Collaborative Learning Techniques

Bill Cerbin
Center for Advancing Teaching & Learning
April 23, 2010
What are your questions, interests, concerns about using collaborative learning in your classes?

Address as many as possible today. I will follow up with additional responses by email to all of you.

Jot them down and please leave them with me and I will add them to the list.
Some of Your Questions, Concerns, Interests

- What techniques work to ensure that all members of a collaborative team are learning and contributing?
- How do you structure the group to let each student’s strengths shine?
- How to construct/guide collaborative learning exercises that support all students taking an active role and that avoids one student taking the lead/doing all the work while others miss out on the learning opportunity
- How to deal with freeloaders.
- How do you structure the group work so that students who work hard won’t fail if someone in their group doesn’t pull his weight?
- How to grade equitably.
- Recommendations concerning assessing the learning of each individual within a collaborative environment?
- Using collaborative learning techniques in a large class setting (~100 students).
- Student-centered collaborative learning via asynchronous online communication (facilitating discussions, using chat room for collaborative dialogues with peers).
- Ways to incorporate group work and other discussion activities into online instruction.
- When NOT to assign a collaborative project (as in, there are good reasons and bad ones, and students who hate them and students who don’t have time outside of class)
- How to address collaboration burn-out (some students have group projects in several classes).
- How to think about class time/out of class time and collaborative work.
- Will students need to do group work in their careers after school?
- Creating collaborative learning opportunities that are open ended in which students create/construct their learning. In particular, an activity to help students learn not only how to evaluate information but why they need to evaluate their sources. Not sure how to keep it open ended and beneficial for students while also being able to manage it from an instruction point-of-view.
- Students might not realize that they can use each other as resources
- Concern about quieter students finding a stronger role in group work
- How can I respond to student complaints about working in collaborative groups that begin during class time and then needs to be completed outside of class?
- I’m interested in collaborative learning with colleagues across campus. I know about Google.docs but would like to have some direction.
- Outside class collaborative project; 1) group members who fail to collaborate, 2) grading group work, 3) keeping groups on task
- Getting groups to keep working beyond easy answers
- Fostering actual collaboration not just doing one thing
- How does collaborative learning work with assigning grades to individuals?
- Is collaborative learning more or less effective than individual learning?
Variety of Methods & Approaches

- Students take group tests
- Work in pairs
- Group members change each class
- Instructor assigns groups
- Group activities used occasionally
- Students have assigned roles
- Group activities in large lecture classes to re-engage students
- Students work in online groups that never meet F2F
- Students stay in base groups all semester
- Semester long group projects
- Turn large lecture classes into team-based learning groups
- Seminar class in which students interact as an entire group
- Class period is a mixture of small groups and whole class discussion
- Lab courses with partners
- Studio courses with extensive critique of one another’s work
Examples of Collaborative Learning Techniques

1. Think-Pair-Share
2. Reciprocal Teaching
3. Think-Aloud Pair Problem Solving
4. Group Grid
5. Group Writing

Refer to handout for descriptions
## EXHIBIT 10.2

### Group Grid for the Middle Ages

<table>
<thead>
<tr>
<th></th>
<th>Two-Dimensional (Painting, Mosaics, Tapestries ...)</th>
<th>Three-Dimensional (Sculpture, Bas Relief ...)</th>
<th>Architecture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Medieval</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romanesque</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gothic</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Creating Conditions that Support Collaborative Learning

1. Structuring Group Learning Tasks
2. Orienting and Training Students
3. Forming Groups
4. Facilitating Student Collaboration
5. Grading/Evaluating Students in Collaborative Learning Situations

Refer to Handout
Advantages According to Students

– You can usually get a lot more done in a shorter amount of time.
– Each member of the group has something unique that he/she can contribute.
– I am able to learn more, and truly understand things better.
– If I am clueless on something a partner may be an expert on it.
– Students can relate to one another more easily than to a teacher.
– It makes the assignment or project more fun.
– I really like working in groups, especially in LAB.
– Years from now, when you are put into this same situation at work, you won't find yourself blowing your lid like many of your inexperienced coworkers will.

For more comments click HERE
Disadvantages According to Students

- People need to go at different speeds.
- Someone may try to take over the group.
- Quiet people may not feel comfortable.
- Sometimes people just don't get along.
- People may not pull their weight. It is not fair!
- A concept may not be understood as well if a person doesn't have to figure it out.
- The time spent talking about irrelevant topics is unbelievable.

For more comments click HERE
Student Recommendations

- **Troubleshoot before you start:** Think before you act. Assess your class, Prepare students for group learning
- **Set up groups that work:** Pick a size that works, Majority view: instructor should pick groups, Minority view: students should pick groups, Select group composition carefully, Decide how long group stays together.
- **Manage groups effectively**
  Design good group assignments, Assign roles to group members, Monitor, monitor, monitor!
- **Attend to grading**
- **Know when to use cooperative learning**

More Comments [HERE]