

# **Supplemental, ELO-based Campus-wide Course Evaluations**

**A White Paper**

**[DATE]**

**Teaching Academy Executive Committee**

**DRAFT**

## 1. Purpose of this Report

At a time of increasing academic accountability and demands for transparency and data-driven educational program design, UW-Madison retains a fully decentralized system of course evaluations. The current system neither allows for comparative assessment across programs, centralized dissemination of data, nor consistent evaluation of our stated essential learning outcomes (ELOs; Appendix A). The UW-Teaching Academy Executive Committee sought to assess whether the current system of course and instructor evaluations could be modified to generate useful, campus-wide course evaluation data or if, instead, a new, supplemental course evaluation system should be developed.

## 2. Abstract

As a campus we need effective ways to evaluate how individual courses contribute to student progress in achieving our essential learning outcomes (ELOs). This is especially important at a time when budgetary allocations to units are made, in part, on credit hours, which is to say course *quantity*, with no mechanism to look at course *quality*. Currently, the collection of course evaluation data is delegated to departments. Departmental course evaluations serve important needs in relation to improving course content and delivery and are also used to compare performance among instructors within a unit. However, as currently implemented, departmental evaluations have limited values for several purposes, including academic planning and in guiding students on course choice. These problems include variation across departments in the content of their surveys, and typical focus on qualities of the instructor and pedagogical techniques rather than the educational impact of courses as a whole, and a lack of a consistent mechanism for making data available to stakeholders. To solve these problems, we considered the possibility of modifying how departments implement course evaluation mechanism but concluded that this would not be feasible and would undermine the ability of departmental evaluations to serve other important goals (e.g., obtaining course-specific feedback, helping in teacher assignments). Instead, we propose that central administration should implement a supplemental course evaluation system, focused on ELOs, with summary data made widely available.

## 3. Challenge Statement

It has long been appreciated that all universities, but especially public institutions like UW, have an obligation to evaluate the quality of their courses. Such data has been designed to serve two primary needs: providing feedback to instructors on how to improve the course, and providing departments, tenure review committees, award committees, and such with data on relative teaching effectiveness of an instructor. However, this does not exhaust the potential uses of course evaluations. Evaluation data can be used by departments, colleges, and other administrative units to assess program quality (e.g., course evaluation data is sometimes included in program reviews). Furthermore, course evaluations can be

used by students to help them in course selection. Indeed, in this data rich age, students have an understandable expectation to be able to access information that might influence their personal choices and potential learning outcomes.

The implementation of course evaluations at UW has historically been handled by the academic department responsible for the course and/or the departmental home of the instructor (these are not always the same). For a time the Associated Students of Madison (ASM) collected and disseminated data on course evaluations, but this has not been institutionalized and ceased at least ten years ago.

Concerned at the lack of consistent course evaluation mechanisms, in 1996 the University Committee charged a Teaching Academy Task Force on the Student Assessment of Learning to work with representatives from the Associated Students of Madison and the Office of the Provost to address the following questions:

- What are the mechanisms for soliciting student evaluations of courses in different settings and class formats?
- What should be the balance between departmental autonomy and university-wide course evaluation guidelines, and to what extent should common elements be included in departmentally administered evaluations?
- How might departments and students most appropriately and effectively use student course evaluation information?
- What is the most effective mechanism to allow students to publish evaluations in a format that makes it easy to ascertain information about courses?

This task force conducted a thorough analysis, resulting in a detailed report (Appendix B). This report was presented to the faculty senate and yielded a motion that was presented to the senate at the April 7<sup>th</sup> 1997 meeting. This resolution contained four specific recommendations:

1. Whereas student course evaluation results are a useful mechanism to provide information to students about their course options, these results should be made available to students at the UW-Madison.
2. Whereas student course evaluation results are only one measure of the effectiveness of teaching at UW-Madison, assessment of faculty and instructional staff should not be based primarily on student course evaluation results.
3. Whereas the following areas are those identified by ASM and the Ad Hoc Committee on Student Course Evaluations as important to student course decisions, departments should develop questions that will address these areas. The areas identified are: (1) course organization, (2) clarity of instruction, (3) instructor accessibility, (4) grading fairness, (5) an overall course rating, and (6) an overall instructor rating.
4. Whereas student course evaluation results have most value when administered and disseminated fairly and uniformly, the recommendations and advice enclosed in the attached report should serve as guidelines for departments as they construct their own questions.

As a result of this task report and resolution greater consistency was achieved across departments in the scale used and the questions included on course evaluation. However, there was a never any system for sharing data with students, and departmental course

evaluations have continued to differ in terms of number of questions, wording of questions, and whether a four- or five-point scale is used.

In the time since the 1997 task force a number of further changes have impacted the course evaluation landscape, of which notable examples are listed below.

- A number of departments have adopted online surveys as well as or in place of in-class scantron evaluations. In many cases the switch to online surveys has been accompanied by a drastic shortening of the survey in the attempt to maintain a reasonable response rate.
- The culture of radio-button rating has now permeated the internet, from Yelp to TripAdvisor. In the educational sphere, the market leader is RateMyProfessors.com. This site collects information from a small number of students who voluntarily score faculty in four categories (Helpfulness, Clarity, Easiness, Hotness) and provide a written review. It is well known that UW undergraduates often use ratemyprofessor.com when selecting classes.
- UW Madison adopted its own version of the AACU LEAP Essential Learning Outcomes (ELOs). These are organized in four umbrella areas: Knowledge; Practical and Intellectual Skills; Social Responsibility; and Integrative Learning. The ELOs have been used to structure the graduation survey and questions were added recently to a departmental course evaluation instrument developed by Testing and Evaluation.
- The UW has adopted a budget model that assigns resources, in part, based on credit hours, a measure of teaching *quantity*. This has highlighted the need to develop complementary measures of teaching *quality*.

## 4. Proposed Solution(s)

### ***a. Introduction to a Solution***

In Spring 2012 the Teaching Academy Executive Committee formed an *ad hoc* subcommittee on course evaluations to revisit the question of whether a consistent, centralized mechanism could be adopted. This subcommittee obtained funding from the University Assessment Council to work with the UW Survey Center (UWSC) to try out an ELO-based survey and evaluate its effectiveness using cognitively-based group interviews with students. Additionally, the subcommittee held several meetings with administrators (Associate Vice Provost, the Associate Provost and Director of Academic Planning and Institutional Research, and the Vice Provost for Teaching & Learning) and with the University Committee.

The committee identified its goal as being to develop a campus wide course evaluation system that would allow uses such as the following:

- An educational analyst can query course data to better understand the educational development of students over their time at UW.
- A legislator or accreditor can assess the role of UW courses in generating knowledgeable, capable, and well-rounded graduates.

- A departmental Executive Committee can compare the educational impact of their courses with those of other departments.
- A divisional committee can compare instructors in terms of the learning that their courses engender.
- An advisor can look at historical data to guide a student on the sorts of educational impact to expect from a given course.
- A student can gain reliable data on the learning outcomes to expect from different courses.

The committee noted that the current system of course evaluations can yield valuable data for instructors and individual programs, but does not achieve the goals we had identified for campus-wide course evaluation, because (a) survey mechanisms vary across departments making them difficult to compare, (b) survey tools generally (and appropriately) focus on qualities of the instructor and pedagogical techniques, rather than on educational impact of the course on learning outcomes, and (c) data collected at the department are not widely available.

One possible approach considered by the committee was to adjust existing department-based course evaluation mechanism to achieve the desired goals. This would require the following changes:

- a. At least a subset of questions on all departmental surveys should be required to be the same
- b. Data, or at least those for the shared questions, collected from the *all* departmental surveys should be uploaded to a central database for access by students and other stakeholders
- c. Surveys should be implemented in as standardized a way as possible to improve comparability
- d. One survey should be conducted per course (rather than per instructor).

We believe that such an approach would be impractical. First, we do not believe there is an effective mechanism to *impose* a particular survey mechanism on all units in all colleges. Second, even if there were, the administration of this mechanism, and particularly the uploading of data to a central database, would represent an undue burden on departmental administrations. Third, it was concluded that in order to collect useful data for departmental needs, a mandated survey delivery mechanism would be impractical. Finally, because departmental evaluations usually focus on individual instructors and TAs, and it is commonly the case that multiple instructors teach in a single course, it would not be practical to obtain useful summary data at the *course* level.

Given the many problems of imposing a consistent survey mechanism on departments we propose instead developing a supplementary online survey system that would be built to gather student self-reported of ELO impacts for all courses, with data collated into a centralized database.

### ***b. Proposed Solution***

The vision emerging from the *ad hoc* committee is that we should develop a short, supplemental course evaluation system that would be layered on top of departmental instructor evaluation to achieve the goals we have identified. This supplemental evaluation would be electronic, quantitative (non-textual), and implemented centrally. We also proposed that the supplemental survey be structured around the ELOs, while also asking at least one summative question on the overall educational impact of the course and one on how effectively the course was taught so as to maximize its educational impact.

An important component of the proposed solution is that aggregate, summary data for each course be made publicly available in a timely manner. This fact will, we believe, enhance student response rate and provide critical information to students in a timely way (for help in selecting courses for the subsequent semester). Summary data could include response rate broken down by whether the student is or is not a major in the same division and could be enhanced by graphical summaries of the quality questions by ELOs.

In addition, data collected by a supplemental course evaluation system should be available to department chairs and other administrators to be used in curriculum design. Additionally, when complemented with more targeted department course and instructor evaluation data it may be hoped that the results would be use in calibrating campus-wide assessments of teaching quality in promotion, merit, and teaching-award decisions. **We would imagine that the expectation would be set that a course impact at least one ELO (not that it necessarily yields gains in all ELOs).**

A potential side benefit is that having students reflect on ELOs at the end of each semester should enhance knowledge of those ELOs among the student body. In addition, the emerging data will foster discussion and normalize a language about learning surrounding ELOs among administrators, faculty and students.

Based on cognitively-based group interviews with students conducted by the UW Survey Center, (as reported in Appendix C), the overall reception of the utility of the survey was very positive. Students seemed to appreciate the idea of a course evaluation that asks about various benefits a course may provide. Respondents did mention that there is great variability in how one might rate a humanities course versus a science course; however, we believe your team expects to see these differences. After having taken the survey and looking at the results, students seemed to have increased their understand of the ELO's.

### ***c. Proposed Supplemental Course Survey***

The *ad hoc* committee worked with the UWSC through three rounds of question-testing using focus groups. During the process, wording for individual questions was modified. Also, it came to be recommended that the second ELO umbrella, "skills," should be divided into *intellectual skills* ("such as critical or creative thinking, quantitative reasoning, and problem solving") and *practical workplace skills* ("written and oral communication, computer literacy, and working in teams").

The following eight survey questions, while still in need of editing, define the starting point for further work.

1. At the time you enrolled, did you take this course primarily to fulfill a requirement for your major? [yes/no] *Helpful for data interpretation* This was assessed in round 3 and seemed fine. However, the committee now thinks that it might be better to use demographic data available for the student instead: for example whether they have declared a major in the same division as the course.
2. In general, how much did this course enhance your knowledge of the world, such as knowledge of human cultures, society, or science? [Not at all, A little, Somewhat, Quite a bit, A great deal] *Relates to ELO #1 (Knowledge)* This was assessed in round 3 and seemed fine.
3. How much did this course help you develop intellectual skills, such as critical or creative thinking, quantitative reasoning, and problem solving? [Not at all, ...] *Relates to ELO #2 (Skills), in part.* This was assessed in round 3 and seemed fine.
4. How much did this course help you develop practical workplace skills, such as written and oral communication, computer literacy, and working in teams? [Not at all, ...] *Relates to ELO #2 (Skills), in part.* This was assessed in round 3 and seemed fine. However, at that time we used the term “professional” rather than “practical workplace.” We would like to try out the latter since it avoids the impression that the other learning outcomes (knowledge etc.) are not professional skills.
5. How much did this course increase your sense of social responsibility, for example by increasing your knowledge of cultures or providing you with opportunities for civic or community involvement?” [Not at all, ...] *Relates to ELO #3 (Social responsibility)* This question still caused problems and the Survey Center suggested we modify it, perhaps by providing more of a definition of social responsibility. Also, we were advised that the “civic engagement” might be a useful concept.
6. How much did this course improve your ability to combine knowledge or skills from different fields of study? [Not at all, ...] *Relates to ELO #4 (Integrated learning).* This was assessed in round 3 and seemed acceptable (though we still wonder if further improvements are possible).
7. How would you rate the overall educational value of this course, that is the extent to which the course improved your all-around education or prepared you for the future?” [Very poor, Poor, Fair, Good, Very good]. Based on the focus group, the recommendation was to cut either “all-around education” or “prepared you for the future” from the question. We would like to evaluate these two options in the next round.
8. How would you rate the overall quality of this course, that is the extent to which it was structured and taught in order to maximize its educational value?” [Very poor, ...] This was assessed in round 3 and seemed fine.

The focus groups led the committee to believe that a survey composed of eight radio-button question per course would not be too onerous and that a reasonable response rate could be hoped for. If it is later felt necessary to increase the number of students who respond, it might be possible to allow students to access the database of past scores in the period of

course selection only if they have completed the requested course evaluations from the preceding semester.

#### ***d. Suggestions for implementation***

There are many details will need to be worked-out by the body charged with implementing the proposed supplemental survey system, but we would like to highlight some principles and suggestions.

We believe that the optimal survey mechanism would entail an electronic survey being generated for each student soon after the end of each semester that would be pre-populated with the list of courses that the student had completed. The data entered by the student should then automatically populate a database, suitably linked to relevant student demographic information drawn in from other sources.

While the raw data should be accessible only to a limited number of individuals, we imagine that a subset of data would be made publicly accessible. For example, we can imagine course means and standard deviation being available for each section of each offering of each course section, plus perhaps means and standard deviations of each course across the last (say) five offerings. Further analysis is needed to decide on the minimum class size needed for data to be made available in the publicly accessible course evaluation database.

Ideally, the publicly accessible database will be linked directly to Course Guide so that students can readily obtain quantitative data for classes they are considering enrolling in. There should also be broad discussion of whom to grant access to the database: should access require a NetID or should it be open to the public?

There is much further work to be done on the presentation of data. One suggestion is that an initial view of a course should show: name the ELO that scored highest; give the score for that ELO, give the score for overall educational impact, and give the score for teaching effectiveness. Then a user would be able to drill down to break the data down by year and section or to obtain means and standard deviations of all ELO scores.

Further discussion involving shared governance bodies would be needed to decide if overall metrics of course “quality,” perhaps a composite score of selected data (e.g., scores of the highest-scoring ELO, overall educational impact, and teaching effectiveness) should be extracted from these data.

## **5. Next Steps**

Based on conversations with the Associate Vice Provost, the Associate Provost and Director of Academic Planning and Institutional Research, and the Vice Provost for Teaching & Learning it has become clear that the decision to invest in a supplemental course evaluation system, which would represent a considerable expense, would depend upon strong support from all three shared governance constituencies: faculty, academic staff, and students. Given this, we propose the following process.

1. This document is finalized based on input and feedback from members of the Teaching Academy, the University Committee, ASEC, and ASM and selected members of central administration.
2. The final whitepaper, with an associated motion (draft included as Appendix D), should be circulated to and then voted upon by the Faculty Senate.
3. If passed, a joint implementation committee will be convened to (a) finalize the initial survey and design and interface for presenting the data, (b) guide the Provost in the design and eventual roll-out of the supplemental course evaluation system.

## 6. Conclusion

Based on the advice of the *ad hoc* subcommittee on course evaluations, the Teaching Academy Executive Committee, requests that steps be taken to develop a campus-wide supplemental course evaluation system and make summary, quantitative data available to campus users—namely students, instructors, and administrators. This system should not replace departmental course/instructor evaluations, which will continue to play an important role in guiding course improvement and in evaluating teaching. It is hoped that the resulting data will provide new insights into educational impact and that the assessment process will foster a broader campus discussion of the ELOs and encourage teaching practices that enhance the educational experiences of UW students.

## **Appendices**

***Appendix A – ELOs***

***Appendix B – 1997 Task Force report***

***Appendix C – USC Report***

***Appendix D – Draft Motion***

***Appendix E – Authors***

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## Appendix D.

### Draft Motion

Whereas UW-Madison has a need for course assessments that yield comparable data on course educational impact, for use in program assessment and to help guide students in the choice of courses, yet such a system is not in place.

Whereas it is impractical to burden departments with the obligation to collect comparable student evaluation of courses and enter it into a centralized database.

Whereas the Essential Learn Outcomes (ELOs) have been selected to define our overarching objectives for what students learn in their time at UW.

It is hereby moved that:

- 1) A Joint Governance, Supplemental ELO-based Course Survey Implementation Committee (SECSIC) be formed and charged with (a) designing an online survey that could be used to collect data from all students each semester and (b) guiding the development of a user interface and a code of practice for presenting the results of the survey to relevant stakeholders.
- 2) Central administration be charged with enabling SECSIC's design process and then to implement the system as quickly as possible.

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lacks a central system for