Improving Lecture/Course Structure Based on Evaluations

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Massachusetts General Hospital
Learning Objectives

- Differentiate the various assessment strategies utilized to evaluate individual lecture /courses.
- Understand the advantages and biases of utilizing student evaluations.
- Become familiar with and analyze the questions utilized on a standard student evaluation form.
- Assess the institutional and individual barriers to implementing changes in lectures/teaching methods based on learner evaluations.
- Assemble strategies to improve lectures/courses bases on evaluation material obtained.
Why care about evaluations?

- Consumer Based Education.
Why care about evaluations?

- Increased Educator Accountability; concern for ‘quality’ of education.
Why care about evaluations?

- Major goal is to improve learning
Why care about evaluations?

The evaluation Cycle (Hounsell, 2003)
How to Evaluate?

- Student evaluation of teaching (SET’s): Evaluation Forms
How to Evaluate?

- Self-assessment done by faculty
How to Evaluate?

- Evaluation by colleagues
How to Evaluate?

- Assessment of student learning; Pre-post test
“personality contests”
“inflated importance given to “enter-trainers”
“grade inflation”
“less challenging material”
“students are simply not in a position to evaluate their teachers’ performance”
“Students have power over teachers”

“...denied tenure and promotions, or jobs altogether, simply because they failed to pander to the increasing desire of students to be entertained or at least to be relieved of the hard work that genuine higher education requires”
Student evaluation of teaching (SET’s): Praise

“focus faculty on students needs”

“Formalizes feedback and removes individual case bias”

“Can reward outstanding teaching in a research driven world; Impact factor”

“Re-emphasizes teaching and the student experience in the larger organization”

“students are qualified to give feedback on the quality of the delivery of instruction”

“support faculty applications for appointment, tenure or promotion”

Metric-driven “teaching portfolio”
Student evaluation of teaching (SET’s); Important Issues in the Research literature; bias

- Students’ evaluations can be influenced more by the style than by the content of presentation. (Naftulin, Ware and Donnelly (1973))
- Students’ evaluations are more positive if they had opted to take a particular module/course rather than a required course. (Marsh (1984, 1987))
- Several studies have found that students’ evaluations tend to be higher where students expect to receive high grades (Worthington, 2002; Braskamp and Ory, 1994; Marsh and Dunkin, 1992; Marsh, 1987).
- Students tend to give higher ratings in courses they perceive as difficult, and in which they are required to work hard (Felder, 1992).
Student evaluation of teaching (SET’s)

- Anonymous
Student evaluation of teaching (SET’s)

- Five-point Likert-type scale ranging from “very poor” to “very good”
Student evaluation of teaching (SET’s)

- Closed-ended statements exploring teaching effectiveness
- Nine dimensions of effective teaching (Marsh, 1984)

- Enthusiasm
- Organization
- Group interaction
- Learning/value
- Individual rapport
- Breadth of coverage
- Examinations/grading
- Assignments and workload/difficulty
Student evaluation of teaching (SET’s)

- Space is provided for open-ended and other additional items to be included where required.
Student evaluation of teaching (SET’s)

Feedback is to be collected as soon as possible after the relevant educational activity.
Student evaluation of teaching (SET’s)

- Response rates of at least 60% are desirable.
Quality of SETs questionnaires?

This is a standard set of questions used by students to evaluate core clerkships at Harvard Medical School. Your responses to respondents is confidential. Survey responses, in aggregate, are available to the Clerkship Director and the Council on Education. They also become a part of official records for purposes of individual promotion and tenure.

1. How well were the clerkship objectives stated at the outset?
   - Very well
   - Not mentioned

2. Were the criteria used in evaluating your performance explained to you at the beginning of the clerkship?
   - Explained in detail
   - Not mentioned

3. Rate the organization of the clerkship.
   - Excellent
   - Poor

4. Were the faculty accessible?
   - Very accessible
   - Not accessible

5. Please rate the overall quality of teaching in the clerkship.
   - Excellent
   - Poor

6. Did this clerkship enhance your interest in the subject matter?
   - Enhanced
   - Diminished

7. Did this clerkship foster your self-directed learning?
   - Fostered
   - Not fostered

8. Was enough content presented in this clerkship to enable you to master core knowledge related to this subject?
   - Enough
   - Not enough

9. How well did this clerkship relate to previous clerkships taken in this area?
   - Offered new material
   - Redundant

10. Did this clerkship promote an integrated view of material?
    - Integrated
    - Not integrated

11. Overall rating of this clerkship.
    - Excellent
    - Poor

12. From whom did you receive feedback?
    - Clerkship Director
    - Faculty
Quality of SETs questionnaires?

- Student ratings, Current Evaluations; Noon Lecture course

What is your level of training
- 1st year
- 2nd year
- 3rd year
- 4th year/minifellow

2013 MINICOURSE LECTURES: Please rate and provide comments, where applicable. "Hybrid imaging: PET/CT to MR/PET" by Dr. Ignasi Carrio, GR speaker, 2013, Barcelona

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Comments

Remaining Characters: 5,000

"Non-traumatic Abdominal Emergencies Part II" by

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Comments

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"Cervical Spine Trauma" by Dr. Laura Avery

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<th>Excellent</th>
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Quality of SETs questionnaires?

CME ACTIVITY EVALUATION FORM

Directions: Please complete the following questions and place the form on the registration table as you leave. Your written comments are greatly appreciated. Thank you!

1. What was your overall opinion of the CME activity? (please circle one)
   - Excellent
   - Good
   - Satisfactory
   - Poor

Educational Objectives:
Upon completion of this CME activity, you should be able to:
   - Objective #1
   - Objective #2
   - Objective #3
   - Objective #4

2. Did the materials presented meet the stated objectives? (please circle)   Yes  No

3. What did you like most about this CME activity? ___________________________
   ___________________________

4. What did you like least about this CME activity? ___________________________
   ___________________________

5. Do you have specific suggestions as to how this CME activity might be improved? ___________________________
   ___________________________

6. Did you feel the CME activity content was: (please circle one)
   - Just right
   - Too advanced
   - Too basic

7. Was the information/material presented at this CME activity free from commercial bias? (please circle) Yes  No  If no, please explain ___________________________
   ___________________________

(over)

FACULTY EVALUATION CRITERIA:

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<th>Quality of Handout</th>
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Additional Comments:

Signature (if you wish): _________________________________________

Thank you for taking the time to share your thoughts about this CME activity.
Quality of SETs questionnaires?

- Improve questionnaire.
Quality of SETs questionnaires?
Quality of SETs questionnaires?

IASystem™ Standard Evaluation Forms

IASystem™ provides several standard forms to capture student evaluations of different instructional formats or with respect to educational outcomes. The evaluation items and form structure support both pedagogical (formative) and programmatic (summative) decision making. The paper version of each form can be viewed below.

A – Small Lecture / Discussion
B – Large Lecture
C – Seminar / Discussion
D – Problem Solving
E – Skill Acquisition
F – Quiz Section
G – Lectures / Assignments
H – Lab
I – Distance Learning
J – Clinical / Studio
K – Project / Studio
L – English as a Second Language
M – Study Abroad
X – Educational Outcomes
Student Comments

View Form A (PDF)
Designed for lecture courses with the opportunity for discussion. Items emphasize the clarity and quality of information transmitted, as well as the nature of the interaction between instructor and student.
Quality of SETs questionnaires?

- Large lecture

10. Instructor's enhancement of student interest in the material was:
11. Student confidence in instructor's knowledge was:
12. Instructor's enthusiasm was:
13. Clarity was:
14. Interest level of class sessions was:
15. Availability of extra help when needed was:
16. Use of class time was:
17. Instructor's interest in whether students learned was:
18. Amount you learned in the course was:
19. Relevance and usefulness of course content were:
20. Evaluative and grading techniques (tests, papers, projects, etc.) were:
21. Reasonableness of assigned work was:
22. Clarity of student responsibilities and requirements was:
23. Do you expect your grade in this course to be:
24. The intellectual challenge presented was:
25. The amount of effort you put into this course was:
26. The amount of effort to succeed in this course was:
27. Your involvement in this course (doing assignments, attending classes, etc.) was:
# Quality of SETs questionnaires?

- Small lecture/Discussion

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<table>
<thead>
<tr>
<th>10. Quality of questions or problems raised by instructor was:</th>
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<tbody>
<tr>
<td>11. Student confidence in instructor’s knowledge was:</td>
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<td>12. Instructor’s enthusiasm was:</td>
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<tr>
<td>13. Encouragement given students to express themselves was:</td>
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</tbody>
</table>

| 14. Answers to student questions were: |
| 15. Availability of extra help when needed was: |
| 16. Use of class time was: |
| 17. Instructor’s interest in whether students learned was: |
| 18. Amount you learned in the course was: |

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<table>
<thead>
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<th>Relative to other college courses you have taken:</th>
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<tr>
<td>25. Do you expect your grade in this course to be:</td>
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<td>26. The intellectual challenge presented was:</td>
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<td>27. The amount of effort you put into this course was:</td>
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<td>28. Your involvement in this course (doing assignments, attending classes, etc.) was:</td>
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<tr>
<td>29. On average, how many hours per week have you spent on this course, including attending classes, doing readings, reviewing notes, writing papers and any other course related work?</td>
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<td>30. From the total average hours above, how many do you consider were valuable in advancing your education?</td>
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<td>31. In regard to your academic program, is this course best described as:</td>
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<th>Possible grades:</th>
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<td>C- (0.0-0.9)</td>
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<td>A program requirement?</td>
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<tr>
<td>An elective?</td>
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<td>Other?</td>
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Student evaluation of teaching (SET’s): Intended uses

- **Formative**: diagnostic feedback mechanism intended to improve teaching and courses.
- **Summative**: feedback mechanism used in personnel and administrative decision-making.
- Information for prospective students when selecting courses and lecturers.
- As a source of data for research on teaching.

Marsh and Dunkin (1992) four purposes for collecting students’ evaluations of teaching (SETs)
Closing the “Feedback Loop” and acting on feedback: Institutional Strategies
Closing the “Feedback Loop” and acting on feedback: Institutional Strategies

- Results should be made available to students—“feedback loop”.

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eVALUEate

feedback vector

student → teacher

Student Feedback, Surveys and Reporting
Closing the “Feedback Loop” and acting on feedback: Institutional Strategies

- Analyzing, interpreting and acting on student evaluation data is time and resource intensive.
Closing the “Feedback Loop” and acting on feedback:

This pamphlet is designed to be used with course evaluation forms and reports on the Schools of Humanities and Sciences, Education, and Earth Sciences. The table of contents is organized for easy cross-reference to the Teaching Evaluation Summary that you receive with completed evaluation forms. This is not meant to be read from the beginning to the end. Because you will most likely want to skip to those parts that are most relevant to your action results, there is intentional repetition of ideas across sections.

An explanation of the five specific aspects of effective teaching that your evaluations help you interpret your evaluation summary addition, the pamphlet also provides specific guidelines for each of the five aspects. These suggestions are drawn from numerous disciplines from observation and practice. The suggestions are practical, not particularly difficult to implement and have worked for them. They are

Interpreting the Four Sections of Your Course Evaluation

1. Student Profiles and Participation
   Information about students’ demographics, background, course participation, and grade expectations (see page 3)

2. Summary Graphs that Capture the Quality of Key Elements of Instruction: Snapshots of Strengths and Weakness
   A graphical summary of students’ ratings, presented as average scores in six categories (see page 4)

3. Graphs and Distribution of Ratings within Evaluation categories: Identifying Trends and Areas Needing Improvement
   A more detailed display of the full distribution of students’ ratings for each item in each of the six categories (see page 5)

4. Comparing Your Evaluation Scores to Course Evaluation Means for Your School
   A set of graphs that allows you to compare your evaluation scores to the course evaluation means of your school (see page 15)
Closing the “Feedback Loop” and acting on feedback: Institutional Strategies

Suggestions for Responding to Students’ Feedback

1. The overall quality of the course content.
Preparation is the foundation of an organized and session. The following strategies will go a long way in improving organization and clarity:
• Prepare an introduction to each class meeting that is clear and engaging for the day.
• Create an outline of your main points and the topics, or demonstrations that support each point.
• Prepare and practice a short conclusion that will leave the audience with a sense of the context of the course.
• If you plan to use technology aids, prepare backups of technological difficulties.
• Be sure that any materials you need for lecture and working properly, and rehearse any demonstrations.

11. Inspired and motivated student interest in the course content.
• Learn and use students’ names. This can help students feel recognized and more involved in the class.
• Demonstrate your enthusiasm about the subject matter. Let students know why you love your field.
• Encourage students to explore their specific interests in your field by allowing students to choose between readings or assignment topics.
• If your course is a requirement or a pre-requisite for other classes, explain to students how the content of your course relates to their future advanced work in different majors.
• Show students how the course material can be applied to real life. Begin classes with thought-provoking questions or recent news events that relate to the topic of discussion.
Consider:
• Can what you’re teaching explain a phenomenon that students may have wondered about?
• Has what you’re teaching been used to solve a modern or historic problem?
• Could what you’re teaching be used to solve a previously unsolvable problem?
• Does what you’re teaching contradict ideas that students may have about how the world works?
• Can students use what you’re teaching to interpret their everyday experiences or cultural phenomena?
• Is there a famous example of what you’re teaching?
Closing the “Feedback Loop” and acting on feedback: Institutional Strategies

- A senior educator can work as an “instructional consultant”, assisting staff to interpret their results and improve their teaching.
- “Safe” peer review
Closing the “Feedback Loop” and acting on feedback: Institutional Strategies

- Staff may be best at interpreting the results of feedback. Encourage reflection on what constitutes good teaching, their teaching practice and their teaching goals.
Access to faculty development seminars on teaching
Closing the “Feedback Loop” and acting on feedback: Individual Strategies

- Develop a strategy to enhance your teaching by taking into account SET feedback
Closing the “Feedback Loop” and acting on feedback: Individual Strategies

- Control your defense mechanism
- What kinds of reactions am I having to this feedback and what is it likely to make me do in future?
Closing the “Feedback Loop” and acting on feedback: Individual Strategies

- Work hard not to under-react or over-react to information that you receive via SET feedback.
- What are the changes that would enhance student learning versus the ones that would have neutral or negative impact on learning?
Closing the “Feedback Loop” and acting on feedback: Individual Strategies

- Analyze the source of your students’ reactions in a way that sheds light on any issues and problems that have been identified.
  - What are the reasons behind both the positive and negative feedback provided by the students?
Closing the “Feedback Loop” and acting on feedback: Individual Strategies

- Divide the issues raised by students into actionable and non-actionable categories.
- What aspects of this feedback can I do something about?
Closing the “Feedback Loop” and acting on feedback: Individual Strategies

- Remember that small changes can have a big effect.
Conclusion

- Student feedback is useful and informative and can improve teaching and course structure.
- Improved understanding of assessment strategies utilized to evaluate individual lecture/courses. Especially Student Evaluation of Teaching (SET) surveys.
- Highlighted the potential biases associated with Student feedback.
- Became familiar with proper strategies used to gather student feedback.
- Understand Institutional and individual strategies to implementing changes in lectures/teaching methods based on student evaluations.
Thank you!

“I’ve got it! How about a funny picture! People love funny pictures!”
References