


# **Collaborative Learning Techniques**

A Handbook for  
College Faculty

**Elizabeth F. Barkley,  
K. Patricia Cross, and  
Claire Howell Major**

 **JOSSEY-BASS**  
A Wiley Imprint  
[www.josseybass.com](http://www.josseybass.com)

2005

Davis (1993) would add at least one more approach: assigning a grade based upon the amount of improvement a student has made in the class. Grading on progress avoids competition and emphasizes individual learning, but it can produce inequities: a student who enters a course with the least background can still be the poorest student at the end, but might get an A for progress. Conversely, an outstanding student with little growth may get a C for progress. As Davis notes, "'Improvement' grades are also difficult to interpret within established grading norms: does a B mean that a student's work is above average or that his or her *improvement* is above average?" (p. 290). In terms of collaborative work, using improvement in teamwork and group process skills may be an appropriate approach to evaluating learning.

Just as teachers can use any of these three approaches to grade work in the traditional classroom, so can they use any of the three approaches to grade collaborative work. It is often most effective to use a hybrid approach, or a combination of approaches throughout the term, in order to emphasize advantages while minimizing disadvantages of a single approach.

### Student Self-Evaluation

Self-evaluation encourages students to take stock of their own efforts, weighing their work against their own goals and against the work of other students. Embedded within self-evaluation is the concept of "reflection." Reflection is important in collaborative learning because it gives students opportunities to think about what they have learned and how they have learned it. As Berthoff (1990) reminds us, "Our job as teachers is to devise sequences of assignments which encourage conscientization, the discovery of the mind in action" (p. 25). Reflection, whether written or oral, provides a nice balance with the activity of collaborative learning, building the bridge between experiences and learning. Reflection helps students be more self-aware as they discover their thinking processes and develop patterns of self-regulated learning (Paris & Ayers, 1996).

Reflection is mostly used for formative assessments, but many of the same questions could be asked as part of a self-evaluation for grades. The questions may be presented as open-ended, such as *In what ways did you help/hinder the group?* or they may be modified such that students answer based on a Likert scale rating. For example, *On a scale of 1 to 5, how would you rate how well you helped the group?* Self-evaluation can focus on subject matter, such as, *What did you learn about course content in this collaborative activity?* or process, such as, *What did you learn about how you interact with others?* A list of possible questions for reflection or self-evaluation follows:

- What have you learned about yourself as a learner? As a team player?
- How can you apply what you learned in this activity to new situations?
- Describe your most successful (or least successful) interaction with your peers.
- How did collaborative learning contribute to learning course content? What were the advantages and disadvantages?
- What connections do you see between this experience and your other college courses?
- How did this experience challenge your assumptions and stereotypes?
- How would you do this differently next time?
- What was the best/worst/most challenging thing that happened?

Although self-evaluation can help promote deep learning, students may be reluctant to negatively evaluate themselves, particularly if they believe they will be penalized for it. When using self-evaluation, it is important to establish trust in the classroom, to explain the benefits of the evaluation, and to make clear whether the evaluation will be used for formative or summative purposes. If the responses are used for grading purposes, self-evaluations might be compared or averaged with instructor or peer-evaluations. Exhibit 6.1 shows an example of a form that might be used for self-evaluation.

**EXHIBIT 6.1****Sample Self-Evaluation Form**

Name \_\_\_\_\_

Group Number or ID \_\_\_\_\_

Project Title \_\_\_\_\_

Rate yourself on your performance on the project using the following scale:

**5 = Always   4 = Frequently   3 = Sometimes   2 = Rarely   1 = Never**

I was prepared to contribute to the group

I stayed on task

I listened to others

I participated in discussion

I encouraged others to participate

Overall I felt my performance in the group should be rated:

### Student Peer Evaluation

Peer evaluation can be an integral part of the assessment process for collaborative learning because peers have a firsthand view of what is going on during collaborative activities. Peers are therefore well positioned to identify each other's levels and degrees of competence. Although peer evaluation is primarily used to assess group process at either the group (see "Group Evaluations" following) or individual levels, teachers are increasingly using peer evaluation for content as well (such as in calibrated peer review). There are challenges inherent in using peer evaluation. It is not a skill that students have had experience with, and faculty must devote time to instructing the students on what and how to effectively assess the product or presentation. Students may lack confidence in evaluating other students and may not be prepared to be critical. Like the other kinds of evaluations, peer evaluation can be used for either formative or summative purposes. In either case, it is perhaps most effective if instructors work with students to develop a set of evaluation criteria, and then ask students to rate their peers according to those criteria. A sample peer evaluation form appears as Exhibit 6.2. (See Chapter Two, Orienting Students.)

#### EXHIBIT 6.2

#### Sample Peer Evaluation Form

	<i>Needs Improvement = 1</i>	<i>Adequate = 2</i>	<i>Outstanding = 3</i>
<b>The team member ...</b>			
<i>Prepares</i>			
<i>Listens</i>			
<i>Contributes</i>			
<i>Respects others</i>			
<b>Demonstrates the following skills ...</b>			
<i>Critical thinking</i>			
<i>Problem solving</i>			
<i>Communication</i>			
<i>Decision making</i>			
<b>Subtotals</b>			
<b>Total</b>			

### Group Evaluation

Group evaluations are a subset of peer evaluations, and focus on group process. Evaluations of the group process by members can help identify conflicts early so that problems can be addressed and tensions ameliorated. It can also help students identify and then capitalize on their group's strengths while minimizing disadvantages. Group evaluations, however, can open up doors for students to undermine the collaborative learning process. For example, students may try to get the instructor involved in conflict resolution instead of working to negotiate the conflicts themselves. Or they may use the activity as an opportunity to "bash" the group work process itself. If used for summative assessment purposes, students may choose to answer dishonestly in hopes of obtaining a more favorable grade. Providing structure to the evaluation can help deter unproductive negative responses to the process. Angelo and Cross (1993, p. 350) provide the sample form shown in Exhibit 6.3.

#### EXHIBIT 6.3

#### Sample Group Evaluation Form

1. Overall, how effectively did your group work together on this assignment?  

Poorly	Adequately	Well	Extremely Well
--------	------------	------	----------------
2. Out of the five group members, how many participated actively most of the time?  

None	One	Two	Three	Four	Five
------	-----	-----	-------	------	------
3. Out of the five group members, how many were fully prepared for the activity?  

None	One	Two	Three	Four	Five
------	-----	-----	-------	------	------
4. Give one specific example of something you learned from the group that you probably wouldn't have learned working alone.
5. Give one specific example of something the other group members learned from you that they probably wouldn't have learned otherwise.
6. Suggest one change the group could make to improve its performance.