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## Feature Article: Yuko Hirade

### Five Differences between Collaborative Learning and Cooperative Learning

#### 協働学習と協同学習における五つの違い



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「協働学習」と「協同学習」の二つの言葉は区別が難しく、時として混同して使われている。なぜなら、両アプローチとも学習者の積極的なインタラクションを重視するコミュニカティブ・アプローチとして導入されたものであり、共に伝統的な教師主導型アプローチと対比する形で位置付けられているからである。また、学習者は積極的なインタラクションを通して、言語技能ばかりでなく学習技能・協調的スキルも身に付けることをその目的としているのも、両アプローチに共通する大きな特徴である。

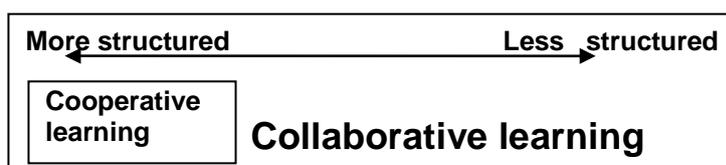
しかし一方で、両者の間には大きな違いがある。本稿は、両者間の五つの違い（概念 vs. 形式、学習者主導 vs. 教師主導、プロセス vs. 結果、知識の構築 vs. 知識の伝達、応用知識 vs. 基礎知識）について、具体的授業活動例を交えて提示し、明らかにしようとするものである。両アプローチの違いを認識した上で的確に各アプロ

ーチを導入することにより、最も効果的な学習活動が可能となると考える。

#### Introduction

The terms 'collaborative learning' and 'cooperative learning' are sometimes rather difficult to distinguish, and are often used interchangeably. Indeed, in language teaching both approaches are strongly associated with the communicative language teaching approach and have been contrasted with more traditional teacher-centered approaches. Both focus on developing learning and social skills as well as language skills, and strongly value students' positive interaction, reflecting their shared foundation in social constructivist theory (Lantolf & Appel, 1994). Both are also strongly learning centered, emphasizing the importance of active learning experiences for students.

However, there are important differences between the two. Collaborative learning is a broader notion. It is less structured, more learner-centered, and places greater focus on the learning process than learning outcomes. Conversely, cooperative learning is a narrower concept. It is more structured, giving teachers a more central role in the classroom, and learning outcomes are emphasized. In fact, cooperative learning is a form of collaborative learning, and represents the more structured end of the collaborative learning continuum (see Figure 1).



**Figure 1: The relationship between collaborative learning and cooperative learning.**

## Yuko Hirade

In this short paper, I explore and clarify the differences between the two, to some degree exaggerating their dissimilarities in order to differentiate them more clearly. Following Panitz (1996), I will use five dichotomies to compare collaborative learning with cooperative learning: philosophy vs. structure; learner-centered vs. teacher-centered; process vs. product; knowledge construction vs. knowledge transmission; and non-foundational knowledge vs. foundational knowledge. To illustrate each of them, I have included representative classroom activities.

In clarifying the differences between collaborative learning and cooperative learning, I am not arguing that one is better than the other. Rather, I believe that a deeper awareness of the differences between the two can help teachers organize more effective language classroom activities.

### **Philosophy vs. Structure**

Both collaborative learning and cooperative learning are based on constructivist theory, which assumes that learning is a social process, one that occurs through student-student and teacher-student interaction (Lantolf, 2000). However, collaborative learning is a broader, more philosophical notion, whereas cooperative learning is a narrower concept that provides specific structures to organize learning activities (Panitz, 1996).

Generally speaking, the notion of 'collaboration' in education can be seen more as a philosophy than a specific way of structuring learning. Individuals are viewed as responsible for their own actions, expected to design their own learning experiences, and encouraged to respect the abilities and contributions of their peers. The breadth of this philosophy permits collaborative learning to include a variety of educational approaches. These range from more general ways of organizing the classroom, such as

group projects, to more structured and specific forms of group work, of which cooperative learning is the most notable example. Thus, collaborative learning invites learners to determine their own responsibilities and ways of working together even in large groups, whereas cooperative learning refers primarily to small groups of learners working together in an environment that is highly structured by the teacher.

In part, the differences between these two approaches reflect their separate origins. Collaborative learning has British roots in literature appreciation (Panitz, 1996), whereas cooperative learning can be traced to the writings of Americans John Dewey and Kurt Lewin (Myers, 1991 cited in Panitz, 1996), and later to Kagan (1989a,1989b), who developed and successfully disseminated a set of very specific structured cooperative learning activities.

### **Learner-centered vs. Teacher-directed**

Broadly speaking, learners are expected to take control of the classroom in the collaborative classroom, while in the cooperative classroom it is primarily the teacher who directs learning activities.

In the collaborative classroom, group members come to assume almost total responsibility for activities. The teacher steps back and does not directly get involved in these activities. Rather, the teacher's role is to assess the progress of each group and provide suggestions about each group's approach. The teacher could also facilitate the process by asking for frequent progress reports from groups, organize group discussions, and help with conflict resolution. One example of learner-centered collaborative learning is the Nanzan University English language class, "Cultural Transfer: Japanese Culture and its Perception in Other Cultures" taught this year by Professor Ken Hinomizu. The main purpose of this class is to develop an awareness and knowledge of

## Yuko Hirade

Japanese culture to peoples of other cultures, in English. In this class students are simply required to research, discuss and do a presentation on a topic they select in groups, throughout the semester.

On the other hand, a teacher using a more cooperative learning approach uses sequences of classroom behaviors called structures, and learners are often given specific roles in learning groups such as questioner, recorder, and organizer. Assigning specific roles to learners is intended to help the group function. For example, one learner might be the questioner to elicit ideas or opinions from every group

member. Another learner might be the recorder to record and summarize the group's work for the whole class. Another could be the organizer to keep the group on task and to make sure each group member contributes to discussion or work. Role assignment should be varied and rotated in order to give each learner opportunities to learn and practice many different social skills. Structures are content-free ways of organizing interactions and may be used repeatedly with various curriculum materials. One example of a structure is 'jigsaw'. In Box 1 are the basic procedures for a jigsaw activity (Jacobs, et al., 2002).

### Box 1: Procedures for a jigsaw activity

- 1. Students are put in small groups, and each group member receives a different piece of information.*
- 2. Students with the same information regroup in topic groups (called expert groups) to master their information, through structured learning tasks.*
- 3. Students return to their home groups (called jigsaw groups) to share their information with other group members.*
- 4. Students then synthesize this information through discussion in their jigsaw groups.*
- 5. Each student produces an assignment or part of a group project or takes a test, to demonstrate synthesis of all the information presented by all group members.*

To facilitate a jigsaw activity, the teacher must intervene to direct student interaction and learning at almost every step of the activity. Teachers are expected to play diverse roles such as inquirer, creator, observer, facilitator and change agent in cooperative learning classrooms, reflecting a dynamic but directive role.

In summary, in the collaborative learning classroom, there is a sharing of authority and acceptance of responsibility among group members for group actions. In the cooperative learning classroom, activities are assigned by the teacher, who also directly and closely controls them.

### Process vs. Product

Simply put, cooperative learning stresses learning outcomes (as reflected in Box 1 above), whereas collaborative learning focuses on the processes of students working together, on learners' active roles in their own learning. For example, peer response groups are a collaborative learning process used for the teaching of writing. Here, learners work in small groups at every stage of the writing process. After composing groups, they formulate ideas, clarify their positions, test an argument or focus a thesis statement before committing it to paper. Thus, writing group members

## Yuko Hirade

help each other with their writing processes by exchanging their written drafts of papers and getting feedback on them either orally or in writing. This can be a challenging process for learners because it requires them to read and listen to peer learners' writing and to make useful suggestions for improvement. However, exchanging opinions and feedback with each other can deeply contribute to the development of their writing proficiency. In collaborative learning, learner talk is stressed as a

means for working things out, and discovery and contextual approaches are used to teach interpersonal skills (Smith & MacGregor, 1992).

By contrast, one of the main arguments for using cooperative learning is that it improves learning outcomes. An explicit emphasis on learning outcomes is evident in Student Teams Achievement Divisions, or STAD (Slavin, 1990), a well-known cooperative learning structured activity. In Box 2 are instructions for a STAD activity.

### Box 2: Instructions for a STAD activity

1. *Using direct teaching methods, teach a lesson; then, prepare a quiz on the lesson material and worksheets based on the quiz.*
  2. *Introduce team assignments, explain group scoring, and start team practice on worksheets. Teams can enter group discussion, pairs check, or just work informally until each member is sure that all on the team will make 100 percent on the quiz.*  
*When students have questions, they ask teammates before asking the teacher. Teammates explain answers.*
  3. *Review and continue team practice. The teacher reviews the lesson; students then review in pairs with worksheets, then change partners to ensure every teammate knows the answers.*
  4. *Give students a quiz (individually, not one quiz per team).*
  5. *Improvement scoring, that is, teacher bases scores on improvement from pre-to post-test scores.*
- Kessler (1992, pp. 20-21)

### Knowledge Construction vs. Knowledge Transmission

In the classroom, collaborative learning is considered to be more effective for knowledge construction, whereas cooperative structures are more effective for knowledge transmission (Panitz, 1996).

Knowledge construction is the idea that learners construct their own networks of knowledge by connecting new information to their past knowledge and interests. It is assumed that each person experiences and understands the same language

lesson differently and so constructs different ideas (Kohonen, 1992). For this reason, the use of open-ended questions is consistent with knowledge construction, and collaborative interaction in groups provides learners with many opportunities to build and try out their developing knowledge. Community-engaged writing in groups can be said to be a collaborative learning for knowledge construction. For example, learners in groups are asked to write about socially relevant issues such as poverty. Concretely, they are required to find out, for example,

## Yuko Hirade

educational problems caused by poverty through engaging in community service. Then, they discuss, put together their thoughts based on what they found in the community with which they engaged, and write a report on it at school. This type of service learning is a teaching method that engages young people in solving problems within their schools and communities as part of their academic studies, and it enables learners to connect their previous knowledge with new information, thus leading to the construction of new knowledge.

On the other hand, learners are often expected to

absorb then reproduce knowledge in the case of cooperative learning. Knowledge is transmitted directly from the teacher to the learner without being filtered by what is already in the learners' heads. The main role of classroom learning groups is to make sure group members master the material determined by the curriculum and teacher. The cooperative learning structure called Numbers Heads Together is often used by teachers to transmit a prescribed body of knowledge. The procedure for Numbers Heads Together is shown in Box 3.

### Box 3: Procedure of Numbers Heads Together

1. Learners number off (in teams).
2. The teacher asks a question (usually low-inference, high-consensus questions).
3. Learners put their heads together to make sure everyone knows the answer.
4. The teacher calls a number.
5. Learners with that number raise their hands to be called on, as in traditional classrooms.

Olsen & Kagan (1992, p. 19)

### Non-foundational knowledge vs. foundational knowledge

It is perhaps preferable to learn foundational knowledge in the cooperative learning classroom in the earlier grades and then to move on later to learning non-foundational knowledge in the collaborative learning classroom.

Foundational knowledge is basic knowledge we all agree on. Correct spelling, grammar, and word usage would represent types of foundational knowledge in the language classroom. These can be effectively learned using cooperative learning structures in junior and senior high school and the first years of university. (Panitz, 1996) Box 4 is an example of how to teach English using a cooperative learning structure, which is designed to acquire foundational knowledge.

Collaborative learning can be referred as the

learning of non-foundational knowledge, which is derived through reasoning and questioning. In order to learn non-foundational knowledge, learners are encouraged not to take their teacher's authority for granted. Rather, learners should doubt answers and methods for arriving at answers provided by their professors, and they are expected to always be active, not passive. In the collaborative learning classroom, the teacher could also be a learner as well as being an expert. One of the most typical examples of collaborative learning for non-foundational knowledge is problem-centered instruction. It is widely used in professional education, and utilizes discussion-based teaching. This approach assumes a strong belief in the importance of giving learners direct experiential encounters with real-world problems.

## Yuko Hirade

### Box 4: Using a cooperative learning structure

Curriculum area: English.

Kind of people: Four students in a group, assigned by the teacher, with mixed abilities.

Roles: Recorder, observer (observation sheet prepared), questioner, and organizer

Materials: English cards are written for each group. The cards can be used in two different ways.

- The whole class completes the cards, one at a time, in groups. The findings of the different groups are shared by all in the class.
- Groups of four rotate through the cards, engaging in one activity for several sessions or over the entire week.

(adapted from Hill & Hill, 1990).

Smith and MacGregor (1992) state that guided design, case studies, and simulations are all forms of problem-centered instruction, which immerse learners in complex problems that they must analyze and work through together. These approaches develop problem-solving abilities, understanding of complex relationships and decision-making in the face of uncertainty. Guided design asks learners working in small groups to practice decision-making in sequenced tasks, with detailed feedback at every step. This approach has been adopted in many disciplines and professional programs, most notably in engineering, nursing, and pharmacy, but in many liberal arts and sciences courses as well (van Merriënboer, 1997).

On the other hand, a case is a story or narrative of a real life situation that sets up a problem or unresolved tension for the learners to analyze and resolve. Case studies have long been a staple for teaching and learning in the professions, particularly in the fields of business, law, and education, and they are now being used in language learning as well. Finally, simulations are complex, structured role-playing situations that simulate real experiences. Most simulations ask learners to play the roles of opposing stakeholders in a problematic situation or an unfolding drama. Box 5 is an example of simulation for a language classroom:

### Box 5: A simulation activity for language learning

Islands: Imagine that a group of people in a shipwreck arrives on a deserted island. They form a new community, invent their environment and define it, determine the rules by which they will live. Learners negotiate in the target language and each role is distributed: who will get the water, the wood for the fire, hunt or fish for food, cook, build boats, etc. The shape of the island, the fauna and flora are invented. The simulation of the island can terminate on a happy note such as a rescue. (Magnin, 1997)

## Yuko Hirade

The key aspect of simulations is perspective-taking both during the simulation exercise and afterwards. Following the simulation, there is usually a long discussion where learners reflect on the simulation and explore their own actions and those of others. This is where important concepts and lessons emerge. (Smith and MacGregor, 1992)

### Conclusion

Cooperative learning is the most carefully structured form on the collaborative learning continuum. The teacher is the main authority in the cooperative learning classroom because it is assumed that learners cannot manage their own learning only by themselves. By contrast, learners assume more responsibility in the collaborative learning classroom, which focuses more on the process of working together and knowledge construction. Cooperative learning stresses learning outcomes, assessing whether basic knowledge has been successfully transmitted by the teacher. It is effective for learners to learn foundational knowledge in the cooperative learning classroom, then extend their learning to non-foundational knowledge in the collaborative learning classroom, when they are expected to experience questioning and reasoning process.

Collaborative learning and cooperative learning are potentially effective in both the secondary and university context. The point is to be aware of which approach you are using and explain this to your students, and create the learning activities that are most effective for your context.

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## Yuko Hirade

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## Appendix

An example of cards you could work with adapted from Hill & Hill (1990, pp. 54-56)

What did you do yesterday?

Describe what you did yesterday. You can make as many sentences as you want using past-tensed verbs. Consider:

- When did you get up yesterday morning?
- What did you eat for breakfast?
- Where did you go ?
- Who did you meet?
- What subjects did you study at school?
- What did you do after school?
- How long did you study at home?
- What time did you go to bed?

Observer

Organizer

Questioner

Recorder

