Interpreting and Working with

Your Course Evaluations

THE CENTER FOR TEACHING AND LEARNING • STANFORD UNIVERSITY

This pamphlet is designed to be used with the course evaluation forms and reports used by 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 your 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 of the handout that are most relevant to your evaluation results, there is intentional repetition of ideas across sections.

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

For more in-depth information, visit the Center for Teaching and Learning's website (http://ctl.stanford.edu) or visit us on the fourth floor of Sweet Hall to browse our outstanding library of teaching resources. We also encourage you to talk to one of our associate directors—who can observe, or arrange videotaping of a class session and discuss your teaching with you. Call 723-1326 or email TeachingCenter@stanford.edu to make arrangements. You can request an associate director with a disciplinary background closest to your own: Senior Associate Director for Science and Engineering Robyn Dunbar; Associate Director for the Humanities Mariatte Denman; or Associate Director for the Social Sciences Marcelo Clerici-Arias.

Teaching at Stanford

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

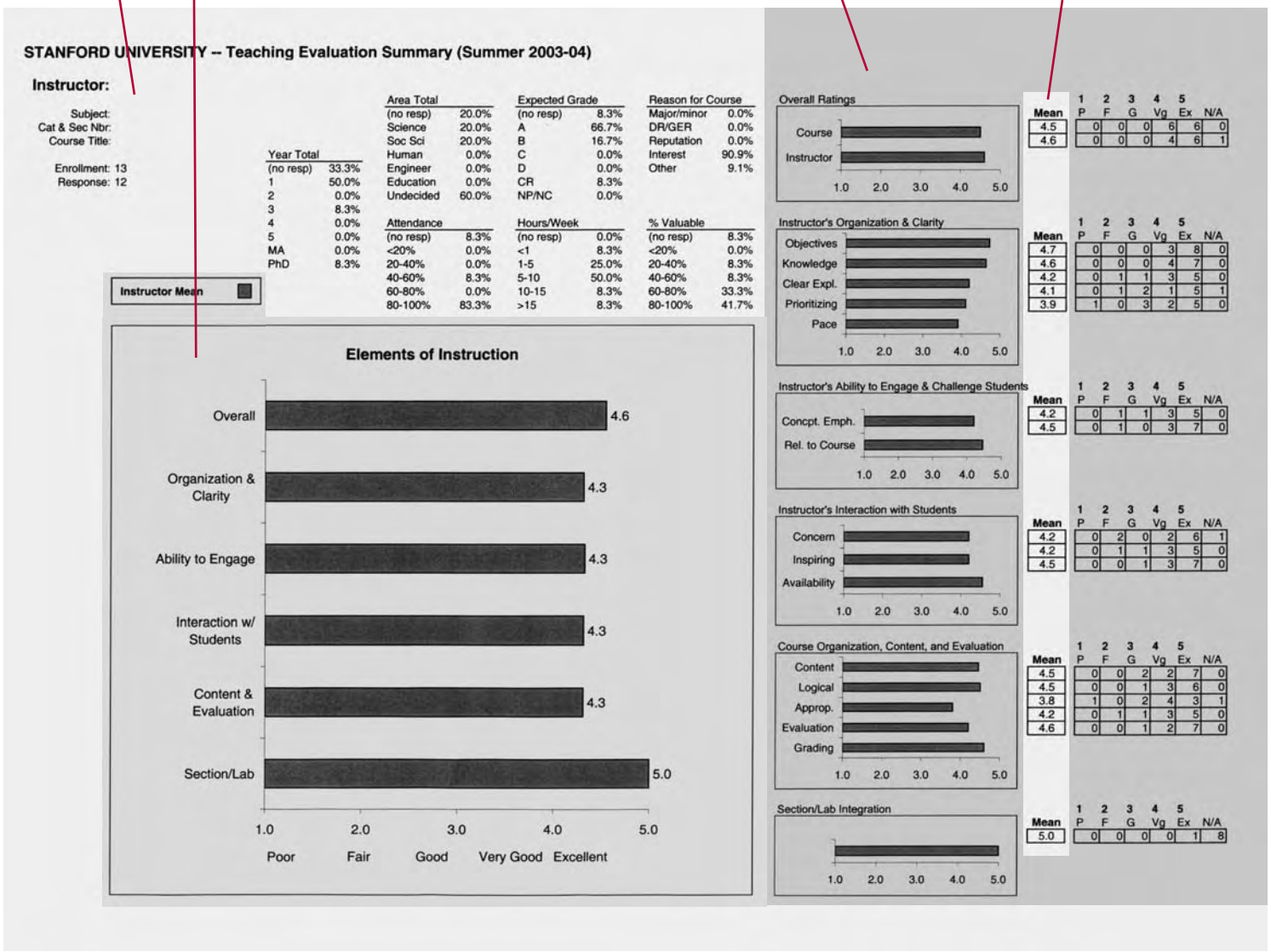
a graphical summary of students' ratings, presented as average scores in six categories (see page 4)

3. Graphs and Distributionof 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)



1. Student Profiles and Participation

The top portion of this section contains demographic information about the students who completed evaluations for your course. This information can help you determine whether the course attracted the students you expected and planned for. Did your class include mostly freshmen or upperclassmen or was there a mix? Did your class attract mostly majors in your field, or did it include a number of students taking the class out of interest, or to fulfill a requirement? These factors can influence the pattern of evaluations you receive, and should also be used in future course planning. Another factor that can influence evaluations is the percentage of students taking the course for a grade versus for CR/NC. These two groups may have different perspectives on the course.

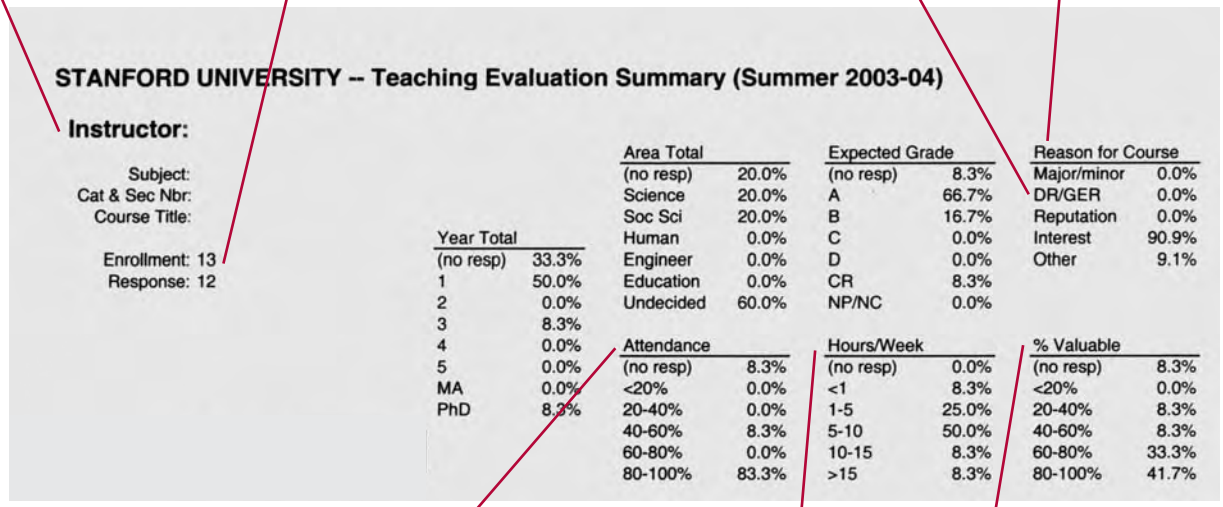
STANFORD UNIVERSITY—Teaching Evaluation Summary

Is this information correct?

Since a high response rate ensures a more reliable assessment of your teaching, you should strongly encourage your students to complete and hand in their evaluations.

Since a student might have more than one reason for taking your course, the total may exceed 100%.

General Education Requirement



STANFORD UNIVERSITY -- Teaching Evaluation Summary (Summer 2003-04)

Instructor:

Subject:
Cat & Sec Nbr:
Course Title:

Enrollment: 13
Response: 12

Year Total	
(no resp)	33.3%
1	50.0%
2	0.0%
3	8.3%
4	0.0%
5	0.0%
MA	0.0%
PhD	8.3%

Area Total	
(no resp)	20.0%
Science	20.0%
Soc Sci	20.0%
Human	0.0%
Engineer	0.0%
Education	0.0%
Undecided	60.0%

Expected Grade	
(no resp)	8.3%
A	66.7%
B	16.7%
C	0.0%
D	0.0%
CR	8.3%
NP/NC	0.0%

Reason for Course	
Major/minor	0.0%
DR/GER	0.0%
Reputation	0.0%
Interest	90.9%
Other	9.1%

Attendance	
(no resp)	8.3%
<20%	0.0%
20-40%	0.0%
40-60%	8.3%
60-80%	0.0%
80-100%	83.3%

Hours/Week	
(no resp)	0.0%
<1	8.3%
1-5	25.0%
5-10	50.0%
10-15	8.3%
>15	8.3%

% Valuable	
(no resp)	8.3%
<20%	0.0%
20-40%	8.3%
40-60%	8.3%
60-80%	33.3%
80-100%	41.7%

High attendance suggests that students valued class sessions. Low attendance may be explained by information in other sections of your report.

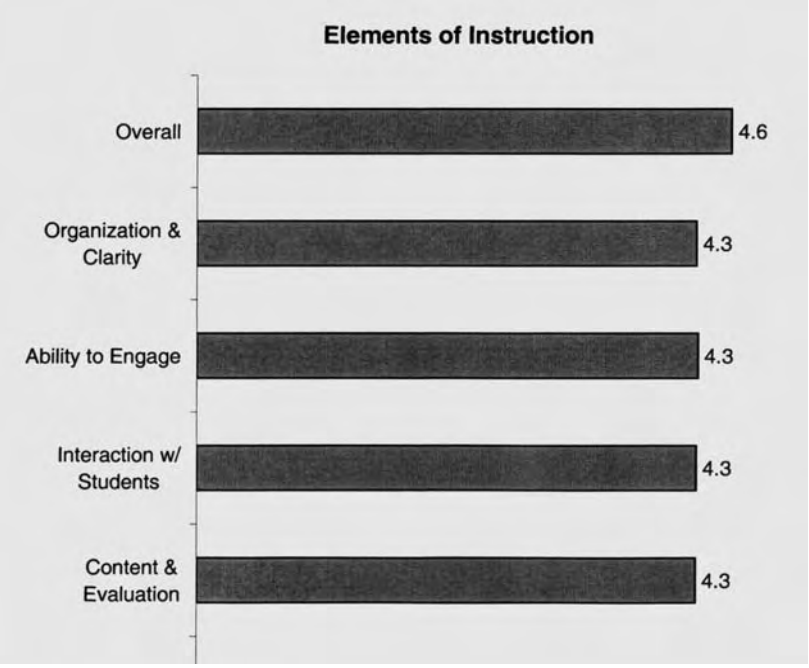
Was out-of-class workload what you had planned? How much variation is there in students' reports?

Studies indicate that students' perceived value of time spent out of class correlates highly with their overall course satisfaction.

2. Summary Graphs that Capture the Quality of Key Elements of Instruction: Snapshots of Strengths and Weakness

This graph summarizes average overall score, average scores within four major instructional categories, and the rating for lab/section integration.

Elements of Instruction



Overall: *The overall rating is the average of all students' responses to two items: overall quality of the course and instructor's overall teaching. It is not an average of other scores. Research suggests that this category is the most valid and reliable measure of students' evaluation.*

Organization and Clarity: *Average score for clear objectives, knowledge of course material, clear explanations, distinguish-ing more vs. less important topics, pacing.*

Ability to Engage: *Average score for emphasizing conceptual understanding/critical thinking and relating course topics to one another.*

Interaction with Students: *Average score for demonstrating concern for students' learning, motivating students, and availability out of class.*

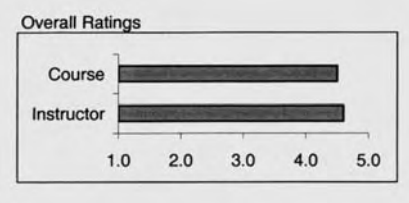
Content and Evaluation: *Average score for worthwhile course content, coherentorganization, choice of assignments, clear evaluation criteria, fair grading.*

Section/Lab: *Score for section/lab integration with the course.*

3. Graphs and Distribution of Ratings within Evaluation Categories: Identifying Trends and Areas Needing Improvement

This section provides a detailed explanation of how to interpret your scores along six dimensions and proposes suggestions for strengthening performance in each of those dimensions.

A. OVERALL RATINGS

Questions to which Students Responded	Graphs of average scores within each of the six evaluation categories	Distribution of raw data within categories gives valuable information to help you interpret trends among student responses.
1. The overall quality of the course content. **2. The instructor's overall teaching.**		1 P / 2 F / 3 G / 4 Vg / 5 Ex / N/A 0 0 0 6 6 0 0 0 0 4 6 1

Suggestions for Responding to Students' Feedback

1. The overall quality of the course content.

Preparation is the foundation of an organized and clear class session. The following strategies will go a long way toward improving organization and clarity:

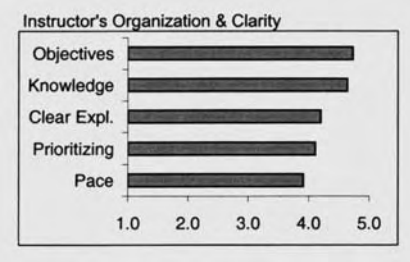
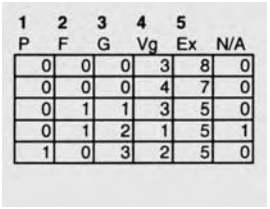
- Prepare an introduction to each class meeting that sets a clear and engaging agenda for the day.
- Create an outline of your main points and the topics, examples, or demonstrations that support each point.
- Prepare and practice a short conclusion that will tie the strands of the lecture together and place the lecture in the wider context of the course.
- If you plan to use technology aids, prepare backups in case of technological difficulties.
- Be sure that any materials you need for lecture are organized and working properly, and rehearse any demonstrations.

2. The instructor's overall teaching.

To make sure a well-planned lecture is well-delivered:

- Clearly signal shifts in topics and explain the connections between various topics.
- Don't assume that students will understand critical links intuitively. Talk students through important reasoning.
- Take into account the students' background knowledge (or lack of background knowledge), and try to anticipate common confusions or questions.
- Leave adequate time to cover the material without rushing

B. ORGANIZATION AND CLARITY

Questions to which Students Responded	Graphs of average scores within each of the six evaluation categories	Distribution of raw data within categories gives valuable information to help you interpret trends among student responses.
3. Set out and met clear objectives set out for the course. **4. Displayed thorough knowledge of course material.** **5. Explained concepts clearly.** **6. Distinguished between more important and less important topics.** **7. Presented material at an appropriate pace.**		

Suggestions for Responding to Students' Feedback

3. Set out and met clear objectives set out for the course.

- To set clear objectives for each class session, identify up to three key points that you want students to leave class understanding. Key points are not specific pieces of knowledge; they are themes or ideas that provide a framework for understanding and using specific pieces of knowledge. For example, a key point in a lecture on vision might be that all of human perception is a synthesis of "objective" reality and "subjective" interpretation. In some classes, it may be more appropriate to identify up to three key skills that you want students to develop in the class session. For example, a key skill in a writing lecture might be that students will learn how to use and analyze syllogistic reasoning and understand its value for structuring a convincing argumentative essay.
- The key points and skills for each class session should clearly relate to overall course goals described in your syllabus. For example, understanding human perception contributes to the larger course goal of understanding human interaction with the environment; learning how to use syllogistic reasoning contributes to the overall course goals of learning to create clear, logical, and persuasive exposition.
- In your preparation for class, outline how each key point will be covered, and how each key skill will be demonstrated and explained. Before class, take five or ten minutes to mentally walk through your outline, focusing on key transitions, explanations, and demonstrations.
- At the beginning of each session, share your outline with students or preview the main ideas. During the session, highlight the key points as you cover them. Summarize these points at the end of class. Throughout class, make sure students also understand how to use the information you have given them, and give them opportunities to practice key skills.
- Also outline how you will assess whether students understood the key points and acquired the key skills. Create learning objectives that are specific, observable, and measurable. R.M. Felder and R. Brent provide an excellent example in Effective Teaching (North Carolina State University, 1999). If you want students to "understand the principles of pollution control," you could specify that students should "if given the flow chart of a chemical process production plant, be able to: a) identify potential hazardous pollutants; b) estimate the likelihood that their emission rates will exceed EPA regulations; c) select monitoring devices for each emission source and justify the selections; d) design a system for reducing an unacceptable emission level and identify its possible flaws."
- Create in-class exercises or short assignments that help students assess their own learning, understand what you consider important, and see the value of what they learned. For example, give students five minutes to pair up and explain material to each other, or solve a relevant problem. Use quizzes (even if ungraded) or classroom assessment techniques (see Angelo, Thomas, & Cross, K. Patricia. *Classroom Assessment Techniques: A Handbook for College Teachers.* San Francisco: Jossey-Bass, 1993) to find out whether students are "with you" as you cover new material.

4. Displayed thorough knowledge of course material.

- Rehearse the main points of your lecture before class, and practice talking through complex concepts or demonstrations. If you have not presented a particular concept before, try explaining it to someone unfamiliar with the field. Note their questions.
- Try to anticipate students' concerns and possible questions, based on your previous teaching experience or conversations with students and colleagues. Prepare thoughtful responses to the most likely questions.

- If you are unable to answer a student's question in class, consider researching the answer and reporting back to the student privately or in class.
- When relevant, use your own research or professional experience to explain or discuss course material.

5. Explained concepts clearly.

- Rehearse the main points of your lecture before class, and practice talking through complex concepts or demonstrations.
- Face students when speaking. It is especially important that students can see you as you talk if you or your students speak English as a second language.
- Consider preparing overheads or handouts before class, taking the time to present material clearly.
- Avoid using jargon that may be unfamiliar to students. Define the jargon that you do use.
- Explain key points in more than one way. Use memorable examples, analogies, or anecdotes to illustrate important points.
- Use a full range of teaching tools to illustrate important ideas. In addition to verbal explanations, create visual representations on an overhead projector or the board. Use maps, charts, and graphs that are clearly labeled and visible from all points in the room. When possible, use objects or students themselves to represent or demonstrate concepts in a physical way.
- Link new information to previous concepts, to help students distinguish ideas and contextualize information.
- Link new information to the day's main objectives and the course's overall goals, to help students understand the value of the information.
- Check for understanding. Give students five minutes to pair up and explain material to each other, or solve a relevant problem. Use quizzes (even if ungraded) or classroom assessment techniques (see Angelo, Thomas, & Cross, K. Patricia. *Classroom Assessment Techniques: A Handbook for College Teachers.* San Francisco: Jossey-Bass, 1993) to find out whether students are "with you" as you cover new material.
- Make time for students to ask questions at the beginning of a session and throughout class. Don't just ask students if they have questions, ask them what questions they have. An absence of questions could indicate that students don't understand enough to generate questions; if students don't volunteer questions, you can ask them questions to make sure they understand the material.
- If a number of students approach you after class or during office hours regarding a particular concept, review it in class.
- Encourage students to ask you questions by email, so that you can clarify any confusion.

6. Distinguished between more important and less important topics.

The following strategies will let students know which topics are most important:

- Emphasize important course topics and themes in the course syllabus.
- Highlight important topics at the beginning of each class by sharing your outline with students.
- Spend more time on important topics and less time on less important topics. Use repetition to reinforce important ideas.
- Consider ways to visually represent your most important points. On handouts, overheads, slides, or the board, highlight important points with different fonts or colors. Use illustrations and figures to represent important ideas.
- Let students know which concepts are most likely to be addressed on a test, or will be important for completing an assignment.
- Avoid getting side-tracked by less relevant questions and comments. Write them down and return to them if time permits. Offer to meet with the students after class or in office hours.
- If your course is reading-heavy, highlight the readings that students should attend to most carefully, and require in-class discussion of the most important readings.
- Give students three minutes at the end of class to summarize the main points of a lecture in their own words. Or, ask students to create a figure or diagram that represents what they learned in a class session. Have students hand these in anonymously. It doesn't take long to skim students' responses to such an exercise, and the results can be illuminating.

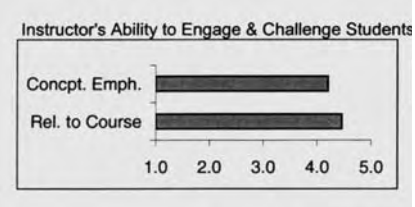
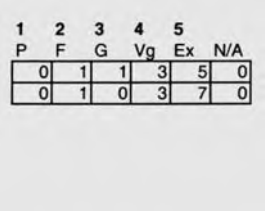
7. Presented material at an appropriate pace.

- At the beginning of the quarter, conduct a survey on students' background experience and knowledge. Consider an anonymous, ungraded quiz or assignment that will allow you to view your students' abilities well before the first exam or major assignment.
- Consider dividing your lectures into 10-minute segments, with opportunities in between for students to ask questions or review their notes.
- Build short breaks into classes that meet for longer than an hour, to restore students' focus.
- Leave more time than you think you need to cover new or complex material.
- Check for understanding. For example, ask students in pairs or small groups to take five minutes to explain material to each other or to solve a relevant problem. Use quizzes (even if ungraded) or classroom assessment techniques (see Angelo, Thomas, & Cross, K. Patricia. *Classroom Assessment Tech-*

niques: A Handbook for College Teachers. San Francisco: Jossey-Bass, 1993) to ensure students are "with you" as you cover new material.

- Make time for students to ask questions at the beginning of a session and throughout class. Don't just ask students if they have questions, ask them what questions they have. An absence of questions could indicate that students don't understand enough to generate questions; if students don't volunteer questions, you can ask them questions to make sure they understand the material.
- If a number of students approach you after class or during office hours regarding a particular concept, review it in class.
- Don't use your own experiences as a student as your sole guide to pacing or other teaching decisions. You would not be a professor if you were a "typical" learner in your discipline.
- Ask students to complete a midquarter questionnaire to assess whether your class is appropriately paced. You can also arrange for CTL to conduct a Student Small Group Evaluation (SGE) for you (see online forms for a SGE request at http://vpue-formserver.stanford.edu/ctl/sge_request.html).

C. ABILITY TO ENGAGE STUDENTS INTELLECTUALLY

Questions to which Students Responded	Graphs of average scores within each of the six evaluation categories	Distribution of raw data within categories gives valuable information to help you interpret trends among student responses.
8. Emphasized conceptual understanding and/or critical thinking. **9. Related course topics to one another.**		

Suggestions for Responding to Students' Feedback

"Engagement" means more than entertaining students—it means asking them to grapple with new ideas; helping them see the relationship between abstract ideas and their own experiences; showing them how knowledge can be applied to solve problems; giving them an opportunity to try it out themselves; caring about students' opinions; and giving them an opportunity to express their points of view. When students are engaged, they can rise to the challenge of your expectations.

During the first class, have students fill out a questionnaire about their background and reasons for taking the course. This allows you to meet students where they are intellectually and to challenge them appropriately. It will also help you shape your material to meet students' interests. The suggestions below will help you provide opportunities for students to learn actively and demonstrate their learning.

8. Emphasized conceptual understanding and/or critical thinking.

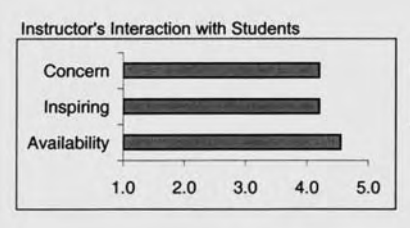
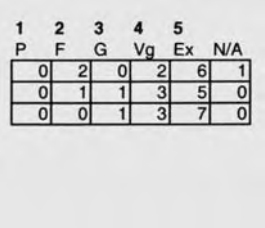
- Make time during class for questions and discussion. Devote some serious thought to the questions you will ask students. Include questions that can quickly address basic knowledge and facts with a simple yes/no or factual response, as well as high-level questions that require analysis, synthesis, and evaluation. Open-ended questions (those that can't be responded to with a simple "yes," "no," or a single correct term) tend to increase participation and reveal student thinking.
- Ask students to elaborate their original responses to your questions. Invite students to think out loud and give students an opportunity to develop their ideas before you evaluate or correct their comments.
- Model your thinking processes and problem-solving by working through actual examples during class. Follow up by having students tackle similar problems.
- Identify the unanswered questions in your field, and explore them with students. Let students know that you value their insight into problems. Encourage creativity in the discussion.
- Take time during a lecture for students (in pairs or small groups) to discuss a question or compare notes on the lecture.
- Create opportunities for students to practice analytical thinking (understanding an issue, argument, or phenomenon), critical thinking (evaluating an idea, argument, or solution), synthesis (understanding the relationship among ideas, arguments, and phenomena), and creative thinking (applying an idea or developing a new solution). Encourage all four types of thinking in class and in assignments.

- Give students an opportunity to apply knowledge to interesting problems. For example, have students apply course concepts to actual or hypothetical case studies.
- Ask students to prepare and turn in (or email) questions about the material, perhaps even their own ideas for exam questions.
- Have students keep class journals, to record questions or ideas about how the material relates to their personal experiences or world events. You can ask students to turn in their journals, or email you their most interesting question, thought, or insight. Read, but do not grade, the students' entries.
- Use a midquarter evaluation questionnaire to assess whether your class is engaging and challenging students. You can also arrange for CTL to conduct a Student Small Group Evaluation (SGE) for you (see online forms for a SGE request at http://vpue-formserver.stanford.edu/ctl/sge_request.html).

9. Related course topics to one another.

- Begin each class by reviewing the main points of the previous lecture. Allow students to ask questions about the previous lecture, or ask students to summarize the main points from their perspective. Then explain how the current lecture will advance or build on the previous lecture.
- End each class by summarizing the current lecture and previewing the next lecture. Be clear about how the two lectures will relate.
- Before an exam, ask students to create a chart, outline, or concept map that organizes the most important ideas and recurring themes from all of the material that will be covered on the exam.
- If the course includes a final exam or project, refer to it throughout the quarter, explaining how ideas, skills, and assignments can help students succeed on the final exam or project.
- Make time in class for discussions that invite students to compare, contrast, and synthesize ideas or readings. This can also be done by email or on an electronic discussion forum. Once students have practice with these skills, include them in assignments and exams.

D. INTERACTION WITH STUDENTS

Questions to which Students Responded	Graphs of average scores within each of the six evaluation categories	Distribution of raw data within categories gives valuable information to help you interpret trends among student responses.
10. Demonstrated concern about whether students were learning. **11. Inspired and motivated student interest in the course content.** **12. Was available for consultation outside of class.**		

Suggestions for Responding to Students' Feedback

Students are more strongly motivated to succeed in a class when they respect and admire the instructor. Students especially appreciate instructors who are approachable, show genuine concern about their success, and seem to truly enjoy teaching. Students will invest more in their learning, and be more willing to address learning difficulties, if the student-instructor relationship is strong. For some students, these interpersonal elements of your teaching will determine the difference between success and failure.

10. Demonstrated concern about whether students were learning.

- If you are teaching students who are new to the university (undergraduates or graduates), take time during the first class to tell them about relevant academic advising services and university policies. As the quarter progresses, continue to let your students know about departmental resources and events.
- During the first class period, collect information from students about why they are taking the class and what they expect to learn from it.

- Encourage students to email you. Email conversations are often the easiest way for a student to contact an instructor. Email is less intimidating, gives students an opportunity to plan their thoughts, and can be written at anytime.
- Encourage students to visit your office hours. Advertise the hours on the syllabus and in class. Do not schedule student meetings "by appointment only;" this creates a barrier to students.
- Consider scheduling one office hour with each student in the course. You can discuss the course, the student's other academic interests, or your field more broadly. If the class is too large for individual meetings, you can create study groups, and schedule a meeting with each group.
- When you talk to students outside class, note any common questions or confusions. Address those issues in class.
- Listen carefully to students' questions. Make sure you have correctly interpreted each question by paraphrasing it and asking the student for confirmation. After answering the question, ask whether your response has clarified the student's confusion. If you cannot adequately address a student's concern during class, offer to discuss it after class or in office hours.
- Give students tips on how to approach the reading, assignments, and exams. Regularly ask students how they feel about lectures, readings, assignments, exams.
- Students value professor feedback. Provide the kind of clear and useful written feedback that helps students know what they are doing well, and how to do better on the next assignment or exam.
- Conduct a midquarter evaluation. Ask students how well the class is meeting their needs and expectations, how they feel about participating in class and approaching you for help, and what they think about the value of readings and assignments, the reasonableness of the workload, and the fairness of exams or grading. You can also arrange for CTL to conduct a Student Small Group Evaluation (SGE) for you (see online forms for a SGE request at http://vpue-formserver.stanford.edu/ctl/sge_request.html).
- Help students review course material. In large classes, you can organize review sessions before exams. In smaller classes, you can ask students to organize a portfolio of their work from the quarter (papers, exams, homework). Meet with students to review their portfolios and discuss their progress.
- Define your instructor's role as being part of a "community of scholars" rather than simply an authority figure. If students see you only as an authority figure, they will look to you to judge the "correctness" of their answers. This may prevent students from developing a deeper understanding of the material, as well as the intellectual skills needed to succeed in your field.

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?
- Is there an interesting anecdote about how an idea was discovered, presented, or challenged?
- Use different teaching methods, including multimedia, to enhance the learning experience.
- When you ask students to solve a problem or answer a challenging question in class, give all students time to develop an answer. Involve as many students as possible in the discussion. Show that you are listening to students' comments by asking follow-up questions or paraphrasing their remarks.
- Let students interact with each other in class, through discussion, brainstorming, and problem-solving. Encourage them to interact outside of class, by forming study groups or suggesting relevant out-of-class activities (talks, demonstrations, events, etc.).
- Students are motivated by clear expectations and timely feedback. Create handouts that detail requirements and expectations for assignments, including due dates and criteria for grading. Provide regular and timely feedback to students. Return assignments promptly. Give students the chance to rewrite papers and redo problems so that they can correct their mistakes and learn from them.
- Invite students to create goals for themselves in your course. You can create specific assignments, including self-graded

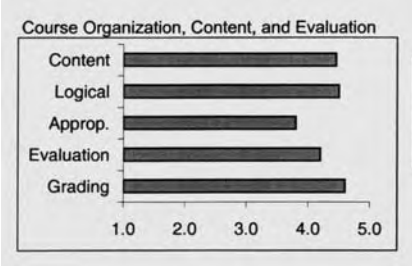
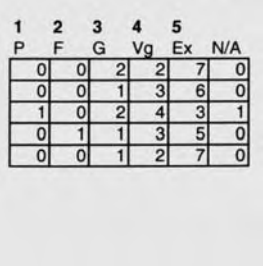
quizzes or journal writing, to help students track their progress.

- Balance critical comments with genuine positive feedback. Recognize students' efforts and achievements, whether it is an insightful comment in class, an outstanding paper, or an improved test score. Use incorrect answers as opportunities to examine misconceptions, and encourage students to develop their original responses. Avoid correcting students in ways that embarrass them, such as suggesting that a concept is "clear," "simple," or "obvious."
- If you teach a large lecture course, try to attend a lab or section meeting. This sends a message to your students that you are interested in their learning; it also allows you to better integrate lecture with lab or section.

12. Was available for consultation outside of class.

- Advertise your office hours on the syllabus and in class. Encourage students to visit your office hours, and be sure you are in your office during those times. Do not schedule student meetings "by appointment only," this creates a barrier to students.
- Encourage students to email you. Email conversations are often the easiest way for a student to contact an instructor. Email is less intimidating, gives students an opportunity to plan their thoughts, and can be written at anytime. Let students know at the beginning of the quarter how often/rapidly you respond to students' emails.
- Use a suggestion box in class or outside your office for students to leave questions and comments about the class.
- Consider asking for a small number of students to volunteer as teaching consultants. Meet with these students every two weeks or so to discuss how the class is going. Ask them to bring suggestions and comments from the rest of the students in the class.

E. CONTENT AND EVALUATION

Questions to which Students Responded	Graphs of average scores within each of the six evaluation categories	Distribution of raw data within categories gives valuable information to help you interpret trends among student responses.
13. Selected course content that was valuable and worth learning. **14. Organized course topics in a coherent fashion.** **15. Chose assignments that solidified understanding.** **16. Explained clearly how students would be evaluated.** **17. Designed and used fair grading procedures.**		

1 P	2 F	3 G	4 Vg	5 Ex	N/A
0	0	2	2	7	0
0	0	1	3	6	0
1	0	2	4	3	1
0	1	1	3	5	0
0	0	1	2	7	0

Suggestions for Responding to Students' Feedback

When planning a course, you need to consider many things: the central ideas, information, and skills in your field; the backgrounds, needs, and abilities of your students; the role of your course in the curriculum of your department or in the general education requirements; and the various teaching and assessment methods at your disposal. It is not unusual for instructors to revise and adapt a course's organization, content, and evaluation methods each time they teach it. If you have taught a course before, use previous course evaluations to help plan the new quarter. You can also explore new teaching and evaluation methods by discussing your course with colleagues, former students, or a CTL associate director (723-1326).

13. Selected course content that was valuable and worth learning.

When designing or revising a course, ask yourself:

- What is the most important information students should learn and remember from this course? (facts)
- What are the most important ideas that students should understand after taking this course? (theories, approaches, perspectives)
- What are the most important skills that students should develop in this course? (laboratory skills, problem-solving skills, creative skills, writing skills, etc.)

Once you have identified the most important learning outcomes for your course, consider:

- What materials (i.e., textbooks, articles, lecture content) do students need access to, in order to achieve your selected learning outcomes? Choose your reading and resource list based on the quality of the information, ideas, and training provided. If several texts seem appropriate, consider the following: accuracy of content, viewpoint, clarity, level of difficulty, format, and price.
- What assignments (i.e., papers, problem sets, projects) and experiences (i.e., discussions, labs, field trips, collaborative activities) will give students the opportunity to reinforce the information and ideas of the course, as well as to practice key skills?
- What should students be able to do to demonstrate that they have met these key learning goals? This will be the basis for your grading structure, as well as the format and content of graded exams, homework, and projects. For example, if one of your essential learning outcomes is improved analytical thinking, make sure that your exams and assignments require it!

During the quarter:

- Outline your specific objectives for each class session, and understand how they relate to overall course goals (see B.3. Setting and Meeting Clear Objectives).
- Do not include a lot of reading or activities that might be relevant but not central to your course goals.
- Keep a teaching journal for each course. Take 10 minutes after each class to note which topics and methods were effective or ineffective, as well as students' questions. Keep these notes as a valuable resource for the next time you teach the course.
- Ask students' opinions about the textbook, readings, lectures, and assignments. Use student feedback to judge whether you should keep or change material the next time you teach the course. This can easily be done at the end of the quarter by providing copies of the syllabus and asking students to rate readings, lecture topics, and projects for a) relevance to the course, b) value, and c) interest.

14. Organized course topics in a coherent fashion.

- Review all your course materials BEFORE the course begins. Have in mind a clear road map of where you are going and how you intend to get there. Review your course organization with a colleague or experienced TA.
- Your syllabus can help students see the underlying structure of the course. Group lectures, readings, and assignments by topic, and describe the main goals of each unit in your course.
- If students have had little or no exposure to your field, make sure that your course is logically sequenced to help them acquire the information and build the skills they will need to succeed in the course. Ask yourself: what do students need to know, and in what order do they need to know it?
- Tell students why you have assigned particular readings, how they relate to specific assignments, and how they support course goals.
- Coordinate lectures with the reading. Make sure students understand the connections between lecture and readings (even if the content does not match perfectly).
- Coordinate lectures with assignments by making sure students receive the information they need to complete assignments. Homework problems should give the students the opportunity to apply information they have just received.
- Before each class session, review your notes from the previous session and the upcoming one. Begin a lecture by making a connection to the previous session's topic. End each lecture by foreshadowing upcoming material.

15. Chose assignments that solidified understanding.

- At the beginning of the quarter, and in your syllabus, tell students what you expect from them and how you plan to measure their progress. Explain how the assignments, exams, and grading policies will help students achieve course goals and allow you to evaluate the students' progress fairly.
- Choose assignments that directly relate to your course goals and learning objectives. Every assignment should give students an opportunity to explore and apply the most important ideas and skills from lecture, discussion, and readings. Let students know which course materials will help them complete each assignment successfully.
- Include a variety of assignments. Create simple assignments, such as in-class quizzes or homework sets, that require basic knowledge and comprehension and help students review core concepts. Also include assignments that require deeper understanding and higher-level thinking. Papers, projects, and presentations can focus on the highest-level goals for the course. For example, they can require analysis and synthesis of competing perspectives, application of theory to real-world problems, or creative extensions of course material.
- In exams or assignments, the following tasks can enhance students' thinking: examining case studies, debates, or controversies in the field; discussing the relationships among topics; exploring both sides of an issue; inventing dialogues among characters or figures that you have discussed; relating topics to the students' own lives and/or prior knowledge.
- Ask colleagues what assignments they have found most successful. Ask other instructors or TAs to review assignments before they are given to students, to determine whether the

assignments are interesting, effective, and pitched at an appropriate level.

- Ask students to create a good sample exam question or problem and to prepare the answer.
- Use multiple testing methods (multiple-choice, essay, open-book, case studies) to allow students to demonstrate different skills and levels of understanding, and also to allow students with different test-taking strengths to demonstrate their learning. Consider combining formats on a single exam. Let students know in advance what the format of the exam will be, so they can study accordingly.
- If you rely on multiple-choice exams, allow students to explain the rationale for their answers. Research has shown that allowing students to explain their answers can relieve test anxiety. Students' written answers will also provide valuable information about the quality of the exam questions.
- Return and review graded tests and assignments in class. Spend time summarizing what you learned from grading students' assignments (such as common misconceptions). Help students understand how to improve future performance, if necessary.

16. Explained clearly how students would be evaluated.

- Your course syllabus should clearly describe all major assignments and exams. Include an explanation of how each requirement will be weighted to create the student's grade, along with any other grading factors (i.e., participation). Review the syllabus in class. Make multiple announcements to students (in class, by email) if assignment requirements, due dates, or grading criteria change during the quarter. Avoid such changes if possible.
- Clearly explain exam formats and evaluation procedures in advance. Provide handouts that detail the requirements and criteria for evaluation for each paper or project you assign. Provide students with examples of successful reports, papers, projects, and written responses in exams.
- During class, be explicit about the important points students need to remember and why they are important. At the end of each class session, write down a few questions that could be used for assignments and tests. This will ensure that your assessments relate to the material discussed in class.
- Give students advice about how to study for your tests. Provide study questions, review sheets, or a practice exam including questions similar to those you will ask on the actual test.

17. Designed and used fair grading procedures.

- Set high but achievable standards, and reward every student who meets them. Grading on a bell curve (for one student to do well, another must do poorly) promotes a competitive atmosphere in the class and decreases incentives for students to help each other. Inflating grades (curving every student's grade up) can encourage students to aim low.
- Teach students what you want them to learn. As you draft assignments or test items, ask yourself if you have taught the material well enough to expect students to know it. Use problems and questions similar to those in homework assignments and class discussion. Give students the opportunity to practice the skills you will require of them in graded exams and assignments.
- Provide clear, direct, and specific feedback on how students can improve. Written (and verbal) comments should relate to the student's work, not his or her abilities or your assessment of his or her effort. For example:

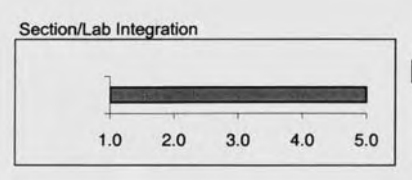
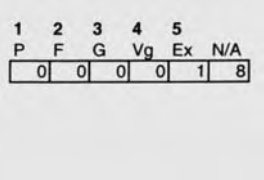
  Unhelpful: You don't seem to understand this concept.

  Helpful: Your summary reflects some confusion about the main ideas—review [relevant reading/handout], or see me to discuss.

  Unhelpful: You didn't put sufficient time into this assignment.

  Helpful: The quality of writing and content of this assignment fall below the expectations of this course. [Include specific suggestions for improvement.]
- If many students do poorly on a quiz or test, consider re-teaching and re-testing. Also consider allowing students to revise papers.
- Don't rush your grading—allow yourself time to respond thoughtfully to every student's work.
- Be consistent when evaluating papers, projects, or essay exams. Give students explicit guidelines, and consider preparing a grading checklist or "score sheet" based on these guidelines. Whether or not you return this score sheet to your students is up to you; however, students always appreciate (and deserve) some comments explaining the grade.
- In classes with multiple sections, discuss grading policies and criteria with teaching assistants. "Norm"evaluation procedures by grading a number of exams or papers as a group.
- Ask for student feedback on exams and assignments. Allow students to turn in a note, along with the assignment, that describes their concerns and problems with assignments. Also ask students to comment on the content, format, and fairness of exams and assignments. You can respond to these notes in your feedback to students, or use it to design future exams and assignments.

F. SECTION/LAB

Questions to which Students Responded	Graphs of average scores within each of the six evaluation categories	Distribution of raw data within categories gives valuable information to help you interpret trends among student responses.
18. Section or lab was well integrated into the course structure.		

Suggestions for Responding to Students' Feedback

When planning the course schedule, carefully coordinate the timing of each lecture's material with its section review or laboratory application. Theory should be closely linked to relevant practice; time lags and intervening material can dilute the intended effects of section or lab. Every section or laboratory should be designed to increase a student's ability to succeed in the course.

18. Section or lab was well integrated into the course structure

Your teaching assistants carry most of the day-to-day responsibility for integrating lecture with section or lab. For this reason, work closely with your teaching assistants:

- Before the quarter begins, give TAs copies of the syllabus, handouts, readings, and other course materials. If you provide standardized instructions for section activities or laboratories, discuss with TAs how each activity or laboratory relates to lecture content and course goals.
- Encourage or require your TAs to take advantage of training opportunities offered by the department or CTL. Schedule time for new TAs to meet with TAs who have taught the course in previous years.
- Make sure TAs know what is covered in lecture, either by attending lectures or (less desirably) through lecture notes that you provide.
- During the quarter, meet regularly with your TAs (preferably weekly) to discuss: the previous weeks' experiences; important topics, activities, and assignments for the upcoming section and/or lab; and feedback from students or about students.
- As much as possible, work with your TAs to create a standardized, high-quality section or laboratory experience for all students. Students will notice a lack of consistency from section to section. Make sure that all TAs cover similar material or follow the same protocols. Discuss grading policies and criteria, and "norm" evaluation procedures by grading a number of exams or papers as a group.
- Occasionally attend section or lab meetings. Ask TAs to visit the sections of other TAs, to share approaches and advice.

4. Comparing Your Evaluation Scores to Course Evaluation Mean for Your School (in Humanities, Sciences, and Education)

Course evaluation means are calculated and distributed to the faculty annually in the Schools of Humanities and Sciences and Education. In Humanities and Sciences, means are provided by each cluster—sciences, social sciences, humanities—rather than school-wide, and separate means are provided for small, medium, large, and extra-large classes. Note that, across schools, small classes tend to receive higher evaluation scores than large classes. This consistent difference may reflect a number of factors beyond basic teaching effectiveness, including students' preferences for smaller classes, the greater opportunity for student-instructor interactions, and the "fit" of student interests to course material in smaller, upper-division classes.

School-wide means are presented in a format similar to your personal "Elements of Instruction" summary. Comparing your scores to the means for your School or area will provide additional insight into your teaching strengths, as well as areas for improvement. It can also be very helpful to discuss your teaching with a colleague who has experience teaching similar courses in your field.

Go to:
http://registrar.stanford.edu/faculty/course_evaluations/evaluation_means.htm
for course evaluation means by class size and class level.

Interpreting Students' Written Comments

Students' written responses to open-ended questions can provide extremely helpful elaboration or explanation of your quantitative evaluation data. To get the most out of your course evaluations, always give students plenty of time to complete the evaluations and also respond to the open-ended questions on the back of the evaluation form. Use the extra space provided on the form to ask your own open-ended questions.

Because students' written comments are not summarized or returned to you in a structured format, they can be difficult to interpret. Comments can seem contradictory, with one student's comment appearing to cancel out another's. The suggestions below will help you interpret students' written comments.

- To get an overall sense of students' responses to a specific question, read and compare the comments in a single category separately. If you are reviewing a large number of evaluations, take notes about comments that appear more than once. Once you have a clear sense of the responses to the first question, go through the stack of evaluations again, examining responses to the next question. This method will help you identify patterns in your evaluations. (If you don't feel that you have the time for this kind of review, the Center for Teaching and Learning can assist you.)
- Compare the comments of students who gave the course a very positive evaluation (a 4–5 on overall course quality and teaching effectiveness) with the comments of students who gave the course a less positive evaluation. This may help you identify the most important issues to address, and can also help you make sense of contradictory student comments. You can keep track of students' comments in a matrix that organizes comments according to both the comment-writer's overall satisfaction with the course, and the question the comment refers to:
- You may also want to compare the comments of students who differ in major, year of study, and whether they are taking the course for a grade or for credit. This can help you identify whether your course is best serving one group of students, and how you might improve the course for all students the next time you teach the course.
- Pay attention to any criticism that appears more than once, even if the majority of comments are at odds with the criticism. There may be a subpopulation of students who could benefit from course modifications or alternative approaches.
- Try to keep your perspective when reading negative comments. Under the protection of anonymity, students may write harshly negative comments that range from sarcastic to vicious. These comments may be motivated by pressures and concerns unrelated to your course. If you receive a number of negative comments among your evaluations, you may want to discuss them with a trusted colleague or a CTL associate director. Talking with someone can help you keep perspective and restore your teaching confidence, while helping you explore ways to address any possible problems in future courses.
- You will get the most out of your evaluations if you can relate the written comments to your evaluation scores. After reviewing trends in your quantitative data, look to the written comments for elaboration and specific suggestions.

  For example, one professor received low overall ratings in "Instructor's Organization/Clarity" and "Course Organization, Content, and Evaluation." Written comments revealed consistent concerns that the instructor assigned homework in a rushed manner during the last few seconds of class, confusing and frustrating students. In the quantitative ratings, some students reacted to this under the item "Explained concepts clearly" or "Presented material at an appropriate pace" (in the "Instructor's Organization/Clarity" category), while others reacted to the problem under "Chose assignments that solidified understanding," "Explained clearly how students would be evaluated," or "Designed and used fair grading procedures" (all in the "Course Organization, Content, and Evaluation" category). By exploring the links between quantitative and qualitative information, the instructor was able to make a relatively simple adjustment that resulted in much improved evaluations the following quarter.

Overall Course Rating Student Gave You	Question 1 Effectiveness and Attitude	Question 2 Texts, Readings, and Materials	Question 3 Assignments and Exams	Question 4 Course Overall	Question 5 Instructor's Questions
5–4					
3					
1–2					

Futher Questions to Think About and Helpful Resources

Questions to Think About

- Is my course attracting the students I expected? If not, what adjustments in course objectives and/or materials should I consider?
- Are students' expected grades accurate? If not, should I consider revising grading/feedback procedures?
- Are students attending the course regularly? If not, do class sessions duplicate the readings too much? Is evaluation weighted too heavily toward readings?
- Are students spending a reasonable amount of time on the course outside of class? Are the course requirements too lax or too demanding?
- Do students find the out-of-class assignments valuable? If not, are assignments and readings relevant and engaging? Should I consider assignments that are more concept-oriented, application-oriented, or that require more critical thinking?
- Looking at the Elements of Instruction graph: What's working well? What areas should I devote more attention to? Within those areas, what two or three specific adjustments might I consider? Is there information in the written comments that can help make sense of lower scores?
- Looking at the distribution of scores within each category: Are the scores consistent, or are they widely distributed? Is there information in the written comments that can help make sense of the distribution of scores? Do the scores seem to vary by major, year of study, or other demographic variables?
- Overall, does the pattern of scores and written comments tell a story? Does it seem that certain factors or teaching methods affected scores in a number of areas? Are there some simple changes that might improve my course and teaching? Or are there more substantial issues I'd like to tackle in my course design and teaching methods?
- Does my own assessment of my teaching match that of my students'? If not, why not?
- Is there someone I'd like to talk to (a colleague, former student, TA, or a CTL associate director) who can help provide some insight into these evaluations?

Resources

The Center for Teaching and Learning (CTL, Fourth Floor, Sweet Hall) provides the following resources:

- individual consultations with CTL associate directors
- midquarter Student Small Group Evaluations and customized midquarter online evaluations
- videotaping or classroom observation
- videotapes from CTL's Award-Winning Teachers on Teaching series
- lectures and workshops
- technology assistance
- customized departmental programs and presentations
- TA training assistance
- funding to attend teaching conference
- extensive library with articles, handouts, and books on leading a discussion, organizing lectures, and planning courses, working with diverse student populations, interacting with students outside of class, and many other topics

You may also wish to consult a very useful on-line compilation of teaching tips made available by UC Berkeley at http://teaching.berkeley.edu/compendium.