Collaborative Learning Techniques Toolbox

Most of these techniques are described in detail in Barkley, E.F., K.P. Cross, and C.H. Major (2005) *Collaborative Learning Techniques: A Handbook for College Faculty* (San Francisco: Jossey-Bass). The Center for Advancing Teaching and Learning (CATL) has several copies of this book for instructors to borrow.

Typically informal techniques useful for informal classroom assessment, breaking up a lecture, or developing students’ ability to self-assess their learning:

* Concept Maps (Word Webs): Students generate a list of related ideas and then organize them in a graphic, identifying relationships by drawing lines or arrows to show connections. Barkley, p. 226.
* Critical Debate: Students assume and argue the side of an issue that is in opposition to their personal views. Barkley, p. 126.
* Learning Cell: Students quiz each other using questions they have developed individually about a reading assignment or other learning activity. Barkley, p. 140.
* Note-Taking Pairs: Students use information from their individual notes to create an improved, combined version. Barkley, p. 135.
* Send-A-Problem: Students try to solve a problem as a group, and then pass the problem and solution to a nearby group who does the same; the final group evaluates the solutions. Barkley, p. 177.
* Structured Academic Controversy - Students work in pairs or small groups to develop a position on a topic. Class discussion involves groups presenting their positions with the goal of developing deeper understanding of the concepts. See .pdf linked below Resources on [this page](https://sites.google.com/a/uwlax.edu/teaching-improvement-guide/improvement-strategies/teaching_methods_course_structure/c-small-group-work) of the Teaching Improvement Guide.
* Test-Taking Teams: Students prepare a test in working groups, take the test individually, and then retake the test in their groups. Barkley, p. 163.
* Think-Aloud Pair Problem Solving (TAPPS): Students solve problems aloud and try out their reasoning on a listening peer. Barkley, p. 172, and the .pdf linked below Resources on [this page](https://sites.google.com/a/uwlax.edu/teaching-improvement-guide/improvement-strategies/teaching_methods_course_structure/c-small-group-work) of the Teaching Improvement Guide for Reciprocal Teaching.
* Think-Pair-Share: Students think individually about a question or problem, compare their responses with a partner's, and then share with the class. Barkley, p. 104, and the .pdf linked below Resources on [this page](https://sites.google.com/a/uwlax.edu/teaching-improvement-guide/improvement-strategies/teaching_methods_course_structure/c-small-group-work) of the Teaching Improvement Guide for Reciprocal Teaching.
* Three-Step Interview: Students interview each other and report what they learn to another pair. Barkley, p. 121.

Techniques that tend (by their very design) to promote the necessity of a group and therefore “positive interdependence” (the success of the group depends on the success of each individual):

* Affinity Grouping: Students generate ideas, identify common themes, and then sort and organize the ideas accordingly. Barkley, p. 207.
* Analytic Teams: Students assume roles and specific tasks to perform when critically reading an assignment, listening to a lecture, or watching a video. Barkley, p. 193.
* Concept Maps (Word Webs): Students generate a list of related ideas and then organize them in a graphic, identifying relationships by drawing lines or arrows to show connections. Barkley, p. 226.
* Group Grid: Students are given pieces of information and asked to place them in blank cells of a grid according to category rubrics. Barkley, p. 211.
* Jigsaw: Students develop knowledge about a given topic and then teach it to others. Barkley, p. 156. A more elaborate form of Reciprocal Teaching (See .pdf linked below Resources on [this page](https://sites.google.com/a/uwlax.edu/teaching-improvement-guide/improvement-strategies/teaching_methods_course_structure/c-small-group-work) of the Teaching Improvement Guide for Reciprocal Teaching).
* Sequence Chains: Students analyze and depict graphically a series of events, actions, roles, or decisions. Barkley, p. 221.
* Team Matrix: Students discriminate between similar concepts by noticing and marking on a chart the presence or absence of important, defining characteristics. Barkley, p. 216.
* Test-Taking Teams: Students prepare a test in working groups, take the test individually, and then retake the test in their groups. Barkley, p. 163.