MEMORANDUM

To: Executive Committee of Faculty Council

From: Professor Greg A. Jamieson

Chair, Teaching Methods & Resources Committee

Date: April 23, 2012 for April 26, 2012 Faculty Council Meeting

Re: New Course Evaluation Framework

REPORT CLASSIFICATION

This is *Major Policy Matter* that will be considered by the Executive Committee for endorsing and forwarding to Faculty Council for vote as a regular motion (requiring a simple majority of members voting to carry).

BACKGROUND

The Centre for Teaching Support & Innovation (CTSI) has developed a new course evaluation framework based on recommendations from a university-wide Course Evaluation Working Group, chaired by several vice-provosts and with representation from a wide range of divisions, including Engineering. The framework adopts an approach to the evaluation of courses that is based on teaching and learning priorities. The new evaluation forms include eight Core Institutional Questions based on common priorities and allows for additional items to be added at the divisional, departmental and instructor levels. The framework has been deployed in several divisions including Arts & Science, Nursing, and UTM.

The new course evaluation framework is aimed at characterizing the effectiveness of the learning experience in a course from the student's perspective. The evaluation is aimed at measuring the characteristics of the course that are indicative of the instructor's choices in designing the course and, as such, provide actionable feedback to the instructor on how to improve the course.

The Teaching Methods & Resources Committee (TMRC) has been working with CTSI since October, 2011 to scrutinize the new Course Evaluation Framework and to develop divisional priorities for the Faculty of Applied Science and Engineering.

¹ http://www.teaching.utoronto.ca/teaching/essentialinformation/evaluation-framework.htm

Established Core Institutional priorities and related items:

Institutional Teaching Priorities	Institutional Core Questions
Students are engaged in their own learning.	Q1. I found the course intellectually stimulating.
Students learn a great deal in each course.	Q2. The course provided me with a deeper understanding of the subject matter.
Students report that their course and instructor offer an environment conducive to learning.	Q3. The instructor created a course atmosphere that was conducive to my learning.
Students indicate that the methods of assessment in a course reflect and contribute to their learning.	Q4. Course projects, assignments, tests and/or exams improved my understanding of the course material.
	Q5. Course projects, assignments, tests and/or exams provided opportunity for me to demonstrate an understanding of the course material.
Students have an overall positive learning experience with the course.	Q6. Overall, the quality of my learning experience in this course was
Students have an overall positive learning experience with the instructor.	Q7. Please comment on the overall quality of the instruction in this course.
Students note the availability of support for their learning both from instructors and from across the institution.	Q8. Please comment on any assistance that was available to support your learning in this course.

The response scales for these items assess the extent to which each item is part of the student's learning experience. The rating scales for items Q1-Q5 are quantitative on a 5-point scale with anchors at Not at all, Somewhat, Moderately, Mostly, and A great deal. The response scale for Q6 is also quantitative on a 5-point scale with anchors at Poor, Fair, Good, Very good, and Excellent. Responses to Q7 and Q8 are open-ended.

Q1-Q5 comprise the Institutional Mean Composite that reflects the average of students' mean responses to the first five institutional teaching priorities. It is presented in the course evaluation report as a single value and may be used as a more aggregated indication of the quality of the student experience in the course.

APSC participation in the new course evaluation framework will allow for comparison of effectiveness of the learning experience in engineering courses to courses across the University.

Proposed Core Divisional priorities:

The TMRC proposes six learning priorities for all APSC courses plus an additional one or two questions depending on the prominent instructional method of the course (Lecture-based, Project-based, or Laboratory-based).

A ***Recommended priorities common to all courses within APSC***

- **PA1.** Students develop and practice analytical and critical—thinking skills, through the ability to:
- Formulate problems
- Engage in creative problem-solving, and
- Analyze problems.
- **PA2.** Students learn to apply knowledge in an engineering context (or to develop an understanding of how to apply engineering knowledge to novel contexts).
- **PA3.** Students are engaged in practicing professionalism/professional behaviour and develop an understanding of ethical issues relating to engineering and the impact of engineering on the environment and society.
- **PA4.** Students are made aware of cross-connections/integration with other courses and learning environments (laboratories, projects, internships).
- **PA5.** The instructor's feedback in the course assignments, projects, tests, and/or papers provide guidance on how a student could improve their performance.
- **PA6.** The instructor provides the students with clear expectations/transparency of learning outcomes and their evaluation.

One or two priorities (and thus question items) will be determined based on the prominent instructional method in the course.

B *** Recommended priorities for lecture-based courses only in addition to (A) above ***

PB7. The instructor arranged for all the necessary infrastructure and made use of the available resources to deliver the course in a clear/concise way.

C*** Recommended priorities for all project-based courses in addition to (A) above***

- **PC7.** Students are encouraged to develop and cultivate an aptitude for innovation.
- **PC8.** Students have an opportunity to develop and practice oral and written communication skills.

D*** Recommended priorities for all laboratory-based courses in addition to (A) above***

PD7. The laboratory provided an opportunity for the student to gain a more in-depth, practical understanding of the course content.

If approved by Faculty Council, the TMRC will continue to work with CTSI to develop and test novel Divisional Core Questions that reflect these priorities.

Student Opinion on Quality of the Instructor

The Committee has considered a proposal to include a quantitative item asking the students for their opinion on the quality of the instructor (cf. Q7). The faculty's current course evaluation framework includes Question 16, which reads: "What is your overall rating of the instructor as a teacher?" Several arguments have been tabled in favour and opposed to this proposal. A summary of those arguments follows:

	IN FAVOUR	OPPOSED
1.	There is a need for continuity in the assessment of teaching quality; particularly for Members in the tenure stream who are at or beyond the Third Year Review.	
2.	We value hearing what students have to say about the quality of the instructor based on what they think are the important characteristics for an instructor.	Q7 provides an opportunity to receive this input from students qualitatively. The Institutional Composite Mean provides an amalgamated evaluation of the essential dimensions identified as essential to the effectiveness of the learning experience in the course.
3.	Desire for accountability and respect for the students' opinion on who teaches them.	The new course evaluation framework provides a valid and reliable measure of student opinion on dimensions identified as essential to the effectiveness of the learning experience in the course. These dimensions have been identified through a combination of student focus groups and analysis of relevant literature on higher education.
4.	Many instructors are interested in what students think of them as instructors.	Instructors will receive student responses to Q7. Moreover, the new framework does not preclude the instructor from seeking additional input from students.
	Students are interested in other students' perception of instruction. Faculty Administrators are interested in students' perception of instruction.	The individual items and the Institutional Mean Composite provide a statistically sound indicator based on dimensions identified as essential to the effectiveness of the learning experience in the course.
7.	The University is interested in students' perception of instruction.	The University has adopted the new course evaluation framework and is using the National Survey of Student Engagement and other techniques to assess students' perception of instruction and engagement.

8. There is inherent value in making a gradual transition from the current to the new course evaluation framework.	The argument is not applied to any other item in the current course evaluation framework, which heightens concerns about over-reliance on the item.
	2. Other Divisions have migrated to the new framework without transitional elements from their legacy framework.
	3. APSc transitioned to the current framework without transitional elements from the preceding framework.
	Research shows that questions that attempt to assess the students' opinion of the quality of the instructor (as compared to questions that target the course) amalgamate other factors that are not actionable on the part of the instructor. These factors include the instructor's race, sex, and ethnicity. They also include characteristics of the course such as whether it is required or not.

Having weighed the arguments for and against a quantitative item pertaining to student opinion of the quality of the instructor—and the available evidence substantiating those arguments—the Committee concluded that such an item was NOT RECOMMENDED FOR INCLUSION in the new course evaluation. However, recognizing the value of providing continuity in the assessment of teaching performance, the Committee recommends retaining Question 16 from the current course evaluation framework for a period of three years.

Departmental Questions

To date, the TMRC has received an indication that none of the departments wish to include department-specific items. This position is open to further discussion.

Instructor/TA Questions

Given the hard limit of 20 questions on the questionnaire, instructors may select up to four-to-five items (depending on instructional method) from an established bank of nearly 200 questions. Feedback from instructor-selected items is visible only to the instructor.

The TMRC is also considering the addition of questions that would serve to evaluate TA performance. Inclusion of TA questions would reduce the number of Instructor questions, as the total number of evaluation items cannot exceed 20.

Implementation

It is the intention of the TMRC to work with CTSI to deploy the new course evaluation framework in the Fall term of 2012.

Dissemination of Survey Results

Both the TMRC and CTSI endorse a high level of sharing of evaluation results with students. Members should expect a detailed policy statement in advance of the first implementation.

PROPOSAL/MOTION

The Teaching Methods and Resources Committee recommends to Executive Committee,

"THAT the Faculty of Applied Science and Engineering adopt and agree to participate in the Institutional Framework for Course Evaluation."

"THAT the Faculty of Applied Science and Engineering adopt the Divisional Priorities [PA1-PA6; PB7, PC7, PD7 and PC8]."

"THAT the Faculty of Applied Science and Engineering retain Question #16 in the current Course Evaluation Framework until Faculty Council chooses to remove it."