Faculty Senate Academic Affairs Committee
Report on Digital Measures Online Course Evaluation Implementation

Last updated Apr. 18, 2012

The Faculty Senate charged the Academic Affairs Committee (FSAAC) to review and evaluate the relatively new implementation of online course evaluations at N.I.U. A campus-wide contract has been established with Digital Measures (DM), a private vendor who began servicing universities in 1999 with a contract for the University of Wisconsin system course evaluations, who has corporate offices in Milwaukee, WI, and who advertizes that it now has contracts with over 2,000 schools and colleges. (http://www.digitalmeasures.com/about.htm. Accessed Mar. 13, 2012)

N.I.U. has a four year history in using DM services and now has campus wide licenses for its two main products, Course Response (DMCR), its online course evaluation service, and Activity Insight (DMAI), its online database service for tracking faculty activity and productivity.

To fulfill its charge from the Senate, the FSAAC interviewed Prof. Murali Krishnamurthi, Director of Faculty Development and Instructional Design Center, Assoc. Dean Jeffrey Hecht, an early adopter of DMCR, and reviewed literature pertaining to online course evaluations and their validity, with special attention to response rate issues. The summary notes from the two interviews and literature are available in the Faculty Senate Academic Affairs BB file folder:
BB Senate > Information > Academic Affairs Committee > Online Evaluation of Instruction

Findings

The DMCR appears to be highly efficient and a technically acceptable alternative to the paper and pencil surveying of student opinion regarding courses and teaching. This finding is based on our interviews and witnessing a demonstration of student and faculty online environments.

1. Faculty benefit from the online evaluation system to the extent that the information is delivered in a more timely and coherent fashion, and to the extent to which faculty can craft tailor-made questions to add to the end of the departmental form. Faculty potentially can benefit by being able to download individual (anonymous) responses for further analysis. This finding is based on our interviews and witnessing a demonstration of student and faculty online environments and DMRC capabilities.

2. Response rates are variable using online procedures and in several studies lower than in-class administered paper and pencil approaches. We reviewed 14 articles that dealt with the issue of response rates for online surveys. Seven of those reported original research studies, and the others included reviews of reports that compared response rates of traditionally administered and online course evaluations. Ten of these articles reported evidence of response rates for online evaluations being lower than paper and pencil methods. This finding is based on a review of the literature.

3. Validity of online course evaluations are susceptible to response bias and unreliable instruments, however perhaps not to a much greater degree than paper and pencil surveys. Benton & Cashin (2012) reviewed 7 studies comparing results of courses using both online and paper surveys. One, (Sorenson & Reiner, 2003 cited in Benton & Cashin (2012, p.11), warns that low response rates threatens representativeness. Benton & Cashin (2012, p.11) claim the studies they reviewed show “. . . no meaningful differences between online and paper surveys.” They cite 3 within group student studies where students filled out both online & paper forms: in one (Johnson, 2003 cited in Benton & Cashin (2012)), correlations between global measures of instructor (.84) and course (.86) imply no method effect. One other study (Venette et al, 2010 cited in Benton & Cashin (2012, p.11)), report “. . . no meaningful differences are found in individual item means, number of positive and negative written comments.” The
third reports similar factor structure among items. The 4 studies reviewed in Benton & Cashin (2012, p.11) where different students used different survey methods for the same course (between groups design) found no meaningful differences in global evaluations, progress on course objectives, subscale means, rate of positive & negative open-end comments, and factor structure. Again note, only 7 articles on this point are contained in the Benton & Cashin (2012) review. This finding is based on a review of the literature.

4. The anonymity of students appears to be adequately protected in the DMCR system. This finding is based on our interviews.

5. The confidentiality of the faculty reports appears to be at least as high, and possibly higher with the DMCR system than with paper files stored in Dept. offices. This finding is based on our interviews.

6. Nonresponse bias may affect results; and estimates are more vulnerable when nonresponse rates are high. The studies reviewed by the literature (7 in one review article) suggest very similar results between paper and online evaluations. Yet non-response bias remains a constant concern. This finding is based on our review of the literature (Benton & Cashin (2012); Government standards and texts on Sampling.)

"Current OMB guidelines require a non-response bias study for all surveys with less than an 80% response rate; however, recent research indicates that non-response bias can occur in surveys with higher response rates and may not occur in studies with lower response rates. Plan for a nonresponse bias analysis if the expected unit response rate is below 80% (Guideline 1.3.4) Plan for a nonresponse bias analysis if the expected item response rate is below 70% for any items used in reports (Guideline 1.3.5)"

Nonresponse bias is a function of the response rate and the difference between the group means of the variable under focus of those who responded and those who did not (the latter mean being unmeasured). The extent of nonresponse bias in course evaluations is not a settled issue. See our related Committee document: "Regarding Response Rates and Nonresponse Bias in Course Evaluations" in the BB folder.

7. No research, no organizations specializing in teacher and course evaluations, no best practices guides of which we are aware recommend relying exclusively on student ratings to assess overall teacher effectiveness.

8. Some anecdotal evidence was reported to Academic Affairs Committee members indicating that courses with newly instituted online evaluations had received lower response rates as well as lower summary ratings than the same course/professor had received in previous years.

Recommendations

1. The FSAFC recommends taking no action to delay or interfere with the decisions by colleges and departments who may choose to implement the DMCR system for collecting and distributing student generated course evaluations. The efficiencies of the online system seem to offset any of the reservations surrounding adopting the DMCR system.

2. We recommend that each department review the validity and reliability of the instrument used by DMCR so that useful information can be obtained.

3. We recommend that each college and department implement the customized ad hoc question supplements available in DMCR so that faculty can create several questions tailor-made for the courses they teach.

4. We recommend that the primary use of these student evaluations be directed at course modification and improvement to facilitate student learning.
5. We recommend that all high stakes decisions (Promotion and Tenure, merit pay increments) involving assessments of teaching effectiveness use multiple measures in addition to student ratings.

Advisories

In the reviews and deliberations conducted by FSAFC, very fundamental issues regarding faculty rights, academic freedom, and faculty accountability emerged that inevitably have to be confronted. Thus, our committee offers the following broader Advisories:

1. We advise that when any student generated course and professor evaluations are used for high-stakes decisions: promotion and tenure, or merit pay raises, only courses with student response rates of 75% be used, and that multiple years and courses be included. This applies regardless of whether DMCR or any other mechanism to collect student evaluations are used.

2. We advise that control and access to the faculty reports be spelled out explicitly regarding who has direct access to faculty information online at DMCR. The information contained in the reports needs to established clearly as part of the faculty member’s personnel file, implying that faculty reports do not fall inside the sphere of material subject to Freedom of Information requests and that faculty reports cannot be made public without faculty consent.

3. We advise that the student information loaded in DMCR prior to randomization to protect anonymity include the student’s prior GPA, as that variable may be implicated in course evaluation responses and can be used to estimate non-response bias and as a control for assessing effectiveness ratings.

4. We advise that the complete, individual level data available for download include relevant student characteristics for both responders and non-responders so that non-response bias can be analyzed. For example, individual faculty can model the propensity to complete a course evaluation as a function of student characteristics.

5. We advise that departments systematically assess the online survey completion rates in ways that can detect nonresponse bias, to the extent that high stakes decisions (promotion and tenure and merit pay increases based on teaching) involve student ratings of teaching. Research on nonresponse bias and best practices recommendations warn that the numbers should not be taken at face value; they require interpretation.

6. We advise that faculty and administrators take into account non-teacher, non-instructional behaviors that have been shown to affect student ratings to varying degrees, including: class size, student motivation, reason for taking the course, expected grade, GPA, course workload, discipline (specifically the degree of quantitative reasoning involved in the course).

7. We advise that when statistical summaries are used administratively to evaluate faculty and courses that confidence intervals revealing the likely range of mean scores be included.

8. We advise that numeric course evaluations collected via DMCR or any other method amount to no more than 10% of the input used to assess a faculty member’s teaching ability when applied to high-stakes decisions; and that correspondingly, multi-method evaluations of faculty teaching ability and course delivery following best practices be used to supplement the student evaluations.
Refer to the Senate Academic Affairs Committee folder for a list of articles reviewed and digital copies of many of the articles.


Explorance. A fresh look at response rates: 9 Best practices for colleges and universities moving to online course evaluations.


