LEARNING COOPERATIVELY MAY NOT BE LEARNING COLLABORATELY!

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ABSTRACT

This paper discusses the similarities and differences between cooperative and collaborative learning. The paper emphasizes that the differences represent not only different pedagogical approaches, but different educational philosophies as well. The paper explains why it is important for instructors to understand and appreciate these differences. Finally, the paper goes on to suggest how instructors using simulations and experiential exercises can benefit by understanding their teaching goals and objectives in the light of cooperative and collaborative approaches to teaching and learning.

INTRODUCTION

Most of us in **ABSEL** have been keenly interested in innovative ways to use simulations and or experiential exercises in the classroom. At times novelty and ingenuity have governed our interests, but most often, we have had a genuine interest for the end result, viz., what are the best ways in which to teach students and what are the educational goals we seek to impart. Over the years, ABSEL has provided an excellent forum for testing, discussing and critically reflecting about educational goals and methodologies. Many of the papers appearing in ABSEL have described and proscribed what is broadly considered to be an *active-learning* approach to using simulations and experiential exercises. Active learning includes a broad range of techniques and processes, but its main philosophy is that students learn better by participating in some way in their own learning. Cooperative and collaborative learning are two approaches to active learning using groups or teams. Several years ago, the authors of this paper presented a didactic piece called, *Cooperative Learning or Learning to Cooperate* (1994). In that paper, we presented and described the concept of cooperative learning, presented the results of two case studies using cooperative learning, and recommended its use to readers. We also indiscriminately--and unwittingly--interchanged the

terms *cooperative* learning and *collaborative* learning. We made no distinction between the terms. In fact, we stated "The nomenclature for cooperative learning is legion. It is known variously as 'collaborative' learning, 'study circle,' 'team learning,'…while there seem to be several different terms used to describe or define a similar concept, there are some essential characteristics which differentiate cooperative learning from the more traditional approaches used in teaching…. " (p. 113). This, as we found, was not unusual. As it turns out, many of the scholars and researchers writing in the field of "active" learning use the terms 'cooperative' and 'collaborative' interchangeably. For example, Meyers and Jones state, "We are well aware that among some active-learning advocates, the words *cooperative* and *collaborative* have different meanings-- though in much of the literature that distinction is unclear….we do not want to muddy the waters for readers by attempting to make fine distinctions, when it seems to us that the thrust of cooperative and collaborative learning is essentially the same" (p. 74, 1993). This co-mingling of the terms *cooperative* and *collaborative* is not uncommon and indeed, includes several papers from ABSEL (Chiesl, 1998; Markulis & Strang, 1997; Vik & Venable, 1996; Markulis & Strang, 1995; Ross, 1995; and Arthur & Klepetar, 1994). As we continued in our research in this area, however, we found that the terms are not interchangeable--and indeed, mean quite different things. At first blush, we felt the distinctions made between the two terms might be the work of pedantic academics. However, as we read further, we discovered that the distinctions between the two had important epistemological and ideological differences, as well as methodological differences. This paper attempts to sort out those differences and illustrate why they are important to understand.

COOPERATIVE VERSUS COLLABORATIVE LEARNING

Instructors have used either cooperative or collaborative techniques--or both--in their classes over the years. In some cases, they may have made deliberate and conscious

attempts to use one or both of these. We suspect, however, that many instructors used them without cognizance of their different orientations.

Bruffee (1995) and Matthews, Cooper, Davidson & Hawkes (1995) indicate that the concepts have developed separately, with different goals and for different philosophical reasons and orientations. Researchers and scholars in the fields tend to come from different backgrounds, publish in different journals, sponsor different conferences and seem to have little contact with each other (Matthews, et al., 1995).

Let us first discuss cooperative learning. Cooperative learning can be said to be a truly 'American' approach to teaching and learning. As its Latin roots suggest the term *cooperative* in Cooperative Learning points to its underlying educational philosophy--the transmission of knowledge. The cooperative approach clearly falls in the lineage of John Dewey and the practical orientation toward learning. Basically, cooperative learning means that one believes that students can and should learn something specific and that learning may be facilitated in a group setting. Cooperative learning is primarily oriented to younger students, who--it is believed--need knowledge and facts. The proponents of cooperative learning believe that knowledge and facts--and many skills as well--are best transmitted through cooperative circles, and other such cooperative mechanisms. They also feel that cooperative learning reduces unnecessary competition among students, helps individual team members become responsible adults and is cost effective as a teaching medium. The instructor decides--that is the key. The ideology and methodology of cooperative learning clearly put the instructor in charge. For example, the instructor determines the structure or design of the cooperative setting. If group skills are part of what the instructor is trying to teach, then those specific skills are mapped and an appropriate forum is devised in which to teach and evaluate how well those skills have been taught. Team building skills may be an example, although some proponents of team building may frown on the notion that it is merely a set of skills to be learned.

Cooperative learning generally focuses on a knowledge base that is considered canonical or necessary for students to learn and understand. A principal ingredient in cooperative learning is the concept of *positive interdependence*. That means all groups or team members **must** cooperate in order to accomplish task, and there is individual and group accountability for that accomplishment As an educational philosophy, cooperative has its roots in social interdependence theory, cognitive-development theory and behavioral learning theory (Brody & Davidson, 1998).

Perhaps it is better to illustrate cooperative learning with an example. This is how it might work in a college setting. Barbara is a junior college student majoring in business administration. She is taking a course in Organizational Behavior from Professor Gentry. She participates in a structured group to which she was assigned. On a typical class day, part of the session will be devoted to a structured group activity, involving group dynamics, communications or motivation (typical topics in an Organizational Behavior course). Sometimes, she is required to play a role, such as scribe or devil's advocate. Professor Gentry walks around the classroom and monitors the groups and answers questions if they arise. He also wants to make sure the groups are sticking to the task. At the conclusion of the exercise, Professor Gentry makes sure he "debriefs" the exercise as the instructor's manual has made an important issue about the importance of debriefing all experiential exercises. All the students are asked to comment on what they learned, and how it might relate to an actual organization. They are also asked to reflect and comment upon the groups' dynamics and if there were lessons to be learned from the experience. At the end of the semester--and perhaps frequently throughout the semester--students are asked to evaluate their team processes and their peers. Professor Gentry provides feedback on the topical issues, but more importantly, he spends substantial time commenting on the group dynamics and makes suggestions for how they might improve (if they need improving).

On the other hand, collaborate learning is more student-centered, less directive and very open-ended. Knowledge *per se* is not the goal, but the goal is to develop students who can interact intelligently with one another. It is very similar to Maslow's concept of self-actualization, although it would be considered as one of the processes on how to reach that state and not the state *per se*. The Latin roots of collaborative suggest a *transaction* as opposed to a *transmission* of knowledge (as in cooperative). A collaborate approach would more likely than not have students forming their own teams, setting their own learning goals and dealing with ambiguous questions, as opposed to questions, problems or issues which have one correct answer. Collaborativists distrust structure, and tend to push empowerment. They emphasize personal growth, student-centered learning, individual responsibility and a sharing of authority. Bruffee offers that collaborative learning should help the student adjust and adapt to life. He calls it a process of reacculturation (Bruffee, 1995).

In the collaborate model, the teacher plays a more passive role than he or she would in a cooperative setting. The teacher believes that education is to make one a more productive, mature and responsible citizen. Knowledge is not to be transmitted to the student, but like Socrates' peripatetic model, the student is put into a situation where he/she interacts constructively with others to arrive at knowledge, albeit imperfect or incomplete. Collaborativists often assume students already know much--they just need to "explore" or "test" that knowledge against others or the larger culture. Collaboration is a philosophy of interaction and personal lifestyle where students are responsible for their actions including learning. In the collaborative setting knowledge is constructed, discovered and transformed by students while faculty create the conditions for this learning to take place. And this is perhaps the most important distinction between collaborative and cooperative learning.

Cooperative learning is closer to a traditional educational paradigm of learning where the teacher provides knowledge--albeit through a group format--to the student. The student is viewed as a sort of *tabula rasa* or a *carte blanc* to be filled with some specific knowledge or skill. The instructor, therefore, carefully plans the cooperative setting. In collaborative learning, the instructor believes that the student already possesses a considerable amount of knowledge. The instructor's role is to provide a forum for a group of students to exchange and further develop or refine that knowledge so as to be better able to constructively interact critically with other learning communities. Bruffee sees one of the purposes of collaborative learning as having students engage in "constructive conservation" viz., students learn and are empowered as they join and talk to each other, and reach consensus (1995). One suspects that there may be a political dimension to collaborative learning, although we could not find an explicit reference to this in the literature.

As with cooperative learning, an example might better describe how a collaborative approach would work. Daniel is a business administration major enrolled in a strategy course taught by Professor Butler. He is part of a group where Professor Butler has told the group that their task is to take a Harvard Business School case, analyze and teach it to the class. They are free to teach it any way they feel will be instructive to the students. Professor Butler has told the group that he will be available if necessary, but when they come to him with questions, he only provides some general guidance on how they might approach the questions. He seldom answers any questions directly. Near the end of the semester, each student team including Daniel's "teaches" their case to the class. They determine if there will be a quiz, whether the format is more 'lecture-oriented' or open discussion. They determine what the goals of the case are and how they are to expose student to those goals. They do not necessarily "teach" the class the goals. Professor Butler does not ask the student teams how they dealt with peers, or about their group's dynamics. Professor Butler clearly believes that the group will research the case, perhaps interview executives from related companies, and interact with each other. He also believes that the group's interaction will significantly contribute to their own knowledge and understanding of the case and to some extent to the broader business community.

Figure 1 indicates the differences in the two approaches by using multifaceted criteria. Differences in theory and differences in process are key elements of the comparison.
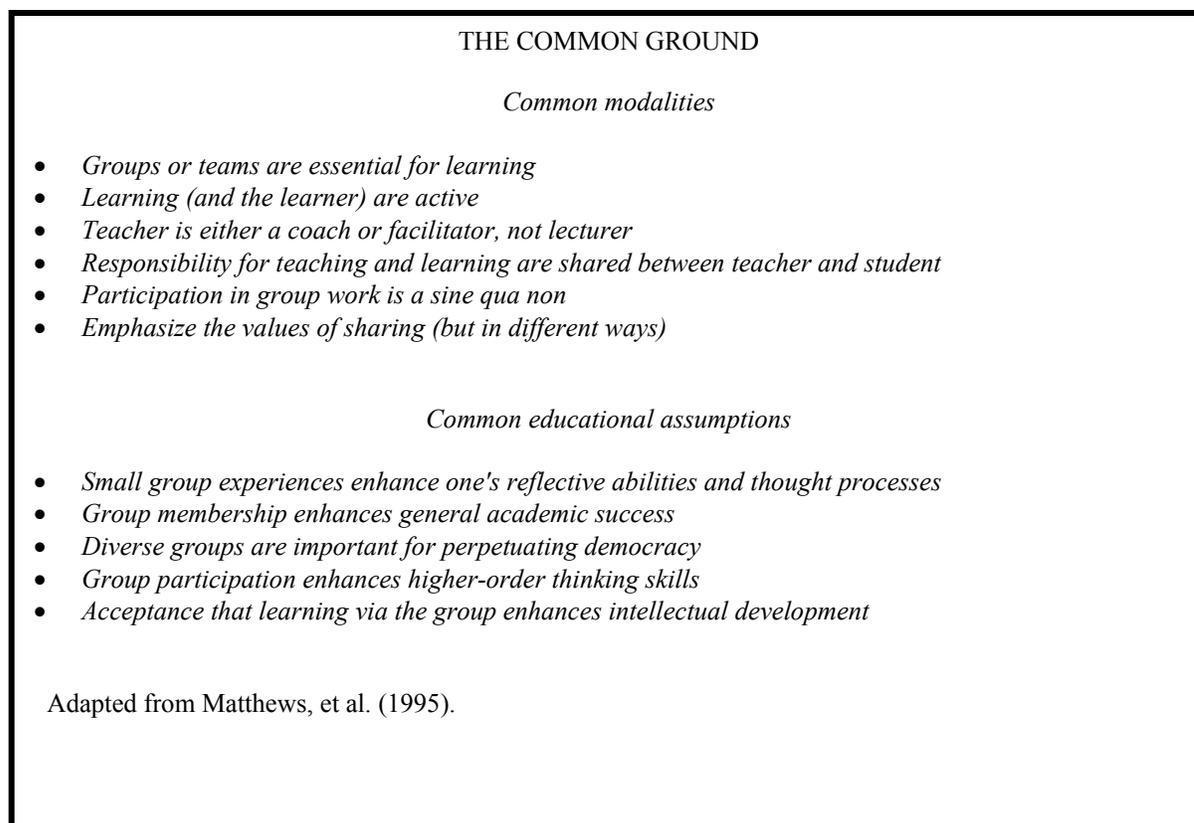
FIGURE 1. DIFFERENCES BETWEEN COOPERATIVE AND COLLABORATIVE LEARNING

Criteria or generative mechanism	Cooperative	Collaborative
educational theory knowledge	--social interdependence theory --cognitive development theory --behavioral learning theory	--social nature of human
modus operandi	--highly directive	--less directive
goals knowledge	--specific skills & knowledge	--discovery of skills &
structure	--formal, organized	--self-derived
knowledge	--traditional, canonical	--constructivistic, ambiguous, help students adapt/adopt to culture
activities	--predetermined individual and group measures	--consensus building
teacher roles	--formal, oversight, specific	--facilitative, coaching
student roles	--more traditional	--student determined

Despite these differences, cooperative and collaborative learning do share some common themes, methods and assumptions about learning. Figure 2 shows the areas of commonality, both in terms of normative assumptions and/or goals as well as structural modalities

FIGURE 2. THE COMMON GROUND

THE COMMON GROUND

Common modalities

- *Groups or teams are essential for learning*
- *Learning (and the learner) are active*
- *Teacher is either a coach or facilitator, not lecturer*
- *Responsibility for teaching and learning are shared between teacher and student*
- *Participation in group work is a sine qua non*
- *Emphasize the values of sharing (but in different ways)*

Common educational assumptions

- *Small group experiences enhance one's reflective abilities and thought processes*
- *Group membership enhances general academic success*
- *Diverse groups are important for perpetuating democracy*
- *Group participation enhances higher-order thinking skills*
- *Acceptance that learning via the group enhances intellectual development*

Adapted from Matthews, et al. (1995).

ADDED VALUE

What are the implications for the ABSEL organization given that most of its members are involved in instruction at the college level? It might have occurred to some of the readers that for the college setting, collaborative learning is superior--or at least more appropriate--than cooperative learning. But not necessarily as indicated by recent research. Karl Smith, a well-known promoter of cooperative learning, has argued that cooperative learning is appropriate and useful in the college setting (p. 6, 1995). He notes that "Cooperative learning was started with college students and continues to be a major factor in students' classroom success….At present there have been more than 100 experimental studies conducted with college student populations that confirm that cooperative learning is appropriate for--and effective with--college student populations." (1995, p. 6). Both cooperative and collaborative learning use teams, but in the former approach, there is more direction, more structure and a primary goal is to impart specific skill sets and/or knowledge bases. In collaborative learning, the process is less structured and the learning goals are more open-ended. Like so many management theories, one must chose the appropriate approach. Whichever approach one chooses, it seems imperative that the decision be made with as much understanding and appreciation of the fundamental axioms

and methodological techniques as possible. The added value that both bring to the classroom or learning laboratory is significant. Experimental evidence clearly points to the value of team-based teaching (Johnson and Johnson, 1989).

The question one might ask at this point is" What is the value of knowing the differences between cooperative and collaborative learning?" Let us address that question in the following manner. We believe that the implications are profound both in terms of developing simulations or experiential exercises as well as in using them. For just knowing that there is a difference forces educators to ask: Why am I using this exercise? Several reasons come readily to mind:

- It makes us sharper intellectually,
- It helps us to clarify what is we are trying to accomplish,
- It makes us think carefully about the modality and structure for accomplishing that (those) goals,
- It enables us to develop appropriate evaluative and assessment techniques,
- It may well force us to ask how we view human nature.

Instructors ought to be cognizant of their own educational values as well as their educational prejudices.

For those pursuing active learning or any type of group or team-based pedagogy, either through the cooperative or collaborative approach, we have prepared a checklist of important questions to ask (see FIGURE 3). These

questions should be of assistance to you in determining which approach is better suited to meeting the learning goals and objectives of a project.

FIGURE 3. CHECKLIST OF A PRIORI QUESTIONS

- What are the pre-conditions of each approach?
- What training/knowledge do I need?
- What is my view of these students?
- What knowledge or skills do the students already possess?
- What is the purpose of this assignment?
- What are my goals?
- What do I think the students will learn?
- What is the appropriate structure for the group?
- Will I measure success and if so, how?
- How will I handle team problems?
- Am I interested in teaching *process*?
- What do I expect the students to bring to the process (they know already)?

CONCLUSION

The terms, cooperative and collaborative learning, are frequently used interchangeably. While the terms have much in common there are some noteworthy differences. The paper presents and discusses those differences. The emphasis on the paper, however, is not so much on the difference *per se*, but on what the differences represent in terms of teaching and learning goals. The differences may also represent very strong, but unstated educational values. Those educational values, in turn, may point to deeply held views about human nature and how one thinks people ought to interact with each other.

Over the years, ABSEL has provided an excellent forum for testing, discussing and critically reflecting about educational goals and methodologies. Many of the papers appearing in ABSEL have described and proscribed what is broadly considered to be an *active-learning* approach to using simulations and experiential exercises. Cooperative and Collaborate Learning fall well within that spectrum. Knowing the differences between them, knowing which one to apply, and knowing how to apply them are important educational obligations for all instructors.

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