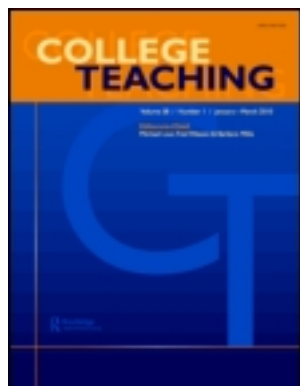


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IMPROVING STUDENT PEER FEEDBACK

Linda B. Nilson

Abstract. Instructors use peer feedback to afford students multiple assessments of their work and to help them acquire important lifelong skills. However, research finds that this type of feedback has questionable validity, reliability, and accuracy, and instructors consider much of it too uncritical, superficial, vague, and content-focused, among other things. This article posits that the typical judgment-based feedback questions give students emotionally charged tasks that they are cognitively ill equipped to perform well and that permit laxness. It then introduces an alternative that encourages neutral, informative, and thorough responses that add genuine value to the peer feedback process.

College-level faculty are relinquishing control of their students' in-class activities and assignments as never before, increasingly holding students responsible for not only their own learning but that of their peers as well. The popularity of cooperative learning reflects this sweeping trend, and we commonly find it coupled with other student-centered methods, such as problem-based learning, the case method, service learning, and creative multimedia assign-

ments. In a parallel development, faculty are mandating students to evaluate and critique one another's work, not just the drafts and rehearsals but also the final versions and performances. Disciplines from English to engineering are trying out this quasi "studio model" of teaching and learning, once confined mostly to architecture and the arts.

The reasons for this trend are both practical and pedagogical. Widespread cuts in university budgets along with increasing enrollments have prompted faculty and faculty developers to devise and use more time-efficient teaching and assessment methods, especially in writ-

ing-intensive courses (Boud, Cohen, and Sampson 1999). At the same time, research studies have found peer learning and assessment to be quite effective methods for developing critical thinking, communication, lifelong learning, and collaborative skills (Dochy, Segers, and Sluijsmans 1999; Topping 1998; Candy, Crebert, and O'Leary 1994; Williams 1992; Bangert-Drowns et al. 1991; Slavin 1990; Crooks 1988).

Yet peer feedback is not without its problems. Many instructors experience difficulties in implementing the method (McDowell 1995), and the quality of student peer feedback is uneven. Although Topping (1998) provides evidence from thirty-one studies that peer feedback is usually valid and reliable, Dancer and Dancer (1992) and Pond, Ulhaq, and Wade (1995) maintain to the contrary that research shows that peer assessments are biased by friendship and race. Reliability is especially poor when students evaluate each other's essays (Mowl and Pain 1995) and oral presentations (Taylor 1995; Watson 1989)—perhaps the most common contexts for peer feedback. Another problem is accuracy, defined as agreement with the instructor's comments and grading. Some studies report high accuracy (Oldfield and Macalpine 1995; Rushton, Ramsey, and Rada 1993; Fry 1990), but others find that most students grade more leniently than the instructor over 80 percent of the time (Orsmond, Merry, and Reitch 1996;

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Pond, Ulhaq, and Wade 1995; Stefani 1992). Despite the pitfalls, Topping (1998) contends that what is lost in quality is compensated for by greater volume, frequency, and immediacy of peer feedback, compared to the instructor's, and that therefore peer feedback is well worth using—and improving.

The mixed research findings mirror the reality that some faculty are pleased with the quality of student peer feedback and others are not. The approach to soliciting feedback that I propose here should be especially useful to those who are not pleased with the assessments their students make about one another's work.

The Problem: The Students

In both the literature and the workshops I have facilitated on this topic, faculty have identified many and surprisingly varied weaknesses in the student peer feedback they have seen:

- uncritical in general
- superficial and unengaged in general
- focused on a student's likes and dislikes of the work rather than its quality
- focused on trivial problems and errors (e.g., spelling)
- focused on content alone, missing organization, structure, style, and so forth
- focused on their agreement or disagreement with the argument made rather than the logic of and evidence for the argument
- unnecessarily harsh, even mean-spirited; unconstructive in its criticisms
- inconsistent, internally contradictory
- inaccurate
- unrelated to the requirements of the assignment
- not referenced to the specifics of the work

Apparently most students are loath to find fault with one another's products, or at least loath to express those faults (Strachan and Wilcox 1996; Pond, Ulhaq, and Wade 1995; Falchikov 1995; Williams 1992; Byard 1989). In particular, students do not want to be responsible for lowering a fellow student's grade. In addition, they may fear "If I do it to them, they'll do it to me," or they may be concerned that giving insightful critiques may raise the instructor's grading standards. They

may reason that the instructor will think, "If students are so good at picking out weaknesses of others, then there is no excuse for their handing in their own work with weaknesses."

When all is said and done, the problems with student peer feedback seem to boil down to three: the intrusion of students' emotions into the evaluative process, their ignorance of professional expectations and standards for various types of work, and their laziness in studying the work and/or in writing up the feedback. Emotion, ignorance, and laziness are formidable barriers, especially in combination.

Students no doubt are aware of these problems, and so it is little wonder that some pay scant attention to the feedback of peers. As is traditional, they look solely to the instructor, who is the only person they have to please and therefore the only real audience. When that happens, student peer feedback defeats much of its purpose. Public writing and speaking are media to impress the instructor for a grade rather than genuine means of communication.

The Problem: The Questions

But does all the blame lie with the students? They are merely responding to questions on forms that instructors have developed. Perhaps the questions themselves are flawed when posed to students. So it is worth examining some typical questions from real student peer feedback forms. I adapted the following questions from actual forms from several universities:

- Is the title of this paper appropriate and interesting? Is it too general or too specific?
- Is the central idea clear throughout the paper?
- Does the opening paragraph accurately state the position that the rest of the paper takes?
- Does the opening paragraph capture your attention?
- Is the paper well written?
- Is sufficient background provided?
- How logical is the organization of the paper?
- Are the illustrations (visuals) effective?
- Are the illustrations (visuals) easy to understand?

- Are the data clearly presented?
- Are the graphs and tables explained sufficiently in the text?
- How strong is the evidence used to support the argument or viewpoint?
- How well has the writer interpreted the significance of the results in relation to the research goals stated in the introduction?
- Does the essay prove its point? If not, why not?
- Does the conclusion adequately summarize the main points made in the paper?
- Below is a list of dimensions on which an oral presentation can be evaluated. For each dimension, rate your peer's presentation as "excellent," "good," "adequate," "needs some work," or "needs a lot of work."

Many or all of these questions are indeed likely to evoke emotions in students that they would not in scholars. All of the items demand that the student arrive at a judgment about a peer. They have to find or not find fault with a fellow student's work, and students are not typically predisposed to judge a peer's product unfavorably. The personal aspect further intrudes; the peer may be a friend or an acquaintance. On the other side, the peer may evoke dislike or hard feelings that may interfere with a balanced judgment.

To scholars the questions look quite different, and they imply a multidimensional evaluative continuum. A scholar's reasoning is more complex: The paper is effectively written in terms of *A*, *B*, and *C* but is somewhat weak on the *X*, *Y*, and *Z* criteria. The evidence supports the main hypothesis but is ambiguous on the secondary one.

Maybe most students lack the disciplinary background to respond to the questions at an adequate level of sophistication. They simply do not know how to give helpful feedback (Svinicki 2001). After all, many students are not even vaguely familiar with the standards for quality work in a given field, especially in a field that is not their major. Even most Ph.D. candidates lack the critical savvy and discrimination to produce an acceptable product in the first draft of their dissertation. Certainly if the students knew how to write a focused paper, how much

background to supply, how to structure an argument, and so forth, they would do so, if for no other reason than a good grade.

Perhaps, too, the items on most peer feedback forms permit laxness. Some explicitly ask for only a yes/no response, which is all that many students will feel obligated to give. In addition, the questions almost always ask for an "opinion." In the relativistic mind of the traditionally young undergraduate, one opinion may be as good as another, justified or not (Perry 1968). Besides, few questions demand a reasoned justification for the judgment made or a specific reference to the particulars of the work.

If judgment questions do not evoke fair-minded, well informed, and thorough evaluations from students, what can instructors do to teach students how to examine a work carefully and give constructive feedback?

A Solution: A Different Kind of Feedback Item

I propose writing a different kind of peer feedback item—one that does not ask for a judgment or opinion and so evokes no emotion; one that any student, no matter how unfamiliar with the discipline's rules, is capable of answering; and one that demands that students carefully attend to the details of the work in question, whether it be a written paper to read, a oral presentation to listen to, or a visual product to experience. Furthermore, if the instructor wishes to grade the peer feedback that students provide, the quality of the answers is quite easy to assess.

Let us consider the following sample items and what they are asking the students to do:

- What one or two adjectives (aside from "short," "long," "good," or "bad") would you choose to describe the title of the paper/speech?
- What do you think is the thesis of the paper/speech? Paraphrase it below.
- Put stars around the sentence that you believe is the thesis statement in this paper.
- In one or two sentences only, state in your own words what you think the writer's/speaker's position is.
- At what point in the paper/speech did you identify the thesis?

- List below the main points of the paper/speech/project.
- Outline this paper/speech/project on the back of this sheet.
- What are the writer's/speaker's justifications (readings, logic, evidence, etc.) for taking the positions that he or she does?
- List the types of supporting evidence and/or experiences given in the paper/speech.
- What do you think is the strongest evidence for the writer's/speaker's position? Why?
- What do you think is the weakest evidence for the writer's/speaker's position? Why?
- In each paragraph of the paper, underline the topic sentence.
- Underline all the logical transitions you come across in the paper.
- Highlight (in color) any passages that you had to read more than once to understand what the writer was saying.
- Bracket any sentences that you find particularly strong or effective.
- Put a checkmark in the margin next to any line that has a spelling, grammar, punctuation, or mechanical error. Let the writer identify and correct the error.
- What do you find most compelling about the paper/speech/project?
- After reading the paper/listening to the speech, do you agree or disagree with the writer's/speaker's position? Why or why not?
- As a member of the intended audience, what questions would you have after reading the paper/listening to the speech?

What are some of the distinguishing features of these items, especially as they compare to the first set of questions? Most obviously, there are no yes/no questions. In fact, some of the items are not really questions at all; they are tasks or mini-assignments (e.g., to outline the work or list its main points). Even those items that are questions specify a task (e.g., to list justifications or to identify the strongest and the weakest evidence).

Consider what these items direct students to do: Rather than asking for a judgment or opinion, many of them ask students simply to identify (paraphrase, list, outline, star, underline, highlight, bracket, check) parts or features of the work

(the thesis, main points, evidence, justifications, topic sentences, transitions, misspellings, mechanical errors), as each student sees them. The remaining items ask students for their personal reactions to the work—not their judgment of aspects of the work as good or bad, but how they respond to or interpret it.

This approach to obtaining student peer feedback brings out the best in students and eliminates the typical problems listed earlier. First, identification and personal reaction items seem—and are—rather neutral. Therefore, they minimize the intrusion of emotions and risk. Students are not finding fault with a peer's product or deciding how good or bad it may be, and so their answers cannot possibly hurt a fellow student's grade, raise the grading bar for the class, or provoke retribution. Even picking out the strongest and weakest evidence is not emotionally charged as long as students understand that every piece of rhetoric has its most and least powerful arguments in the eye of every beholder. Students are accustomed to agreeing or disagreeing with each other, so this task should not lead to problematic feelings.

Secondly, any student who has read or listened to the work can give acceptable answers to the items. They require attention to the work but not a strong disciplinary background or discriminating judgment. In fact, they do not ask for a judgment at all. In Bloom's terms, they call for comprehension and analysis, but not the most challenging cognitive operation, evaluation. They ask students to go on a scavenger hunt for pieces of the work or to identify and describe their nonjudgmental reactions to it. If a peer feedback form were to include all the questions above, students would need only basic knowledge about essay writing, rhetoric, parts of speech, punctuation, grammar, and sentence mechanics.

Thirdly, no student can ignore the work in question. The keen focus and attention to detail that these items require prevent once-over skimming or lazy listening. To pick out aspects of content, organization, and mechanics in a paper may require three or more readings. In fact, although all the items may be doable, they are not necessarily quick and easy to answer. They force a student to learn. They

demand that he or she actively practice the lessons in the readings and classes about essay/speech construction, organization, argumentation, types of evidence, active listening, style, grammar, mechanics, and intended audience.

The Value of Student Peer Feedback

Instructors who have used judgment-based peer feedback forms know that students give a great deal of erroneous feedback to one another. Many of the errors are those of omission—a failure to point out problems and mistakes in the work. Typically, then, the recipient of the peer feedback believes that his work is of higher quality than it actually is, and than the instructor thinks. No doubt many students find peer feedback misleading and even useless because they feel that the real audience is the instructor anyway.

Instructors can raise the quality of the peer feedback by grading it, but reading and commenting on all the written answers presents a formidable task, one less feasible as class size increases. Judgment-question answers are not easy to grade, as there are no absolute right or wrong answers. There are only more or less defensible judgments, and an instructor must give a careful reading to each answer to see how well justified each one is.

However, with identification and personal-reaction feedback items, students cannot give erroneous feedback, as long as they respond in good faith. How can a student's honest perception be wrong? This statement may sound radically naïve, but an example should serve to clarify its meaning.

Let's say a student writes a paper with the intended thesis that a particular gun-control bill being considered by a House committee should be passed. The three peer reviewers fill out a feedback form that asks them, among other things, to identify the thesis of the paper. The first student reads the paper just as the writer intended and says that the paper argues in favor of a particular gun-control bill being considered by a House committee. The second student identifies the thesis differently—that the Second Amendment should be amended to reflect the particular gun-control bill. The third believes that the paper contends that the House

should repeal the Second Amendment. What does this feedback, some of which could be seen as erroneous, mean to the recipient? It means that she did not make herself completely understood by a significant part of her audience. It means she should revise her paper to make her thesis clearer. Perhaps she should even add a sentence or two stating what she is not arguing.

Similarly, if a couple of peer reviewers say that they did not know the thesis until the conclusion, the writer (or speaker) should consider reinforcing the thesis early on. If most of the reviewers miss a main point, a key justification, or an important piece of evidence, the writer knows that part of his or her message was missed and should be emphasized.

The personal reactions of reviewers can also provide helpful information. What audience members find to be the strongest and weakest evidence tells the writer which content to highlight and which to downplay or edit out. What they identify as "particularly strong or effective" identifies what the writer is doing right and should do more often. Whether he or she actually changed any of the audience members' minds demonstrates just how effective the argument was, which should be of primary interest to any writer or speaker. Peer feedback informs self-assessment, an especially effective process for enhancing learning (Boud, Cohen, and Sampson 1999; Boud 1995).

When instructors distribute feedback forms with identification and personal-reaction items, fellow students constitute a genuine audience, and their feedback is meaningful. They cannot fake an "uncritical" answer that reflects just what the writer intended. As writers and speakers, students realize that their purpose—and the appropriate measure of their success—is to communicate, to help the audience understand their point.

Is it possible that some students may be lazy audience members and may miss some points that are perfectly clear in the text? Yes, of course, but they reflect the reality that in any true readership or audience, some members will be half-listening. Still, some articles and speeches are written and delivered so effectively that they compel people's attention. The lesson here is to express oneself so clear-

ly and powerfully that almost no one tunes out.

Instructors who wish to grade this type of feedback can still do so, but the criteria must be different. They cannot assess the feedback for "accuracy" or "defensibility" because it is purely perceptual. All that they can judge is the extent to which the answers reflect a good faith effort. Did the student respond to all the items? Are the answers reasonable? Grading on these criteria should be much easier than evaluating the defensibility of and justifications for judgments.

Conclusion

There is no question that peer feedback can be very valuable to students, and that learning how to give and take it is a crucial lifelong skill. Its value, however, is largely dependent on avoiding its various problems and pitfalls. By following two guidelines, instructors can greatly enhance its benefits:

- Instructors should present peer feedback items that ask students to identify or to personally react to defined parts of the paper, speech, or project.
- If fellow students are to provide honest and useful feedback, they should constitute the real audience, at least in the revision stages. This places students in the position of writing truly to communicate.

The feedback that students give under these conditions is less prone to the problems that plague judgment-based feedback—blandness, superficiality, inaccuracies, inconsistencies, and so forth—for several reasons. First, identification and personal reaction items do not have emotionally charged consequences for the feedback giver or recipient. Second, such items ask students to perform cognitive operations—primarily comprehension and analysis—rather than the more difficult and demanding process of evaluation. Third, the items do not allow students to gloss over a peer's paper or fade in and out of a speech. They require a thorough examination of the work in question, and instructors can grade peer feedback largely on the evidence of close attention.

Key words: peer feedback, assessment methods, evaluation, cooperative learning

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