



Collaborative vs Cooperative Learning Overview

Samuel Zowam, Mahjabin Chowdhury, & Jonan Phillip Donaldson

Center for Teaching Excellence, Texas A&M University

Uploaded June 6, 2023

Collaborative learning is a method of learning in which students work together to explore a question or to work on a significant project. In other words, it is a coordinated, often synchronous activity which results from a continued attempt to construct and maintain a shared conception of a problem (Dillenbourg, 1999). *Collaborative learning* is a very different kind of learning from *cooperative learning*. Johnson and Johnson (2002) refer to cooperative learning as “learning together and alone.” In cooperative learning, students work together in small groups but are individually accountable for their work, even if the work of the group as a whole is also evaluated. In cooperative learning, students in a group split the tasks into several subtasks, and then proceed to solve the sub-tasks individually, after which the partial results are assembled into the final output. In *collaborative learning*, however, students do the work “together” (Dillenbourg, 1999). The main distinguishing characteristics between cooperative learning and collaborative learning is the dimension of equality and the mutuality of influence (Damon and Phelps, 1989). Cooperative learning can be high in equality but low on mutuality, while collaborative learning can be high on both equality and mutuality (Damon and Phelps, 1989). Collaborative learning activities are embedded in learning theories such as Vygotsky's (1978) theory of social development and Lave and Wenger's (1991) situated learning theory, amongst others.

Collaborative learning is more about group learning, and although individuals within the group engage in learning, the design of collaborative learning experiences focuses on the group. For instance, imagine a project in which groups are tasked with writing a literature review paper. Without clear instructions to scaffold the experience, most groups will default to a “divide-and-conquer” approach, for instance by having each member take a particular subset of the literature to analyze, or by having each member be responsible for writing a particular section. This is NOT collaborative learning. To structure this as a collaborative learning project, the groups should be required to do the majority of the work together at the same time, and that whenever an individual group member has something to contribute (such as a new journal article to be considered) the whole group must discuss and negotiate the contribution such that it is transformed by the group. This does not mean that group members no longer have specific roles within the group, but types of roles are different than in traditional group work—roles such as “logistics coordinator,” “social interaction facilitator,” “problematizer,” “initiator,” or “process monitor” may be appropriate. Projects like these would need to continually reinforce positive interdependence, group accountability, and group processing by having the groups routinely set aside time to discuss the way in which they have been going about doing the group work. By the end of the project, it should be impossible for any one group member to point to any particular aspect of the literature review paper and say “I did that.” Therefore, designing for collaborative learning often involves having groups create and sign team contracts in which they clarify roles and responsibilities such that true interdependence and collective cognition are ensured. Other example applications of collaborative



learning include creative problem solving through design thinking processes, creating products, or assigning groups to teach particular topics in a course.

Although collaborative learning and cooperative learning are often used interchangeably in normal conversation, they are in fact two very different concepts. In the learning sciences there is a consensus that collaborative learning is of much greater value in terms of depth of learning.

Collaborative Learning - Learning Activity Design Principles

- Engage learners in collaboratively constructing knowledge (as well as products).
- Develop strategies to ensure that students are working together as one unit (and to prohibit them from dividing up group tasks to individually perform).
- Engage learners in discussing the strengths, weaknesses, preferences, and passions of each member of the group - and then negotiate roles within the group (avoid “task” roles, but encourage process, interaction, communication, and logistics roles). Have the learners re-negotiate roles frequently.
- Build time into group learning activities to develop group cohesion and interdependence.
- Through activity instructions, expectations, and grading practices, encourage focus on process, depth, and innovation (discourage focus on efficiency and effectiveness).

	Cooperative Learning	Collaborative Learning
Tasks	Individual	Collective
Roles	Product-oriented	Process-oriented, social-oriented
Relationships	Dependence, independence	Interdependence
Knowledge	Contributed	Negotiated
Process	Synthesis	Generative
Outcome	Efficiency	Powerful learning, innovation
Risks	Inequality, social loafing	Interpersonal issues, logistics

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