

Collaborative Learning

Collaborative learning takes place when students work together to “achieve shared learning goals” (Barkley, Cross & Major, 2005, p. 4). This active teaching and learning strategy has been utilized across multiple disciplines in elementary, secondary, and higher education. The benefits of collaborative learning include content mastery, development of critical thinking and problem solving skills, and improved interpersonal skills (Johnson, Johnson, & Smith, 1998; Johnson & Johnson, 1999).

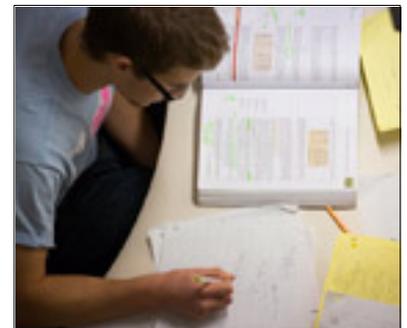


Collaborative learning has been widely researched across educational levels, but has been well studied in higher education since the 1960's. The terms collaborative learning and cooperative learning are often used interchangeably, and varying definitions abound in the literature. Team learning, and “team based learning” (Michaelsen & Richards, 2005) are forms of collaborative learning that are widely utilized, but entail prescriptive procedures and materials (see information on Team Based Learning elsewhere in vCTE site).

A meta-analysis of 305 studies by Johnson, Johnson, and Smith (1998) comparing cooperative learning with more traditional competitive and individual approaches uncovered three major benefits for college students: academic achievement, improved quality of interpersonal relationships with peers, and improved “psychological adjustment” to college life. Cooperative learning is rooted in three theoretical frameworks: social interdependence theory, behavioral learning theory, and cognitive learning theory.

Social interdependence theory postulates that through a shared goal, effective teams learn to work together for the overall success of the group. Learning is facilitated when group members strive to motivate and support each other. These cooperative efforts, known as promotive interaction, are an essential element of the collaborative learning process (Johnson & Johnson, 1999). Behavioral learning theory suggests that if individuals perceive a benefit or reward, they will actively engage in the task (Bandura, Skinner, as cited in Johnson & Johnson, 1999). Cognitive theory states that learning occurs when students make connections to existing knowledge through the cognitive exercises of rehearsing, restructuring and “scaffolding,” or building mental models of the material (Wittrock, as cited in Johnson & Johnson, 1999). Thus, working with others to solve a common problem, explaining one's viewpoint to others and coaching fellow group members build strong cognitive connections.

It is important to remember that true collaborative learning is more than just having students “work in groups.” Barkley, Cross & Major (2005) recommend that students be given clear instructions and an explanation for the use of collaborative learning in a student orientation session. They also stress careful structuring of both the groups as well as the learning task based on course and assignment objectives. Lastly, they recommend a mixture of both individual and group accountability when collaborative learning activities are graded.



Here are some Collaborative Learning Activities that you can use to “get your feet wet.” Each of these activities is adapted from *Collaborative Learning Techniques: A Handbook for College Faculty* (Barkley, Cross & Major 2005):

- 1.) **For class discussion: Think-pair-share:** Pose an engaging question to the class. Ask students to take a few minutes to formulate an individual response and write it down. Ask students to pair with another student and have each of them share their responses. If the students disagree, have them justify their position to the other student. Ask some of the pairs to share with the entire class to generate discussion.
- 2.) **For reciprocal teaching: Jigsaw:** divide the students in to groups of 4-5 (larger groups than this make working together difficult, as students will tend to “pair off”). Assign each group a content area. Each group is charged with becoming an “expert” on their assigned content and determining the most effective way to “teach” their fellow students about the content (give the students learning objectives or guiding questions). Students then break from their assigned group into a new group and “teach” their fellow students about that content. Alternatively, the groups can present to the entire class. If this strategy is used, it is helpful to assign each student a particular role in the group (i.e. note-taker, spokesperson, time-keeper etc).



- 3.) **For problem solving: Send a Problem:** Form groups of 2-4 students. Give each group a written problem to solve (part of a case, ethical dilemma, patient care plan etc). After the end of an established time period, ask each group to place their problem and “solution” in to an envelope. Each group then passes their envelope to a different group. The group receiving the envelope reviews and evaluates the problem and solution posed and adds additional solutions/ideas as necessary. The envelopes are then passed again. Repeat this process however many times you wish. Students in the final group analyze and evaluate all responses and report a “best” solution to the entire class.

- 4.) **For writing: Peer Editing:** Have students work in pairs to examine the rubric for a writing assignment (research paper, creative writing assignment etc). Have each student describe their idea for the paper, while the other student takes notes for him/her, asks questions, and makes suggestions. Students then write a first draft of their papers individually. They share their draft with their partner who will assist them with proofing and editing. They should also use the rubric for the assignment to evaluate the paper for content etc. (A separate “Peer Review” form can also be constructed for this purpose.) Each author revises their final draft, taking in to consideration the suggestions from their peer. Consider grading the peer review form in some way.



LINKS:

[Wisconsin Center for Education Research](#)

[Educause Collaborative Learning Resources](#)

SUBMITTER INFORMATION:

[Anne Schoening, PhD, RN, CNE](#)

Creighton University School of Nursing

REFERENCES:

- Barkley, E.F., Cross, K.P., & Major, C.H. (2005). *Collaborative Learning Techniques: A Handbook for College Faculty*. San Francisco: Jossey-Bass.
- Johnson, D.W. & Johnson, R.T. (1999). *Learning together and alone*. Needham Heights, MASS: Allyn and Bacon.
- Johnson, D.W., Johnson, R.T., & Smith, K.A. (1998). Cooperative learning returns to college: What evidence is there that it works? *Change, July/August*, 27-35.
- Michaelsen, L. & Richards, B. (2005). Drawing conclusions from the team-learning literature in health-sciences education: A commentary. *Teaching and Learning in Medicine, 17*(1), 85-88.