# REPORT TO THE UNIVERSITY OF BRITISH COLUMBIA VICE PRESIDENT ACADEMIC AND PROVOST

ON THE

## NEW UNIVERSITY-MODULE ITEMS AND THEIR ONLINE ADMINISTRATION AT THE UNIVERSITY OF BRITISH COLUMBIA

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### **EXECUTIVE SUMMARY**

#### **BACKGROUND**

An examination was undertaken, on behalf of the Vice President Academic and Provost, of the performance of the new *University-Module Items* (*UMIs*) administered at the University in the Fall term, 2007. The scope of the investigation included evaluation of psychometric characteristics of the UMIs and of the similarity of item performance from paper to online administration of student-evaluation inventories. Another aspect of the University initiative—that of the posting of the student-evaluation results to a password-protected website for access by students and faculty—is considered. Recommendations for future student-evaluation activities at the University are provided.

The implementation of the UMIs followed several Senate recommendations for a uniform student-evaluation process, with the most recent recommendation also urging the online publication of teaching-evaluation results. The body most closely responsible for the implementation of these recommendations is the Student Evaluation of Teaching (SEoT) Committee.

Student evaluations of teaching at colleges and universities have been ubiquitous for the past 40 years or more. Research on student evaluations has shown them to be useful for the purposes of teaching improvement and not merely a reflection of instructor popularity. The research evidence on paper- vs. online-administered student evaluations has revealed that both produce comparable results, and, with increasing familiarity with computers and the Internet by students, online administration is increasing. Research has also revealed certain extraneous factors that can affect student evaluations. At UBC, student evaluations have, for some time, been used across campus for both formative and summative purposes. Although administration of the inventories has for the most part been in paper format, some administrative units have experimented with online presentation and some, in addition, have, in the past, published student-evaluation results. At present, only the Faculty of Arts publishes these results on a website.

#### **ANALYSES PERFORMED**

The six UMIs were examined for a number of performance characteristics. Inspection of item content and scores revealed that the UMIs measured instructional themes and produced score levels and distributions very similar to those seen in the past with existing items. The items were seen as tapping into central aspects of effective teaching and learning and were sufficiently comprehensive to provide adequate assessment of the important facets of instruction.

Further, the UMIs were found to be of comparable reliability to existing items, in terms of both stability over time and internal consistency. The question of inter-rater reliability of mean item results (the unit used for formative and summative purposes) was addressed, and this form of reliability was seen as fully adequate as long as the means were based on at least 10-15 student raters.

Validity of the UMIs was assessed by correlating scores on them with those on existing items that were designed to measure the same aspects of teaching. Results indicated that the UMIs provide valid assessment of what have been identified as central aspects of teaching.

The question of the effects of changing from paper administration of the student evaluation inventories to online administration was addressed by an examination of the student response rates under the two formats, as well as that of the general level of results obtained under each. Results of analyses of student response rates in four administrative units for which online data were available indicated very little, if any, reduction in response rates for the online presentation format. Similarly, comparisons of mean item ratings showed no systematic differences favouring one format over the other. There is no evidence from the present evaluation, therefore, to suggest that online administration of the UMIs (along with other faculty- or department-specific items) will cause a decline in response rates or any change in the general level of ratings awarded by students.

Several factors that can be expected to affect student evaluations were investigated. The relationship between class grades and mean ratings, that between class grades and student response rates, and that between mean ratings and response rates were all examined. Very low correlations were found in analyses across nine administrative units, with those between class grades (actually awarded) and mean UMI scores the highest—averaging .27. Although low, this correlation raises the question of whether grading leniency affects student ratings, but this relationship can be explained in several ways, with grading leniency only one possibility. This topic deserves further research, but the correlations found with extraneous factors do not undermine the use of the UMIs (or any items) for reliable and valid student evaluation of teaching.

#### **DISCUSSION OF POSTING OF RESULTS**

The subject of the posting of student evaluation results on a University website is discussed. Although no data have been collected in this regard and no local empirical findings inform this discussion, prior experience with posting evaluation results is available and suggests some ways in which the goals of Senate—in providing systematic, reliable, and valid course-planning information—can be realized.

#### RECOMMENDATIONS

A number of recommendations are made, based on the findings of the present investigation. It is generally recommended that each administrative unit consider adding items to the UMIs that reflect the specifics of teaching in that unit. More specifically, a number of recommendations are presented that concern tasks to be performed in the short term—in time for the Fall, 2008 administration of student evaluations. In addition, a list of recommendations is provided containing tasks that can be completed over a longer period of time. The intention of these recommendations is to aid the University in systematically developing, over the next few years, fully effective procedures by which student evaluation of teaching is made more precise, more useful, more widely-accepted and optimally-used, and more clearly tied to pedagogical upgrading opportunities available on campus than it currently is.

One summary observation that deserves mention is the generally high regard that UBC students have for the quality of their teaching. In the various analyses performed, mean scores falling between "Good" and "Excellent" were routinely found, indicating that students have reported that teaching is generally at a high level at UBC.

A full copy of this report is available at www.vpacademic.ubc.ca.

Please send feedback to student.evaluations@ubc.ca.