

UNIVERSITY OF CONNECTICUT

Student Evaluations of Teaching Committee

Report to Vice Provost Veronica Makowsky

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Committee members:

Arlene Albert

Lynn Allchin

Lawrence Armstrong

John Bennett

Elizabeth Ciurylo

Karl Guillard

Diane Lillo-Martin – Co Chair

Robert McDonald

Catherine Ross – Co Chair

Lauren Schlesselman

With valuable input from:

Pamela Roelfs

Cheryl Williams

Student Ratings of Instruction: Recommendations to the Provost

The revised report (Aug. 1, 2007) of the Teaching, Learning, and Assessment Task Force recommended a variety of steps to recognize and enhance teaching at the University of Connecticut. It is important to place the current recommendations in the proper context. First, evaluation of teaching must go hand-in-hand with opportunities for improving teaching. Second, student ratings must be only one form of input on teaching, taken in conjunction with other forms of evaluation (e.g., peer review).

Here we quote from the section on “Gathering Evidence of Teaching Excellence” in the TLA report:

Recommendation 1: Replace the current student ratings of instruction (SRI) instrument with a more appropriate, reliable, and valid instrument.

Changing the forms for student ratings of instruction (SRI) will require extensive work. Core questions should include student information (to assist in interpreting scores), overall instructor and course ratings, and diagnostic instructor and course questions. In addition, an SRI should incorporate:

- Multiple forms (for discussion, lab sections, studio classes, writing courses, graduate seminars, etc.) with additional diagnostic questions chosen by the instructor or department members.
- An option of a paper copy or a computerized version of the instrument.
- An improved procedure for reporting results and interpretations to the faculty member.
- A means for faculty to understand the relationship between student ratings and classroom learning objectives.
- Means of reducing the possibility of, and means of dealing with, potential bias toward women faculty, international faculty, and faculty of color in these evaluations, particularly for courses whose content includes sensitive or controversial materials and discussions.

Recommendation 2: While a revised and nuanced instrument for student ratings of instruction will be used throughout the university, each academic department should establish its own criteria and procedure for gathering evidence of excellence in teaching that does not rely exclusively on the student evaluations as evidence of good and effective teaching.

In this context, we make the following recommendations to the Provost.

Recommendations

There are three steps in the process we recommend:

1. Information
2. Pilot testing
3. Implementation

Each of these steps involves a significant amount of communication and coordination. We recommend that a faculty leader be appointed to oversee all stages of this process. The leader should be someone who is well acquainted with the issues and research concerning student ratings of instruction. The leader may work with a committee and specialists needed for various parts of the project. Each step is described below.

1. Information
 - It is important that all users (faculty, administration, students) are well aware of the proposed changes, the reasons for these changes, and the steps being taken. From the beginning, we hope to see a change in attitudes about SRI's, so that all users will see the value of these ratings, and will understand clearly the processes involved in collecting and using these ratings.
 - A draft core SRI form, and draft forms for discussion sections and labs, are included in this report. These draft forms are presented together with important documentation of the research on SRIs which supports decisions reflected in the forms, such as inclusion of three groups of questions (student information, summative, and formative), the scales used, and specifics of the questions asked.
 - The pilot forms should be posted on a website during Summer 2008, together with a summary of the research that supported the choices made. In addition, information about the appropriate interpretation and use of SRIs should be posted. Samples of the information to be presented on the web site are included in this report. Some of these samples come from the website of the University of Massachusetts Office of Academic Planning and Assessment, Martha Stassen, Director of Assessment.
 - During Fall 2008, there should be several opportunities to present information about SRIs and the new forms to all users, including focus groups, forums, and the web site.
 - The draft forms should be presented to the following groups for feedback:
 - Faculty Standards Committee of the Senate
 - Senate Executive Committee
 - Senate as a whole
 - Graduate Faculty Council
 - Executive Committee of the Graduate School
 - Deans' Council
 - Department Head Professional Development Sessions
 - Regional campuses

- AAUP
- Undergraduate Student Government
- Graduate Student Senate

2. Pilot testing

Pilot testing should be carried out under the direction of a psychometrician, who will oversee the administration and analysis of pilot tests.

- During Spring 2009, the draft forms should be pilot tested with interested volunteers.
- During Summer – Fall 2009, results of the pilot testing and feedback from all sources should be considered and the forms / information revised accordingly. If necessary, newly revised forms should be pilot tested.

3. Implementation

- Potentially, the new forms can be used throughout the university starting in Spring 2010, but this schedule cannot be determined until the results of the pilot testing are analyzed.
- The new forms should be accompanied by detailed protocols of use, which will be different from the present practice, and training in these protocols. For example, faculty should be present when the instructions are presented to students; students who distribute and collect the forms should provide both their names and their email addresses to be contacted in case of questions.
- There should be continued sharing of information about research on SRIs and the new forms with all users (faculty, students, administrators, staff). New students and faculty should receive information during orientation, and results should be reported with more extensive interpretation information.

Resources needed

For Information and Pilot testing stages:

- Faculty leader (with appropriate release from other administrative and teaching duties).
- Committee members to work with faculty leader.
- Web designer.
- Administrative support for running focus groups, faculty forums, and other informational / feedback sessions.
- Consultant from peer institution having already completed such a transition.
- Psychometrician for overseeing pilot testing.
- Pilot testing, printing of forms, reporting and evaluating pilot results.

For Implementation stage and ongoing:

- A continuing Faculty Advisory Board on Evaluation of Teaching.
- Staff member(s) to provide more detailed feedback / interpretation of results for faculty and administrators with each evaluation.
- Website maintainer.
- Additional resources to ITL, as needed, to respond to faculty members' increasing use of their development activities.

***Information on the use and interpretation of
Student Ratings of Instruction (SRI's)***

Why should we have SRI's?

A large body of research on SRI supports the value and reliability of well-designed student evaluations. SRIs can be used to improve the quality of teaching and learning through feedback to both individual faculty members and promotion committees.

How are SRI's used?

- Formative

Instructors read and seriously take to heart what students report on the evaluations. Student feedback can lead faculty to revise teaching methods, change textbooks, revise assignments and make other changes to help students learn.

- Summative

Department Heads and Deans also review the feedback and use this information as one measure of teaching that contributes to decisions concerning faculty promotions.

What kind of information do SRI's provide?

Responses to the SRIs provide information on students' perceptions of their engagement, learning outcomes, the instructor's behavior and course activities. This feedback will help guide changes in future iterations of the course and/or the instructor's teaching.

Why should students participate in SRI's?

Just as students should be assessed often and in more than one way over the course of a semester or a program of study, so teachers should be assessed in a variety of ways. Student participation in the SRI process is critical to the university's commitment to quality teaching and academic excellence. Students are strongly encouraged to participate in the process with constructive feedback that is relevant to teaching and course content.

Who receives the information collected in SRI's?

All numerical summaries are reported to the faculty member, department head, and dean. Written comments are supplied to the faculty member only.

Which information from SRI's is used in administrative evaluation of teaching?

Only the **overall questions** should be used for this purpose, because they are highly correlated with student achievement and satisfaction and are comparable across different teaching situations.

What kinds of biases are found – or not found – in research studies of SRI's?

- Lower level students (freshman, sophomore) do tend to rate more harshly than upper level students (seniors, graduate students).
- Students in required courses tend to rate their instructors more harshly than students in elective courses.
- Math and science courses tend to be rated more harshly than courses in the humanities.
- Easy grades do not necessarily lead to high ratings.
- Although there is a tendency for students to rate large classes more harshly, small classes do not automatically guarantee high student ratings, nor do large classes automatically guarantee low ratings.
- There is no overall gender bias in student ratings.
- The time of day a class is taught does not affect the student ratings of the instructor.

Are SRI's the only way to evaluate teaching?

Many tools are available to help assess student learning and teacher effectiveness, of which the end-of-term course evaluation is only one. SRI's can also be a measure of an instructor's achievements in teaching, but it is effective as one form of measurement among many.

This information has been excerpted from the following websites, which provide very useful information related to this issue:

Iowa State University, Center for Excellence in Learning and Teaching

<http://www.celt.iastate.edu/set/homepage.html>

University of Massachusetts, Office of Academic Planning and Assessment

<http://www.umass.edu/oapa/srti/>

University of Michigan, Office of Evaluations and Examinations

<http://www.umich.edu/%7Eeande/tq/index.htm>

Carnegie Mellon, University Course Assessment

<http://www.cmu.edu/uca/index.html>

New forms for Student Ratings of Instruction

Forms Subcommittee Members

Catherine Ross, Chair

Larry Armstrong

Liz Ciurlylo

Lynn Allchin

Robert McDonald

Lauren Schlesselman

With additional input and help from Pamela Roelfs and Cheryl Williams, OIR

Recommendation: All information included in this document should be used to create a website that will provide information to faculty, teaching assistants, administrators, department heads, deans and students about the process of piloting new forms and about the use and interpretation of student ratings of instruction in general.

Pilot Information

Need description of pilot process, including how and when pilot testing will be conducted, how focus groups will be developed, how to volunteer if you are interested, who is in charge of the pilot process, etc.

Research Summary to Accompany Draft Pilot Forms

Introduction

We, the New Forms subcommittee of the Student Evaluation of Teaching Committee, submit the following summary of the research on student ratings of instruction because we recognize, and the literature documents, the fact that “Negative attitudes toward student ratings are especially resistant to change, and it seems that faculty and administrators support their belief in student rating myths with personal and anecdotal evidence, which [for them] outweighs empirically based research evidence” (Cohen, 1990, p. 124-125).

First and foremost, a recommendation:

“Student rating forms that have *not* been constructed according to professional psychometric standards may be unreliable and thus able to be influenced by factors such as popularity, temperature in the classroom, instructor gender or anything else. Unfortunately, many institutions do use student rating forms that have not been constructed and validated using professional psychometric standards. Without rigorous reliability and validity data on such forms, it is impossible to tell for certain what influences the final student rating” (Arreola, 2007).

These pilot forms must be tested and validated by a professional psychometrician before being used to evaluate faculty. According to Arreola (p. 104), “given the use of a well-designed, valid and reliable student rating form, the literature indicates that:

- **Faculty cannot buy good ratings by giving easy grades.**
- **Teaching a small class does not automatically guarantee high student ratings, nor does teaching a large class automatically guarantee low ratings.**
- **Lower level students (freshmen, sophomores) tend to rate more harshly than upper level students (seniors, graduate students).**
- **Students in required courses tend to rate their instructors more harshly than students in elective courses.**
- **Math and science courses tend to be rated more harshly than courses in the humanities.**
- **There is no overall gender bias in student ratings (i.e., one gender of faculty does not consistently get higher or lower ratings than the other).**
- **The time of day a class is taught does not affect the student ratings of the instructor (i.e., students do not automatically rate faculty lower in classes taught early in the morning or right after lunch).**
- **Student ratings can be quite helpful in instructional improvement efforts, when used as part of a faculty development program that includes personal consultations.**

Arreola, R. (2007). *Developing a Comprehensive Faculty Evaluation System*. San Francisco, CA: Jossey-Bass Publishers.

General Questions:

Q: Why a 5 point scale?

A: “Scales with fewer than five points do not discriminate well, but using more than seven points adds little” (Berk, 1979; Doyle, 1983 as cited in Cashin, 1995)

Q: To whom will the information in the different sections be reported?

A: As is the case currently, all numerical summaries (both overall summative and diagnostic formative) will be reported to the individual faculty member and the department heads and deans. However, in the information for administrators, it will be **strongly emphasized** that the **Overall questions** (3 & 4) are the ones that should be used for administrative evaluation of teaching performance, or summative evaluation (Abrani, 2001; Arreola, 1995; Centra 1993) because they are “highly correlated with student achievement and satisfaction and are **applicable and comparable in nearly all teaching and learning situations**” (Centra, 1993).

The diagnostic questions on the other hand, are primarily formative, providing the faculty member with information on strengths and weaknesses in the instruction and in the course, at least from the students’ perspectives. The responses to these questions are intended to help faculty develop their teaching through consultation with a mentor, or a faculty development specialist in the Institute for Teaching & Learning. The written student comments will continue to be reported to the faculty member only.

It is crucial to remember that these student ratings should NOT be the ONLY piece of evidence in the evaluation of teaching; there should be additional information collected from peers, colleagues and from the individual faculty members themselves.

I. Student Information

Q: Why collect student information such as expected course grade, elective vs. required status, class level distribution, etc.?

A: Most of these characteristics have potentially small effects on the overall ratings that instructors receive, but oftentimes provide useful information in the interpretation of the results, especially when used by outside consultants, such as faculty developers from the Institute for Teaching & Learning.

The effect of **expected grades**, though widely believed to be a strong predictor of instructor ratings, has only shown a very low or no correlation with student ratings of instruction (in over 500 studies!) in the research (Arreola, 1995, 2007; Braskamp & Ory, 1994; Feldman, 1976a; Howard & Maxwell, 1980 & 1982; Marsh & Dunkin, 1992). In the Howard & Maxwell studies, they concluded that most of the correlation between expected grade and the global instructor rating was “accounted for by student (self-reported) learning ...and desire to take the course” (Cashin, 1995).

There is a substantial body of work which shows that “**student ratings are positively correlated with student learning**, as measured by student performance on standardized final exams” (Cohen, 1981, 1986; d’Appollonia & Abrami, 1988; McCallum, 1984; as cited in Arreola, 2007).

There is strong research support which shows that **student motivation** or **reason for taking the course** is correlated with instructor overall ratings. In general, we can say that “higher ratings were received from students who took a course for general interest, or as a major elective; lower ratings were received when the course is being taken as a major requirement or general education requirement. This variable REQUIRES CONTROL.” (Cashin, 1995). According to Ory (2001), “Research has shown that ratings in elective courses are higher than in required courses [Costin, Greenough, and Menges, 1971; Feldman, 1978; McKeachies, 1979; Marsh, 1984].

The literature on the effects of **class standing** shows consensus that “freshmen tend to rate a course more harshly than sophomores, sophomores more harshly than juniors, juniors more harshly than seniors and seniors more harshly than graduate students” (Arreola, 2007). This is mirrored in the research on course levels reported in Ory (p. 4, 2001), “research has shown that ratings in higher-level courses tend to be higher than in lower-level courses [Aleamoni and Graham, 1974; Bausell and Bausell, 1979; Feldman, 1978; Kulik and McKeachie, 1975], though these effects are marginal. By obtaining this student characteristic information, it is hoped that UConn can identify which factors correlate strongly, weakly or not at all, with overall instructor ratings.

II. Overall Summative questions

Q: Why use global or summative ratings?

A: Research shows that global items such as these 4 questions in Part Two: Overall Summative Questions are highly correlated with student achievement and satisfaction, and are applicable and comparable across different teaching and learning situations (Centra, 1993). Similarly, researchers found that that these types of summary items can provide sufficient data for personnel decisions (Abrami, 1989, 2001; Abrami & d’Appollonia, 1991; Braskamp and Ory, 1994). These global rating items “tend to correlate more highly with student learning than do more specific items” (Cohen, 1981; Feldman, 1989 as cited in Seldin, 1995).

“Do not average all of the items into a single score” (Cashin, 1999)

According to the research, it is not good practice to simply average the scores of diagnostic items that are designed to provide formative feedback for teaching improvement to get the overall teacher rating. Everyone agrees that student rating items are multidimensional (Marsh & Dunkin, 1992). Because of this, it is highly likely that the teaching method items on any given form are not all from the same dimension, but a mixture of the dimensions” (p. 35), and yet if we average these items instead of using an overall global rating, we are implying that each of these behaviors has equal weight for every teacher in every class, which clearly is not the case.

III. Formative/Diagnostic Questions

Q: What is the purpose of these diagnostic questions if we have overall ratings for the instructor and course?

A: All of the items in this section, in parts A. (Instructor) and B. (Course) are designed to give feedback to the instructor on areas of strength and areas for improvement. These items are called “formative” or “diagnostic”, and are best used in conjunction with a mentor or faculty development consultant to look at areas of concern and develop a plan for improvement in those areas. These items can be very productively used in conjunction with the open-ended comments to map out a plan for teaching improvement. As Cashin (1999) states, “These two types complement each other. Sometimes just reading the students’ comments gives a negative impression while looking at the numerical ratings shows relatively high numbers giving a positive impression. Combining both qualitative and quantitative data is useful for improvement (p. 38).

Q: Why have separate sections on instructor and course items?

A: It seems to help students give better feedback to faculty when course issues are clearly separated from instructor behaviors. It also allows the users of the forms to clearly identify the source of a problem. This also prevents situations where, for example, student dislike of a textbook might be conflated with the instructor rating if there are no explicit questions to handle things like textbook, readings, syllabus, etc. For teaching improvement, it is best to “use items that require as little inference as possible on the part of the student rater and as little interpretation as possible on the part of the instructor/evaluators” (Cashin, 1995).

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Draft of Proposed Common Form Pilot

I. Student Information

- Semester Standing: Keep as is on current form
- Expected Grade in this Course: Keep as is on current form
- Cumulative Average (GPA): Keep as is on current form
- How often did you attend class: Keep as is on current form

-Which best describes this course for you?

- Requirement for my major
- General Education requirement
- Other requirement
- Elective

-On average, how many **hours a week** did you spend outside of class preparing for this course?

- | | |
|-----|-------|
| 0 | 7-9 |
| 1-3 | 10-14 |
| 4-6 | 15+ |

II. Overall Summative questions

1. Overall, how much do you feel you've learned in this course?

- 5 **Much more** than most courses
- 4 **More** than most courses
- 3 About the **same** as most courses
- 2 **Less than** most courses
- 1 **Much less** than most courses

2. My desire to take this course was

- 5 **much more** than most courses
- 4 **More** than most courses
- 3 About the **same** as most courses
- 2 **Less than** most courses
- 1 **Much less** than most courses

3. What is your overall rating of this instructor's teaching?

- | | |
|-------------|--------|
| 5 Excellent | 2 Fair |
| 4 Very Good | 1 Poor |
| 3 Good | |

4. What is your overall rating of this course?

- | | |
|-------------|--------|
| 5 Excellent | 2 Fair |
| 4 Very Good | 1 Poor |
| 3 Good | |

III. Formative/Diagnostic Questions

A. Instructor (all questions will use the same 5 point scale as in question 1)

1. The instructor presented the course material in a clear manner.
 - 5 Almost always
 - 4 Frequently
 - 3 Sometimes
 - 2 Rarely
 - 1 Almost never
2. The instructor was well prepared for class.
3. The instructor cleared up points of confusion.
4. The instructor inspired interest in the subject matter.
5. The instructor showed a personal interest in helping students learn.
6. The instructor clarified student assignments and responsibilities.
7. The instructor was accessible to students both in and out of class.
8. The instructor gave me useful feedback on my performance.
9. The instructor returned graded assignments and exams in a reasonable amount of time.
10. The instructor used class time effectively.
11. The instructor treated all students with respect.
12. The instructor assigned grades fairly.
13. The instructor was receptive to the expression of student views.
14. The instructor's voice was loud enough.
15. The instructor had good communication skills.

B. Course (All course items will use this scale)

- 5 Agree strongly
 - 4 Agree
 - 3 Neither Agree nor Disagree
 - 2 Disagree
 - 1 Disagree strongly
16. The methods of evaluating my work were fair.
 17. The syllabus, readings and assignments, were well organized.
 18. The course objectives were clear.
 19. The course objectives were met.
 20. The textbook and/or assigned readings made a valuable contribution to the course.
 21. The amount of material covered in the course was reasonable.
 22. For me, the level of difficulty of this course was:
 - Very Easy
 - Easy
 - Reasonable
 - Hard
 - Very hard

IV. Student Comments Page: For the instructor ONLY.

NOTE: Your responses to the following questions will be sent directly and **ONLY to the instructor**, after the final grades are posted.

1. Please write here any comments you have about the course or course materials.

2. What was the most positive aspect of the way in which this instructor taught this course?

3. What can this instructor do to improve teaching effectiveness in the classroom?

4. For courses with **labs and/or discussion sections**: Were the labs/discussion sections helpful to your learning in this course?

Addendum: Question banks for other kinds of courses

Additional question bank for **team-taught** courses (Arreola, R. 2007, p.138):

- The team teaching method provided me with a valuable learning experience.
- Instruction was well-coordinated among the team members.
- The team teaching approach was effectively implemented in this course.
- Team teaching provided me with diverse insights into course materials.

Additional question bank for **clinical** courses (Arreola, R. 2007, p. 137)

- The teaching done in clinical settings increased my learning.
- The instructor provided relevant clinical experiences.
- The instructor's questions in clinical discussions were thought-provoking.
- The instructor observed students' techniques of interviewing.
- The instructor helped me develop good clinical techniques.
- The instructor observed students' techniques of physical examination.

Arreola, Raoul. (2007) *Developing a Comprehensive Faculty Evaluation System*. San Francisco, CA: Jossey-Bass.

Draft of Proposed Supplemental Discussion/Laboratory Pilot Form

I. Student Information

The lab/discussion forms will use the **same student information questions as the Common Form**

- Semester Standing: Keep as is on UConn form
- Expected Grade in this Course: Keep as is...
- Cumulative Average (GPA): Keep as is....
- How often did you attend class: Keep as is...

-Which best describes this course for you?

- Requirement for major
- General Education requirement
- Other requirement
- Elective

-On average, how many **hours a week** did you spend outside of class preparing for this course?

- | | |
|-----|-------|
| 0 | 7-9 |
| 1-3 | 10-14 |
| 4-6 | 15+ |

II. Overall Summative question (The laboratory/discussion form will use only one overall question)

1. What is your overall rating of this instructor's teaching?

- 5 Excellent
- 4 Very Good
- 3 Good
- 2 Fair
- 1 Poor

III. Formative/Diagnostic Questions

A. Instructor (all questions will use the same 5 point scale as in question 1)

1. The instructor was well prepared for class.
 - 5 Almost always
 - 4 Frequently
 - 3 Sometimes
 - 2 Rarely
 - 1 Almost never
2. The instructor cleared up points of confusion.
3. The instructor inspired interest in the subject matter of this course.
4. The instructor showed a personal interest in helping students learn.
5. The instructor clearly explained student assignments and responsibilities.
6. The instructor was accessible to students both in and out of class.
7. The instructor gave useful feedback on my performance (in this class?)

8. The instructor returned graded assignments and exams in a reasonable amount of time.
9. The instructor used class time effectively.
10. The instructor connected the lab/discussion with the lecture material.
11. The instructor encouraged questions and discussion.
12. The instructor was responsive and respectful to student questions.
13. The instructor assigned grades fairly and carefully.(?)
14. The instructor was understandable. (has good communication skills?)

Lab only

15. The instructor explained safety and emergency procedures for the lab.
16. The instructor is knowledgeable about lab materials and techniques.
17. The instructor explained the rationale behind lab experiments clearly.

Discussion only

18. The instructor established clear ground rules for discussing difficult topics.
19. The instructor modeled respectful discourse with all students.
20. The instructor created a safe climate for class discussions.
21. The instructor helped all students participate.