

**Book Review: Collaborative Learning Techniques:  
A Handbook for College Faculty (2nd ed.) by Barkley, Cross, and Major (2014)**  
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In the 1930s, psychologist Lev Vygotsky hypothesized that students who worked with other, more capable students learned more than if those students worked alone. Research in the decades since then has supported Vygotsky's foundational work: collaborative learning is positively correlated with retention, higher-order thinking, and accurate and creative problem solving. Indeed, after a review of over 500 studies of pedagogy in higher education, it was determined that the most effective teaching method is "depends on the goal, the student, the content and the teacher", but that the second most effective teaching method is "Students teaching other students" (p. 16). The benefits of collaborative learning are particularly strong for women, minorities, adult students, and international students (p. 27).

*Collaborative Learning Techniques: A Handbook for College Faculty* (2nd ed., 2014) by Elizabeth F. Barkley, K. Patricia Cross, and Claire H. Major provides a one-stop guide to implementing this highly effective learning strategy. The authors have varying academic backgrounds—education, psychology, and music history—but all have published and in some cases been nationally recognized for their research into active and collaborating learning and pedagogical approaches. In the authors' definition of 'collaborative learning,' two or more students work together on an activity that has been intentionally designed for a particular learning outcome, during which all group members contribute relatively equally but not equitably (p. 4). This definition contrasts with cooperative learning, where disagreement and competition are discouraged. Barkley, Major, and Cross also emphasize the difference between the larger, more generic category called group work and true collaborative learning: "Shifting responsibility to students and having the classroom vibrate with lively, energetic small-group work are attractive, but it is educationally meaningless if students are not achieving intended instructional goals" (p. 5). This type of understanding of learning theory undergirds all parts of the book, from the guidelines for forming groups to each activity's introduction. *Collaborative Learning Techniques* will therefore be especially welcome to instruction librarians confident in their ability to foster an engaging classroom and who are now desirous of increasing the effectiveness of their instruction.

The authors note that most of what they present is not innovative or new; indeed, familiar activities such as think-pair-share and peer editing are included here. Instead, the intent of the book is to collect a variety of collaborative activities whose effectiveness has been demonstrated in the literature, and to help readers brainstorm how they might implement each activity in their own classroom by supplementing activity instructions with examples and ideas. This is the same format as was used in the landmark *Classroom Assessment Techniques: A Handbook for College Teachers* (first published in 1988), which was co-written Cross, a *Collaborative Learning Techniques* co-author.

### **Logistics of Designing and Implementing Collaborative Learning**

A significant portion of the book is dedicated to a review of the literature on collaborative learning and general information on the logistics of designing and implementing a successful collaborative activity; as the authors readily admit, it can be skipped (or at least skimmed) by readers who have greater familiarity with collaborative learning. The second section of the book following this literature review provides guidance for designing learning tasks, including the stipulations that tasks should stem from the planned learning outcomes (advice that will be familiar to anyone with cursory knowledge of backwards design) and that tasks should clearly support those learning outcomes to avoid students perceiving them as busywork. Because students can be reluctant to participate in active learning techniques if they are not accustomed to them or have had negative prior experiences with them, the authors also provide a variety of activities that can be used to increase student comfort. The icebreakers and activities that focus on introducing course policies and procedures are geared towards instructional scenarios where time can be spared for activities which do not serve more than one pedagogical function (e.g., semester-long courses). However, activities in this section that are included as a way of introducing a course can be used even within the time-constrained confines of a one-shot in the form of "bell work" as students trickle in before class and as a way of activating students' prior knowledge, which should be done by all teachers before introducing new information. One example of this is the "Common-Sense Inventory," where a table of statements about a course topic (e.g., source differentiation or source evaluation), and a column each for true and false, are projected on a whiteboard. Students get in small groups and put hash marks in what they think are the appropriate column for each statement; this can be followed by an instructor-led class discussion of each statement.

Comprehensive guidance is also provided for forming groups, a logistical detail that can be especially difficult in the one-shot classroom. Designing groups to be heterogeneous is the most pedagogically effective grouping mechanism overall for groups, but it can marginalize underrepresented groups (women, minorities, etc.) and prevent lower-achieving students from taking on leadership roles within their groups. Group homogeneity, conversely, can increase student comfort when discussing controversial or sensitive topics. Multiple strategies are provided for quickly creating freeform groups, which can be especially helpful for breaking up cliques whose members are unknown to you in a one-shot situation. Suggestions for forming groups within a variety of classroom settings (lecture hall, seminar room, and so on) are provided as well.

The final part of the introductory material is a section on avoiding and resolving problems common to collaborative learning, though most of the suggestions will work best, and

perhaps only, in the for-credit classroom. For example, student resistance to group work can be overcome by planning an extensive orientation to the activity; the difficulties created by students with poor interpersonal skills can be navigated by assigning each group member a role; and students can be incentivized to assume leadership roles via additional grade points. However, several pieces of troubleshooting advice will be of use even in the one-shot classroom: off-task behavior can be avoided by setting a hard-to-reach time limit, while also preparing ‘sponge’ activities that expand to fill the allotted time if there are still groups which finish earlier.

## Techniques for Collaborative Learning

What follows this background and foundational information is the book’s third section: a review of 35 collaborative learning techniques, or CoLTs. Each CoLT shares a template that includes the activity’s characteristics (group size; time on task, i.e., classroom time needed; group duration); its description/purpose; what must be done in preparation; the implementation procedure for face-to-face classes; the implementation procedure for online classes; examples of how the CoLT has been used in the fictional classrooms of faculty from a variety of disciplines; variations and extensions on the activity; observations and advice; and primary resources for those who wish to read more about the CoLT in the literature. The characteristics (e.g., “**Group Size:** 2 then 4; **Time on Task:** 15-30 minutes; **Duration of Groups:** Single Session”) are very helpful for determining at a glance whether a technique would work in a one-shot instructional scenario.

As the authors note, “The easiest approach to incorporating collaborative learning is to look at what you do now and see if one or more activities could be done collaboratively” (p. 138). To make that review process easier, the CoLTs are organized by activity type into chapters:

- reciprocal teaching,
- problem-solving,
- discussion,
- graphic information organizing,
- collaborative writing, and
- gaming.

Within each of these six chapters, activities are organized from least to most complex; for example, the discussion chapter begins with Think-Pair-Share and ends with Critical Debates; the reciprocal teaching chapter begins with Note-Taking Pairs and ends with Test-Taking Teams.

Discussion, for example, can be an effective instructional strategy for helping students think through new ideas and to examine their own conceptions, but can make for an uneven learning experience if a handful of students dominate the conversation and others listen passively while others participate. Discussion can also be off-putting to students who are English language learners or who otherwise need more time to think before responding. The six discussion CoLTs address these issues.

One discussion CoLT, Three-Step Interview, ensures participation from all students, helps them more deeply understand both course content and their fellow classmates’ perspectives, and generates ideas that can be used later on in the class—think of it as a more involved Think-Pair-Share. Students form pairs and each student takes a turn asking the other a series of instructor-provided questions, such as “If you were looking for information on [topic], what are some characteristics you would look for to ensure the source was trustworthy?” and “Where else would you go, beyond the site itself, to evaluate a site’s trustworthiness?” In addition to the instructor-provided questions, students can follow up with questions of their own, asking in a nonjudgmental way to help clarify their partner’s responses. After 5-10 minutes, each pair of students then finds another and the four students take turns describing their teammate’s thoughts to the other student pair; this act of “summarize and synthesize” (p. 175) helps students understand the information at a deeper level. After the activity has concluded, students can be asked to volunteer to the class some of the ideas that were shared in their groups. In this source evaluation scenario, group responses could be categorized thematically, such as those in source evaluation acronyms like CRAAP (Currency, Relevance, Accuracy, Authority, and Purpose) or the five Ws (Who, What, When, Where, and Why) that could be used to guide further class discussion on the topic; other responses could prompt a brief introduction to concepts such as the importance of lateral reading. The use of this particular discussion CoLT is likely to elicit a wide variety of responses because all students must participate. Because this required participation is low-stakes, however—students share their own ideas with only one person, then share the thoughts of their classmate with another group—it is less intimidating to shy students and English language learners.

## Conclusion

*Collaborative Learning Techniques* is the ideal resource for librarians with at least a few years of instruction experience. While most of the activities are not complex, they do all require thoughtful planning and familiarity with the instructional scenario in which they will be used; the authors further note that its easiest to implement CoLTs when the underlying activity—discussion, reciprocal teaching, etc.—is already being used in your classroom. For this reason, inexperienced teachers may prefer and find greater success with more prescriptive and library-centric collections of instructional activities such as *The Library Instruction Cookbook* (2009) and *Teaching Information Literacy: 50 Standards-Based Exercises for College Students* (2010).

On the other hand, those who like me have been providing library instruction in either one-shot or for-credit form for several years may be finding the highly specific activities in many books specifically directed at instruction librarians to be of decreasing use. Reading *Collaborative Learning Techniques* was a revelation because many of the CoLTs inspired multiple ideas for their use. More experienced librarians who already have a repertoire of go-to activities could find themselves supplementing (if not replacing) their dog-eared copies of such texts with this single volume.