

## **Resources**

Directions to faculty in marking the Faculty Information Form:

<http://www.theideacenter.org/sites/default/files/DirectionsToFaculty.pdf> Consider these three questions when identifying 3-5 essential and important learning objectives: 1) Is this a *significant* part of the course? 2) Do I do something *specific* to help the students accomplish *this* objective? 3) Does the student's progress on this objective affect his or her *grade*?

Sample IDEA Diagnostic Form that faculty receive with their class ratings scores:

<http://www.theideacenter.org/sites/default/files/AXReport.pdf> . Increase student response rates and show this to your students so they can see how their input is used to improve student learning.

Handout for interpreting reports:

<http://www.theideacenter.org/sites/default/files/InterpretativeGuideDiagForm.pdf>

Handout on interpreting adjusted scores:

<http://www.theideacenter.org/sites/default/files/InterpretingAdjustedScores.pdf>

Handout on using additional questions with the ratings forms:

<http://www.theideacenter.org/sites/default/files/UsingAdditionalQuestions.pdf>

Handout on additional questions for online courses:

<http://www.theideacenter.org/sites/default/files/OnlineAdditionalQuestions.pdf>

Additional resources on student learning <http://www.theideacenter.org/PODNotesLearning> and on instruction <http://www.theideacenter.org/node/64>

IDEA papers related to teaching and faculty evaluation: <http://www.theideacenter.org/category/helpful-resources/knowledge-base/idea-papers>

## **FAQs**

### **Question**

Are students able to objectively measure their progress on learning? What research has been done on this topic?

### **Answer**

The bulk of the research indicates students' self-ratings of learning correlate positively with direct external measures of how much they have learned. In their review of such studies, Cohen (1981) and Feldman (1989) reported average correlations (Pearson's  $r$ ) exceeding .40 between an external final exam grade and student ratings of self-reported learning.

Cohen's (1981) meta-analysis included studies based on aggregated data collected from actual college classes that were assessed with a common achievement measure. For 20 of the 22 courses analyzed, the overall course rating was positively correlated with the student achievement measure; it was negatively correlated in the other two cases. The average  $r$  for the 22 courses was .47, which is considered a moderate-to-large effect (Cohen, 1977), especially when one considers the restricted range on student self-rating scales and the less-than-perfect reliability of most college exams. This indicates a tendency for students to assign the highest ratings to instructors "from whom they learned the most" (Cohen, 1981, p. 301).

More recently, Marks et al. (2010) correlated disaggregated student ratings with performance on a common external final exam across multiple sections of a remedial college course. Sections were taught by different instructors but the text, number of assignments, and point system for grading were the same. All students took a common post-test that was centrally graded. The authors focused specifically on student responses to the question, "The course overall as a learning experience was excellent." Marks et al. found a consistently positive relationship between ratings on this item and scores on the common final exam, controlling for student demographic characteristics, ability, and pretest scores. So, again, the course ratings correlated positively with student achievement.

Even more recently, Pallett et al. (2011) examined the relationship between individual student self-ratings of progress on relevant IDEA learning objectives and performance on exams administered during a college course. Across three sections of the same course taught by a single instructor, 188 students rated themselves at the end of the course on two objectives identified by the instructor as either essential or important. They also rated themselves on the other 10 IDEA objectives the instructor identified as having minor or no importance. Self-ratings on relevant objectives correlated significantly and positively with four out of five exams and the course total, whereas ratings on irrelevant objectives did not. Students that rated their progress as either exceptional or substantial generally performed better on course examinations than those that rated their progress as moderate. These findings support the validity of student self-ratings of learning.

Cashin, W. E. (1995). Student ratings of teaching: The research revisited. IDEA Paper No. 32. Manhattan, KS: Center for Faculty Evaluation and Development, Kansas State University.

Centra, J. A. (1977). Student ratings of instruction and their relationship to student learning. *American Educational Research Journal*, 14, 17-24.

Cohen, J. (1977). *Statistical power for the behavioral sciences*. (Rev.ed.). New York: Academic Press.

Cohen, P. A. (1981). Student ratings of instruction and student achievement: A meta-analysis of multisection validity studies. *Review of Educational Research*, 51, 281-309.

Feldman, K. A. (1989). The association between student ratings of specific instructional dimensions and student achievement: Refining and extending the synthesis of data from multisection validity studies. *Research in Higher Education*, 33, 317-375.

Marks, M., Fairris, D., & Beleche, T. (2010). Do course evaluations reflect student learning? Evidence from a pre-test/post-test setting. Manuscript accepted for publication.

Pallett, W. E., Duchon, D., & Benton, S. L. (2011). Validity of student ratings of learning. Manuscript submitted for publication

### **Question**

Does increasing academic rigor or lowering standards affect IDEA ratings?

### **Answer**

A recent doctoral dissertation by Hornbeak (2009) revealed the following positive correlations between possible “rigor” measures and Item 38, “I really wanted to take a course from this instructor.”

Item 45, “The instructor expected students to take their share of responsibility for learning,” correlated  $r = .54$  with Item 38.

Item 46, “The instructor had high achievement standards in this class,” correlated  $r = .56$  with Item 38.

*These positive correlations indicate that students have a stronger desire to take a course from an instructor when they perceive that he/she expects students to take their share of responsibility for learning and has high standards.*

### **Additional Resource**

Centra, J.A. (1993). *Reflective faculty evaluation: Enhancing teaching and determining faculty effectiveness*. San Francisco: Jossey-Bass.

### **Question**

Are IDEA student ratings just a popularity contest that concerns the attractiveness/personality of the instructor?

### **Answer**

Out of the 47 items on the Student Diagnostic Form and the 18 items on the Short Form, there is only 1 item that specifically rates the teacher: Item 41, “Overall I rate this instructor an excellent teacher.” The progress on relevant objectives (PRO) score (A on page 1 of the class report) pertains only to the students’ ratings of their progress on relevant objectives. Only score B (Excellent Teacher) reflects students’ perceptions of the instructor. As an institution, you and your colleagues are free to change the weightings of the Summary Evaluation (average of A and D) on page 1 to give B more or less weight if you so desire.

Few personality traits correlate with student ratings. See [IDEA Paper #32](#)

### **Question**

How can we use students' perceptions about themselves and the course to put survey outcomes in their proper context?

### **Answer**

Although, when appropriately adjusted and averaged, students ratings of their own learning and of the instructor's techniques have acceptable validity, students are not qualified to judge many other factors which characterize excellent instruction. They usually can't judge, for example, the appropriateness of the instructor's objectives, the relevance of assignments or readings, the degree to which subject matter content was balanced and up-to-date, or the degree to which grading standards were unduly lax or severe. These, and other dimensions of teaching excellence, are important to a comprehensive evaluation of instructional effectiveness; but methods other than "student ratings" are needed to assess them.

Student ratings can be valuable indicators of teaching effectiveness, and they can help guide improvement efforts. But they are most useful when they are a part of a more comprehensive program which includes additional evaluation tools and a systematic program for faculty development.

### **Question**

Aren't student ratings typically bimodal? (Only the students who are very happy or very disgruntled will respond) What research shows otherwise?

### **Answer**

On the contrary, student ratings are consistently negatively skewed (i.e., the majority of ratings tend to be on the high end). "Negative skews have been characteristic of all student rating forms, probably reflecting the fact that college professors are not representative of a general population. They have a superior level of education, a commitment to higher education, and, on average, many years of experience; a negatively skewed distribution should be expected. In addition, most rating scales are subject to the "error of leniency;" raters tend to give those they are rating the benefit of the doubt" (D. P. Hoyt, personal communication, based on years of research at the IDEA Center)

## **Question**

We believe that ratings will not change much after about half of the course, but faculty want to wait until the last possible time to conduct surveys. What does the research show on the best time to conduct the surveys in a typical semester-long course?

## **Answer**

Any time during the second half of the term seems to yield similar results (Feldman, 1979). Feldman, K. A (1979). The significance of circumstances for college students' ratings of their teachers and courses. *Research in Higher Education*, 10, 149-172.

## **Question**

We want to know if we are aggregating data in the right way. We multiply the # of respondents in a class times the summary score for every class in the semester. We add the total points and divide that by the total number of respondents to get an average summary score.

## **Answer**

That is correct, if they want classes with larger enrollments to count more and classes with small enrollments to count less. However, given that there is a slight negative correlation between class size and ratings (larger classes tend to be rated somewhat lower), instructors with larger sections (probably the younger ones who sometimes are assigned larger sections) could be harmed by this method. A better approach would be to look at adjusted scores, which control for class size.

I think a better method than aggregating scores would be to employ the spreadsheet that Pam Milloy developed that tabulates scores across courses.

*See the IDEA\_Scores\_Worksheet\_with\_Graphs\_sample.xlsx to compile the results for 8 classes.*