Report to UBC Senates: Progress on Student Experience of Instruction Recommendations

Report to Okanagan Senate Learning and Research Committee – April 9, 2021
Report to Vancouver Senate Teaching and Learning Committee – April 14, 2021

Contents

Introduction and background

In February 2019, a Student Evaluation of Teaching (SEoT) working group formed with membership across both UBC Okanagan and UBC Vancouver campuses. Working under the auspices of the UBCO Senate Learning and Research and the UBCV Senate Teaching and Learning committees, the group had the following remit:

1. Interrogate anonymized UBC data, to determine if there is evidence of potential biases.
2. Review and assess the recent literature on the effectiveness of SEoT, with particular reference to potential sources of bias in evaluations.
3. Review the University questions (UMI) used in SEoT in light of the data and available literature, recommending changes where appropriate.
4. Propose recommendations for appropriate metrics, effective analysis and presentation of data to support SEoT as a component of teaching evaluation.
5. Consider the implications any proposed changes may have on other components of teaching evaluation.

Through work and consultations done over an extended period, the SEoT working group presented a report to both the Okanagan and Vancouver Senates in May 2020. Included in the report was information about the working group's membership and consultation process, an annotated bibliography of research on bias in student evaluations of teaching, studies done at UBC on bias based on binary sex data, and information about a new set of metrics used in reporting SEoT results.

In addition, and most pertinent to the present purpose, the report included sixteen recommendations about student evaluations of teaching, which were endorsed by both Senates, see Appendix 1. In the Fall of 2020, two new committees were formed to oversee the process of implementing these recommendations, a Steering Committee and an Implementation Committee. Since one of the recommendations in the original working group's report was to change the name of the process from "student evaluations of teaching" to "Student Experience of Instruction" (SEI), these new committees are called the SEI Steering and SEI Implementation committees.

The SEI Steering Committee is made up of senior leaders, faculty and students on both campuses, and provides strategic guidance and oversight for the Implementation Committee, which is tasked with operationalizing the implementation of the recommendations. Please see Appendix 2 for membership of these groups.

Summary of implementation work

Since early Fall 2020 the Implementation Committee has worked collaboratively with the Planning and Institutional Research Office (PAIR), the Equity and Inclusion office (EIO), the Centre for Teaching, Learning & Technology (CTLT) and others on the recommendations put forth from the SEoT working group. In addition, the Implementation Committee has worked on creating a number of resources and events to communicate changes and work to date across both campuses, including a SEI website and a cross-campus open forum that was held on March 10th, 2021.

The main focus of work to date has been on the changes to the questions. This committee has also begun work on recommendations related to the need for additional data and analyses to better answer questions related to bias in SEI, as well as exploring how UBC could adopt a more integrative approach in the evaluation of teaching. Further details of work on each of the recommendations are presented throughout this report.

Engagement and pilot process for revised University Module Items

The Student Evaluations of Teaching (SEoT) working group recommended that the questions on end-of-course student surveys be focused on the student experience rather than the evaluation of teaching. Six core university questions were drafted, based on the six questions used in the Vancouver survey, to solicit feedback from students on their experiences in courses. In addition, the working group recommended that further data collection and analysis be undertaken, particularly for a proposed new question on feedback that would replace a previous question from the Vancouver survey on the fairness of assessment of student learning (see details on the proposed questions below, under Updates on Recommendations).

In taking this work forward, the SEI Implementation Committee developed an 8-step plan to evaluate and test the proposed core university questions within our community. In January 2021 we recruited student and faculty participants through email invitations. To ensure a diverse group of participants, we collected information about students' program of study, undergraduate/graduate program, year level, and international/domestic status during the recruitment phase. We asked faculty participants to provide us with information about their rank and their Faculty. Student participants received a $20 electronic gift card to thank them for their time. Faculty members did not receive any monetary incentive for their participation.

During the month of February, we held 16 one-hour focus groups with 116 students across both campuses, all year levels, undergraduate and graduate, and across a diversity of programs. The goal of the focus group discussions was to introduce the six proposed questions and to gain an understanding of how students interpreted and would respond to these survey questions. Further, we asked them to identify any possible confusion that might occur in terms of different interpretations or understanding of the questions. In addition, we asked for suggestions on how to improve the questions that might be interpreted differently across students or in different environments, such as in a large compared with a small class setting.

In late February/ early March we also held eight one-hour focus group sessions with faculty members, of which four involved Okanagan faculty and four involved Vancouver faculty. In total, 40 faculty members participated in the sessions, from a range of programs as well as from tenure-track and non-tenure track positions. Again, we asked them to provide insight on how they interpreted the proposed questions and their thoughts on how students would possibly understand and respond to the questions. We also collected suggestions from participants on possible ways to reword the questions.

Our next step was to conduct one-on-one interviews with students who had not participated in the previous focus group sessions, which also took place in March. These interviews are called think-aloud sessions or cognitive interviews. In these interviews, we asked students to speak aloud to verbalize their thoughts on how they interpret each of the six questions, what types of examples about the course they recall when responding to the question, and what information
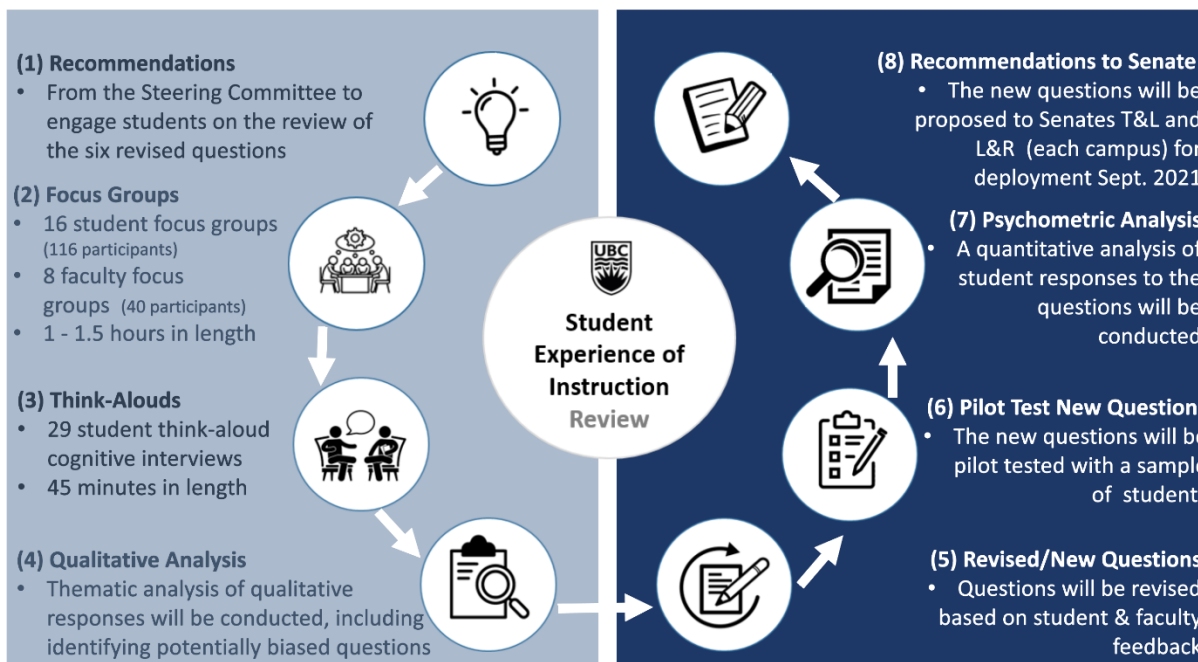
they recall and consider when responding to each question. We conducted 29 interviews that each took between 45 minutes and one hour.

We have completed all of the focus group sessions and student interviews, and have transcribed all of the recordings. We are currently working on coding these transcriptions and conducting a thematic analysis of the qualitative results collected from students and faculty, including any concerns regarding possible biases in the questions. Through to the end of April we will be developing revised questions based on this feedback and then we will pilot test the new questions with a sample of students across UBC in May to early June. Once we have collected the responses to the questions, we will conduct a quantitative analysis of the student responses with the new questions, reviewing the results and following up with students on items needing further clarification.

Finally, we will make recommendations to the Senate Teaching and Learning Committee in Vancouver and the Senate Learning and Research Committee in the Okanagan for adoption of the new questions to be deployed starting September 2021.

Visual representation of the process and timeline provided below.

Timeline for process	Jan	Feb	March	April	May	June	July	Aug	Sep
Focus groups students & faculty	▨	▨	▨						
Conduct Think aloud Sessions			▨						
Qualitative Thematic analysis				▨	▨				
Revised/New Questions				▨	▨				
Pilot new questions					▨				
Psychometric Analysis						▨	▨		
Senate committees for review								▨	
Deploy the final questions									▨

Progress with recommendations

As noted above, in May 2020 sixteen recommendations about Student Evaluations of Teaching were endorsed by both the UBCO and UBCV Senates. Most of the work to implement these recommendations is still in progress; some of it will be completed by the beginning of September 2021, while other work will continue further into the next academic year and possibly beyond.

Student Involvement – Recommendations 1 – 4

The first set of recommendations focused on the role and contributions of students to the process of the evaluation of teaching. Under each of the recommendations below is an update on work to date.

1. **Evaluation of teaching should include student feedback.**

   Complete

   This recommendation reaffirmed the important role that student feedback plays in the evaluation of teaching; thus, end of course student surveys will continue as one aspect in that process.

2. **The name of the process by which student feedback is gathered should be changed from 'Student Evaluation of Teaching' to 'Student Experience of Instruction'.**

   In progress

   This recommendation has already been rolled out in a number of communications, including the SEI website and the open forum held in March 2021. A full switch to the new name will begin in all communications starting in September 2021.

3. **Questions asked of students should focus on elements of instruction based on their experience with instructor(s) in specific contexts and relationships.**

   In progress (see UMI questions, below)

   The wording changes to questions to be included in new student experience of instruction surveys are a result of this recommendation. Throughout the process of piloting and reframing the questions, students reflected on their perceptions of what the questions were asking and how they might be interpreted in different course contexts. They also made suggestions for improving the questions to ensure they capture various student experiences in courses.

4. **Student leadership on both campuses should be actively engaged in raising the profile of student feedback on instruction.**

In progress

Students have an important voice and perspective in work to improve the process of gathering student feedback and how it is used to evaluate and improve teaching at the university. Students have been invited and have participated in this initiative, including participation as members of the Steering and Senate committees, as well as in the work to refine the questions, as outlined above. Over the next few months, the Implementation Committee will be developing information for students about how results from the surveys are used at the university and advice for providing effective, constructive feedback. Partnering with students on this work will be very helpful, to ensure the information is useful to students.

Discussions to further engage student leadership across both campuses will be undertaken by the Implementation Committee to ensure a dialogue and feedback on communication and implementation plans for the changes coming in September 2021.

University Module Items – Recommendations 5-9

5. **UMI-6 (*Overall the instructor was an effective teacher*) should be retained in the core question set, but modified.**
6. **Minor changes in wording of other UMI questions are suggested to better reflect the focus on each student's experience of instruction.**
7. **UMI-4 (Overall, evaluation of student learning was fair) should be removed from the common set**
8. **A new UMI item, pertaining to the usefulness of feedback, should be trialed.**
9. **There should be a common set of UMI questions asked across both campuses**

In progress

The current UMI 4 from the Vancouver student surveys (as noted in recommendation 7) will be removed as of September 2021, and both UBCO and UBCV will use the same set of University Module Items starting with Winter Term 1, Fall 2021 surveys (recommendation 9).

Regarding recommendations 5, 6, and 8: The May 2020 SEoT Working Group report to Senates suggested the following wording for University Module Items 1-6:

1. *The instructor made it clear what I was expected to learn*
2. *I think that the instructor communicated the subject matter effectively.*
3. *The instructor engaged me in the subject matter*
4. *I have received feedback that supported my learning*
5. *I think that the instructor showed concern for student learning*
6. *Overall, this instructor was effective in helping me learn*

As discussed above, this wording has been tested through student and faculty focus groups, and student interviews, yielding rich qualitative data that is being used to refine

the questions for pilot testing in a survey of students in early summer 2021. Further revision to the questions will be undertaken as needed before presenting to the Senate committees on both campuses for endorsement ahead of implementation in September 2021.

Data and Reporting – Recommendations 10-12

10. **Units should be supported to adopt a scholarly and integrative approach to evaluation of teaching.**

    In progress

    The Implementation Committee has drafted an outline for a discussion paper on integrative approaches to the evaluation of teaching (see Appendix 3). This paper will be completed by early Fall of 2021 and will present the current ways teaching is evaluated at UBC, rationale for moving to a more integrative approach, best practices from institutions who have adopted such an approach, and recommendations of how UBC should move forward in the development and implementation of an integrative approach to the evaluation of teaching.

    This discussion paper will contribute to the process of developing broader evaluation of teaching policies through the UBCV and UBCO Senate processes (see recommendations 15 and 16, below).

11. **Reporting of quantitative data should include an appropriate measure of centrality, distributions, response rates and sample sizes, explained in a way that is accessible to all stakeholders, regardless of quantitative expertise.**

    Complete

    Individual instructor reports of results have included the interpolated median (instead of the mean), the dispersion index (instead of the standard deviation), and the percent favorable (percentage of respondents who chose Agree or Strongly Agree on each question) since 2018 Winter Term 1.[1] These reports also include the response rate as well as a table with the recommended response rates according to the number of students in the course, based on research by Zumrawi, Bates, and Schroeder (2014).[2]

    The interpolated median, dispersion index, and percent favorable are explained on the new Student Experience of Instruction website, under "Metrics."

    Faculty preparing dossiers for tenure and promotion, as well as heads or directors, can request conversion of past results using previous metrics into the new metrics. In

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[1] Individual reports included both the previous and new metrics beginning in 2018 Winter Term 1, and only the new metrics beginning in 2020 Winter Term 1.

[2] Zumrawi, A.A., Bates, S.P. & Schroeder, M. (2014). What response rates are needed to make reliable inferences from student evaluations of teaching? *Educational Research and Evaluation*, *20*(7-8), 557-563. DOI: 10.1080/13803611.2014.997915

addition, unit heads, program directors, and dean's offices can request aggregate reports. Please see information about how to request aggregate data reports on the new Student Experience of Instruction website.

12. UBC should prioritize work to extract information from text/open comments submitted as part of the feedback process.

In progress

In addition to the quantitative information from the Likert-style questions on student surveys (interpolated median, dispersion index, and percent favorable), there are frequently text comments from students as well that may provide more in-depth information about students' experiences in courses. It is important to recognize that the comments sometimes include harmful and abusive language, including racist, sexist, ableist and other discriminatory statements and questions. The Implementation Committee has begun investigating a possible automated process for analyzing text comments to help with extracting meaning from them for formative purposes, for instructors to be able to more easily understand patterns in the comments. In time, this may also contribute to ways to address harmful comments on the surveys.

Qualitative data analysis to extract meaning from text is often done through one or more people reviewing the text, picking out themes and categories that either emerge from the data or are determined in advance, and assigning codes to particular pieces of text accordingly. It is possible to partly automate this process through natural language processing systems that can generate a set of themes or codes from a list of text comments, when can then be refined and categorized by human reviewers. Such systems can also tie these themes to sentiments expressed in the comments.

For example, a comment on a student survey could be:
- "We didn't get our graded essays back in time to use the feedback on the next one. Which is too bad because the feedback was clear and helpful and could have been used to improve on the next paper."

An automated system might then yield the following themes and sentiments:[3]
- "We didn't get our graded essays back in time..."
  - Theme: grading
  - Sentiment: negative
- "the feedback was clear and helpful …"
  - Theme: feedback
  - Sentiment: positive

After reviewing and refining the automated generation of themes and re-running the data through the system, it is then possible to build filters and visualizations that can help with extracting meaning from long lists of comments. Themes generated can then be linked back to lists of individual comments. Such a system could be used for individual instructors for formative purposes, to help them better understand students' experiences

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[3] It may also be possible, depending on the system, to expand the sentiments from a simple binary (positive or negative) to a range, such as a 5-point scale.

in their courses, and possibly consider changes to their approach to teaching (if needed). It may also be possible to use this kind of system to pre-emptively remove harmful comments from individual reports of survey results (though this possibility needs to be further investigated).

The Implementation Committee has begun investigating such systems, and they will oversee a pilot test of one or more of these systems using SEI comments from faculty who volunteer to share their data for this purpose. A report on progress, and recommendations for moving forward, will be presented to UBCV and UBCO Senate committees and Senates during the 2021-2022 academic year.

Dealing with Bias – Recommendations 13-14

13. **UBC needs additional and regularized analysis of our own data to answer questions related to potential bias, starting with instructor ethnicity, as it is frequently highlighted as a potential source of bias in the literature on student evaluation of teaching.**

In progress

The Implementation Committee has been working with the EIO, PAIR, and the CTLT (who supports and operates the software used for SEI surveys and reports) on plans for regular analyses of SEI data for bias. So far, only analyses on binary sex data for faculty and students have been done using administrative data (see Appendix 3 of the May 2020 SEoT Working Group report to Senates); this is because there has not been enough other demographic data available to yield valid results if analyzed for bias. The current employment equity survey has a response rate of 66% and there is evidence that some non-response is not random, making the data insufficient for bias testing at this time. That is changing, however.

A new employment equity survey has been rolled out for newly-hired UBC employees, and will be available for existing employees starting in September. The questions better address the range of how members of the UBC community self-identify, and may then lead to more people answering all the questions on the survey. There is also a plan for publicizing the new survey for existing employees to encourage all to fill it out even if they have already filled out the old one. The Implementation Committee is working with the EIO, PAIR, and the CTLT on processes and workflow for accessing and analyzing combined EE and SEI data in an anonymized way to analyze for bias, once there is further data from the new EE survey.

In addition, there is work underway through a collaboration between the EIO, PAIR, Enrolment Services, and Enterprise Data Governance to collect further demographic data from students. As of March 2021, the project is in planning stages, with the aim to develop a survey to collect student demographic data, as well as governance processes for collection, storage, access, and approved uses of the data by early 2022.

The Steering and Implementation Committees will work with the above groups to undertake analyses of SEI data for biases when governance processes are established and there is enough faculty and student demographic data available to yield valid

results. They will also establish a process for continuing those analyses on a regular basis and reporting to both Senates.

14. **The work of collecting, integrating, interpreting and using feedback on teaching should mitigate against bias, but should not presume the complete removal of bias.**

In progress

As noted in response to the previous recommendation, regular analyses of SEI data for bias will continue to be conducted. It will then be possibly to recommend actions to be taken to mitigate bias, if found, even if complete elimination is not possible.

Broader Issues – Recommendation 15 – 16

15. **The Vancouver Senate should review the policy on Student Evaluations of Teaching and consider a broader policy on the evaluation of teaching writ large. The Okanagan Senate should develop a similar policy for the Okanagan campus.**

In progress

Initial discussions about this recommendation have been held with the Chairs of the Okanagan Learning and Research Committee and the Vancouver Teaching and Learning Committee, with the aim to start formal work in the Fall of 2021. Consultations held so far have reinforced the importance of this work moving forward. In addition, noted above, the Implementation Committee is writing a discussion paper over the summer of 2021 with recommendations for a broader, integrative approach to evaluation of teaching that can feed into this policy work.

16. **Senate should commit to support the ongoing work of implementing policies related to the evaluation of teaching.**

In progress

This recommendation is focused on the need to ensure there is support for broad implementation of policies developed through the above recommendation, and thus, much of this work will need to happen alongside the development of the policies.

However, the Implementation Committee will also be creating resources for the SEI website to support the current transition to new SEI questions:
- Advice for faculty on how to include reports of results from previous and new SEI questions in their dossiers for review, tenure, promotion, or merit.
- Advice for academic leaders and reviewers on how to interpret the new metrics, particularly in dossiers that include both old and new questions, and possibly old and new metrics as well.

Summary of Upcoming Activities

The following list of upcoming activities is partly summarized from information above, and also contains some new items not yet discussed above.

Changes to University Module Items

Once the qualitative data have been analysed, the results will be used to inform further changes to the six core university questions. These revised questions will be pilot tested on a sample of students in May 2021. Then in June, a quantitative analysis will be conducted to see how well the questions performed. Further refinement of the survey questions may be made based on the results of the quantitative analysis.

A report on the results of testing the new questions, along with recommended wording, will be brought to the UBCO Senate Learning and Research and UBCV Senate Teaching and Learning Committees for endorsement before implementing these questions in student surveys beginning in Winter Term 1, Fall 2021.

Communications

- Emails about the upcoming UMI changes: to Associate Deans, Heads & Directors, all faculty and others teaching courses where the UMI are used in SEI surveys (note: surveys about TAs vary across the institution and do not all include the UMI).
- Information about upcoming changes in various newsletters on both campuses.
- Meetings with student leaders on both campuses, also VP Student communications, to discuss getting the word out about the changes to University Module Items.
- Presentations:
    - Session on new metrics at CTLT Spring Institute in June 2021 (possibly repeated in August & December 2021)
    - Another open forum, late summer or early fall 2021
- Information to be added to seoi.ubc.ca website
    - Advice for faculty on how to include reports of results from previous and new SEI questions in their dossiers for review, tenure, promotion, or merit.
    - Advice for academic leaders and reviewers on how to interpret the new metrics, particularly in dossiers that include both old and new questions, and possibly old and new metrics as well.
    - Information for students on how SEI are used at the institution, and advice on providing effective and constructive feedback (developed in partnership with students).

Further data collection and analyses

Work with EIO and others to access new faculty and student demographic data when available, and conduct analyses for bias in SEI results. Recommend process for regular, periodic analyses for bias and steps to mitigate if found.

Test one or more systems that can partially automate extraction of meaning from text comments, and determine feasibility and desirability of implementation at the institution. Recommend governance for access and use of the data, privacy and security requirements, and resources required.

Integrative approach to evaluation of teaching, and Senate policy work

Discussion paper with recommendations on an integrative approach to evaluating teaching will be completed by the end of Summer 2021 (see Appendix 3 for a draft table of contents). This paper will feed into work on both campuses, starting in Fall 2021, to develop Senate policies on broader approaches to evaluating teaching (currently Senate policies on teaching evaluation only focus on SEI).

Appendices

Appendix 1 – Recommendations from May 2020 Senate report
Appendix 2 – Steering & Implementation Committees Membership and Consultations
Appendix 3 – Draft Table of Contents for a discussion paper on an integrative approach to evaluation of teaching

Appendix 1 – Recommendations from May 2020 Senate report

Student Involvement

1. Evaluation of teaching should include student feedback.

Students have a unique and valuable perspective from which to provide feedback on teaching at UBC. Student feedback on teaching is one of several sources of data that should be used for making personnel decisions and for the improvement of teaching.

2. The name of the process by which student feedback is gathered should be changed from 'Student Evaluation of Teaching' to 'Student Experience of Instruction'.

Evaluation of teaching is a complex process, whether for formative or summative purposes. To do it effectively requires input from multiple perspectives and sources (students, peers, self) integrated across time. As noted in (1) above, students have an important perspective that should be part of that. However, students should be asked to focus on their experience, rather than to 'evaluate' teaching writ large.

3. Questions asked of students should focus on elements of instruction based on their experience with instructor(s) in specific contexts and relationships.

In line with a recent statement from the American Sociological Association (Article, Sept 2019) questions for students should focus on their experiences and be framed as an opportunity for students to provide feedback, rather than positioning the request as a formal and global evaluation of the teacher.

4. Student leadership on both campuses should be actively engaged in raising the profile of student feedback on instruction.

Gathering and considering feedback on teaching and learning from students is a responsibility shared between faculty and students. Student leadership should play an active and visible role in raising awareness of the purposes for, and ways in which, this feedback can improve instruction. Student leadership should also be part of efforts to raise awareness of comments that are not appropriate and/or counter-productive in the context of an anonymous survey.

UMI Questions

5. UMI-6 (*Overall the instructor was an effective teacher*) should be retained in the core question set, but modified.

The Working Group had extensive discussions about the inclusion or deletion of this item. Analysis of UBC data indicates that UMI-6 scores are able to be predicted to a high degree of confidence based on a weighted linear combination of other UMI questions (except UMI-4). However, in its current form, UMI-6 asks students to directly evaluate the 'overall effectiveness of the teacher'. As we have argued above, students are not in a position to be able to make sweeping, all-inclusive judgments about the effectiveness of instruction. On balance, the Working Group recommends retaining UMI-6, but rewording it as '*Overall, this instructor was*

effective in helping me learn'. This centres the question on the individual experience of the student.

6. Minor changes in wording of other UMI questions are suggested to better reflect the focus on each student's experience of instruction.

The instructor made it clear what students were expected to learn, to be changed to
The instructor made it clear what I was expected to learn
The instructor helped inspire interest in learning the subject matter, to be changed to
The instructor engaged me in the subject matter
The instructor communicated the subject matter effectively to be changed to
I think that the instructor communicated the subject matter effectively.
The instructor showed concern for student learning to be changed to
I think that the instructor showed concern for student learning
The latter two questions are phrased so as to balance first person perceptions with overall cohort experience and classroom climate.

7. UMI-4 (*Overall, evaluation of student learning was fair*) should be removed from the common set

UMI-4 is something of an outlier in the current UMI set used in Vancouver campus surveys. It is consistently answered by fewer students. It is also problematic because the concept of 'fairness' is highly ambiguous. Student consultations have indicated they are often unsure how to interpret what 'fairness' means.

8. A new UMI item, pertaining to the usefulness of feedback, should be trialled.

Whilst the working group recommends removal of the previous UMI-4 item, on fairness of assessment (see recommendation 4), there was a strong sense that, given the importance of timely and effective feedback in the learning process, this should be reflected in the core UMI questions.

We recommend a question worded as follows: *"I have received feedback that supported my learning"*. However, this question should be piloted in a limited set of courses in 2020/21 to ensure that we understand how responses might be influenced by variables such as class size, etc. It is certainly the case that the opportunity to provide feedback, and indeed the nature of that feedback (e.g., written and / or numerical), will look very different in a seminar class of 20 compared to a large introductory lecture of 200. We should collect data from a pilot to better set. The results of the pilot could be included in the 2020/21 Report to Senates and a decision taken on how to proceed.

9. There should be a common set of UMI questions asked across both campuses

There should be a commonly-used core set of five or six questions across both campuses. Modular approaches to constructing feedback surveys may be appropriate (university-wide items plus Faculty, Department and course-specific items). However, units should be mindful that most students complete several surveys per semester, potentially causing 'feedback fatigue' and reducing rates of participation. Therefore, units should be mindful of the overall length of feedback surveys students are being asked to complete. Units should also explore other ways to gather specific feedback as the course progresses.

Data and Reporting

10. Units should be supported to adopt a scholarly and integrative approach to evaluation of teaching.

Because teaching is complex and contextually dependent, departments and units should be supported to adopt an integrative and scholarly approach to evaluation that synthesizes multiple data sources (e.g., students, peers, historical patterns, and self-reflection documentation) for a holistic picture, without over-reliance on any single data source. This approach will necessarily look different in different units but should include both in-kind support from units such as CTLT/CTL and funding for department leaders to accomplish the work proposed. When used for personnel decisions, the unit's approach, strategy, and norms can then be communicated to all levels of review, along with the file. The VPAs on both campuses should work with the Senior Appointments Committee (SAC) to identify and disseminate anonymous examples of effective ways to integrate, synthesize and reconcile multiple perspectives on teaching effectiveness.

11. Reporting of quantitative data should include an appropriate measure of centrality, distributions, response rates and sample sizes, explained in a way that is accessible to all stakeholders, regardless of quantitative expertise.

The interpolated median should be used as the measure of centrality, with the dispersion index as a measure of spread. Reports should include distributions of responses, response rates and sample sizes, clearly flagging where response rates do not meet minimum requirements for validity and accuracy. Visualizations of comparative (anonymous) data should be developed, along with an on-going program of consultation and dissemination to different groups (faculty, staff and administrators).

12. UBC should prioritize work to extract information from text/open comments submitted as part of the feedback process.

Many faculty members report the free-text student comments as sources of rich data to support reflection and enhancement of their course and teaching. It is recommended that a pilot investigation be undertaken, with one or more Faculties, to investigate the potential of automated approaches to extract useful information from large volumes of text submissions. The pilot should engage with appropriate research expertise in Faculties in these areas, and aim initially for formative purposes. There is an opportunity for UBC to take a lead among institutions in providing balance and insight when combining quantitative and qualitative data. Failing to do this continues to privilege quantitative over qualitative data about teaching.

Dealing with Bias

13. UBC needs additional and regularized analysis of our own data to answer questions related to potential bias, starting with instructor ethnicity, as it is frequently highlighted as a potential source of bias in the literature on student evaluation of teaching.

An analysis of UBC-V data with respect to instructor and student gender over the last decade reveals no systematic differences in aggregate data of ratings received by female vs. male instructors. Variables tested for (including instructor and student gender) indicate aggregate differences at the level of approximately +/- 0.1 on a 5-point scale, in other words, very small

effects. Course-specific effects (e.g., subject discipline, course level) demonstrate larger effects (typically +/- 0.3 on the same scale). An analysis of UBC-O data across 2015-16 and 2018 academic year revealed mixed results, as are detailed in Appendix 3.

For both campuses, it is important to note that this is an analysis of aggregate data and, as such, will mask variation on an individual level. The lived experience of individual instructors may be quite different from this aggregate view. However, holistic evaluations of a person's teaching (see: Recommendation 15) can be used to contextualize individual instructors' experience. We cannot stress enough the importance of a holistic evaluation that allows individual lived experiences to be heard, particularly if their lived experience runs counter to the aggregate data.

Given that studies have presented evidence of bias on the basis of instructor ethnicity, it would seem both appropriate and timely that the same analysis be brought to bear in checking the UBC data for bias. This work comes with privacy and ethical implications. We recommend developing a process that would allow instructor ethnicity data to be accessed confidentially for regular investigation of bias. We have not been able to address this analysis during the timescale of this working group and thus recommend a follow-on activity to investigate this, reporting back to Senates during the 2020-2021 academic year. The follow-on report would also be in a position to recommend regularized analysis and mitigation strategies to address any systematic biases found, particularly related to gender and/or ethnicity.

14. The work of collecting, integrating, interpreting and using feedback on teaching should mitigate against bias, but should not presume the complete removal of bias.

As with most other forms of surveys, student feedback on instruction cannot be completely free from bias. Bias can be explicitly discriminatory and perpetuating of stereotypes. But bias can also be implicit, where respondents are not consciously aware of how their attitudes influence their responses. Implicit biases have been shown to occur in many domains and the general approach at UBC (e.g., on hiring committees) has been one of mitigation through education and awareness raising.

This recommendation is supported by an analysis of the voluminous literature on the topic of student evaluations of teaching, and interrogation of the UBC dataset at multiple points in the last 10 years. The research literature reports studies on a wide variety of instruments and processes, with considerable variation in the scope of data collected. Individual studies are often reported in the mainstream academic press, sometimes with extrapolation beyond the context and the effects found in the initial study. Studies investigating a variety of instructor effects (e.g. age, gender, ethnicity) vary in whether they show bias, no bias or bias toward (rather than against) female instructors. In the subset of published studies where biases are found, and enough detail is provided to be able to discern the effect size, those effect sizes on aggregate are small.

Broader Issues

15. The Vancouver Senate should review the policy on Student Evaluations of Teaching and consider a broader policy on the evaluation of teaching writ large. The Okanagan Senate should develop a similar policy for the Okanagan campus.

Student feedback, both quantitative and qualitative, should be integrated with other forms of data to estimate the effectiveness of a faculty member's teaching. The current policy (2007) says little about how student feedback should be integrated with other forms of data before making judgments about the effectiveness of teaching. Therefore, it is appropriate to revisit the UBC-V Senate Policy on Student Evaluation of Teaching and consider adding or replacing it with a policy that sets forth a broader and teaching. Similar processes should be applied and governed by either a joint Senate policy, or aligned policies for each campus.

16. Senate should commit to support the ongoing work of implementing policies related to the evaluation of teaching.

Career advancement decisions are made on the recommendation of Departmental, Faculty and a system-wide Senior Appointments Committee, each of whom is tasked to evaluate teaching effectiveness as a component of every case. It is imperative that UBC commit to providing the necessary resources and training, including administrative and technological support, to implement Senate policies on evaluating teaching (see Recommendation 15). Faculty members must be given the tools, resources, and support to effectively present a scholarly case for their teaching effectiveness. Likewise, evaluators at all levels must be adept at appropriately interpreting and contextualizing the kinds of data offered across diverse disciplinary and teaching contexts, with due consideration to multiple sources of data and the limitations of each.

Appendix 2 – Steering & Implementation Committees Membership and Consultations

The Steering committee and Implementation Group began work in the Fall 2020, and smaller groups also worked on specific items.

Steering Committee, 2020-2021

Support: Debbie Hart, Senior Manager, Strategic Projects

Simon Bates	Associate Provost, Teaching and Learning, UBCV (Co-chair)
Moura Quayle	Vice Provost, Associate Vice-President Academic Affairs, UBCV, (Co-chair)
Stefania Burk	Associate Dean Academic, Faculty of Arts, UBCV
Sage Cannon	Students Union Okanagan - Faculty of Creative & Critical Studies Representative
Julia Mitchell	Director, Communications & Marketing, Office of the Provost & Vice-President Academic, UBCV
Karen Rangoonaden	Chair, Senate Learning and Research Committee, UBCO
Rehan Sadiq	Professor and Executive Associate Dean, School of Engineering, UBCO
Naznin Virji-Babul	Assistant Professor, Physical Therapy Senior Advisor to the Provost on Women and Gender-Diverse Faculty, UBCV
Georgia Yee	Vice-President Academic and University Affairs, UBCV

Implementation Committee, 2020-2021

Support: Debbie Hart, Senior Manager, Strategic Projects

Christina Hendricks	Academic Director, CTLT, Professor of Teaching, Philosophy, UBCV (Chair)
Vanessa Auld	Professor / Head, Research Group Co-leader - Cellular Mechanisms of Development and Disease, UBCV
Breeonne Baxter	Communications Manager, VPA Communications, UBCV
Brendan D'Souza	Lecturer, Department of Biology, UBCO
Tanya Forneris	Interim Academic Lead, CTL, Associate Professor of Teaching, School of Health & Exercise Sciences, UBCO
Mark Lam	Lecturer, Department of Psychology, UBCV
Stephanie McKeown	Chief Institutional Research Officer (PAIR)
Marianne Schroeder	Sr. Associate Director, Teaching and Learning Technologies, CTLT, UBCV (Sept. 2020-Feb. 2021)
Abdel-Azim Zumrawi	Statistician, CTLT, UBCV (Feb. 2021 onwards)

Advisory group on changes to UMI

Christina Hendricks	Academic Director, CTLT, Professor of Teaching, Philosophy, UBCV
Stephanie McKeown	Chief Institutional Research Officer (PAIR)
Catherine Rawn	Professor of Teaching, Psychology, UBCV
Bruno Zumbo	Professor, Canada Research Chair in Psychometrics and Measurement, Tier 1; & Paragon UBC Professor of Psychometrics and Measurement Educational and Counselling Psychology, and Special Education, UBCV
Abdel-Azim Zumrawi	Statistician, CTLT, UBCV

Group working on discussion paper on integrative approach to evaluating teaching

Tanya Forneris	Interim Academic Lead, CTL, Associate Professor of Teaching, School of Health & Exercise Sciences, UBCO (Chair)
Brendan D'Souza	Lecturer, Department of Biology, UBCO
Christina Hendricks	Academic Director, CTLT, Professor of Teaching, Philosophy, UBCV
Jaclyn Stewart	Deputy Academic Director, CTLT, Associate Professor of Teaching, Chemistry, UBCV

Starting in the Fall of 2020 the Implementation Committee has been consulting with several different groups, which have informed and provided feedback on the work of implementing the recommendations.

In addition to the work detailed above to test the new UMI, discussions have been held with and feedback collected from:

- UBC Vancouver:
    - Senate Teaching & Learning Committee
    - Associate Deans Academic, Students, and Faculty
    - Heads & Directors (at a Provost's Heads & Directors meeting)
- UBC Okanagan:
    - Senate Learning & Research Committee
    - Deans Council
    - Student Academic Success Committee
- Across both campuses:
    - Senior Appointments Committee
    - Open forum March 10, 2021 (over 100 faculty, staff and students joined)

We will continue with our communications and building out of information available for access via the website seoi.ubc.ca. Please see the section on upcoming activities in the main report, above.

Appendix 3 – Table of Contents for a Discussion Paper on Integrative Evaluation of Teaching

**Outline for Discussion Paper on an
Integrative Approach to the Evaluation of Teaching**

Background/Context

- Why we evaluate teaching at UBC / the purposes of evaluating teaching
- Background and current context at UBC in terms of the evaluation of teaching (summary, with more detail below)
- Types of Evaluation (e.g., formative and summative) and the role of each in the evaluation process
- Identification of gaps/concerns
- Explain why a more integrative approach is needed

Summary of Practices at UBC (examples from both campuses):

- How is teaching being evaluated here and how does this vary across the institution
- Examples of good practices already in place
- Identify issues and/or areas for improvement

What is an Integrative Approach to the Evaluation of Teaching?

- Define what is meant by an integrative approach to the evaluation of teaching
- A brief summary of relevant research literature on equitable evaluation practices that are likely to promote improvements in teaching
- A summary and examples of work being done at other institutions who have adopted a scholarly and integrative approach to evaluation of teaching

Best Practices for Implementing an Integrative Approach to the Evaluation of Teaching

- Describe the process of how these institutions implemented these changes
    - Approaches other institutions have used to have academic units across the institution adopt the change
    - Processes other institutions have used to integrate this work into policies related to tenure and promotion as well as merit processes
- Challenges in developing and implementing an integrative approach
    - Lessons learned in the implementation process and what institutions would now change/adapt
    - Possible solutions to the identified challenges and barriers
- Identify best practices for implementation, based on published resources as well as interviews with key institutions who have gone through the process

Recommendations for Establishing an Integrative Approach at UBC

- A set of guiding principles for how an integrative approach to evaluating teaching should take place at UBC. Guiding principles initially discussed include but are not limited to processes that are streamlined, useful, and forward looking towards improving teaching.
- Considerations for how to address the different requirements for summative evaluation of teaching for faculty in different roles.
- Discussion within the implementation committee has noted that the development and implementation of an integrative approach at UBC should include input from all parts of the UBC community, including faculty, students, and staff.