

Cooperative and Collaborative Learning: Definitions and Applications in Japanese Universities

Toshie Agawa

Abstract

The aims of this paper are to establish definitions of cooperative learning (CL) and collaborative learning (Part 1), and discuss their possible applications in the EFL classroom in Japanese universities (Part 2). Part 1 of this paper, as the first step towards defining CL and collaborative learning, discusses different definitions of CL and collaborative learning based on the literature in the fields of ESL/EFL, education, and educational psychology. Next, the distinctions and similarities between CL and collaborative learning are illustrated. Finally, definitions of CL and collaborative learning, both of which are taxonomic subdivisions under group/pair work, are proposed. In Part 2 of the paper, based on the proposed definitions of CL and collaborative learning, the author examines why and to what end CL and collaborative learning should be utilized in English classes in Japanese universities.

Keywords: cooperative learning, collaborative learning, learner autonomy

キーワード：協同学習，協働学習，学習者の自律

Introduction

Cooperative learning (CL) has a rich history of theory, research, and practice. Theories that have significantly influenced CL include *group dynamics theory* and *sociocultural theory*. Further, some of the key concepts of CL originated in group dynamics theory. Deutsch (1962) proposed the sub-concepts of *social interdependence* (i.e., interrelation between society and individuals) that Lewin (1935) originally put forth: *Negative interdependence* and *positive interdependence*. Negative interdependence refers to the situation where “individuals are so linked together that there is a negative correlation between their goal attainments”

(Deutsch, 1962, p. 276). For example, in a negatively interdependent classroom, since one student's goal attainment prevents the others from doing the same, competition among students is inevitable. Conversely, positive interdependence refers to a situation where "individuals are linked together so that there is a positive correlation between their goal attainments" (Deutsch, 1962, p. 276). In a positively interdependent situation, a goal is set in such a way that it cannot be attained unless everyone in the group contributes and successfully plays an imperative role. In such classrooms, positive interdependence materializes by dividing students into groups and giving them a goal with the aforementioned property. In other words, students need to cooperate to achieve their goal.

The other key theory that has influenced CL is sociocultural theory. Vygotsky (1978) claimed that children learn via interaction with their environment and that their higher psychological processes are awakened under adult guidance or in collaboration with more capable peers. The gap between the level at which children can solve problems alone and the level at which they can solve problems with the assistance of others is called the *zone of proximal development* (ZPD). The notion of ZPD has been applied to older learners and is now widely accepted that learners, in general, can understand and learn more challenging subject matters and solve more difficult problems with scaffolding from teachers and peers (Gibbons, 2002; Johnson, Johnson, & Smith, 2006; McCafferty, Jacobs, & Iddings, 2006; Sato, 2004; Swain, 2000). CL, which asks students to work collaboratively, is rooted in Vygotsky's philosophy of psychological development.

Not only has the effectiveness of CL been supported by theoretical background, concerning competitive and individual learning, CL has also been supported by a rich body of research. Numerous studies have been conducted in the fields of psychology, educational psychology, and mainstream subject education (e.g., Johnson & Johnson, 1989; Johnson, Johnson, & Smith, 2006; Masutani, 2009; Phipps, et al., 2001; Sharan & Shaulov, 1990; Sugie, Sekita, Yasunaga, & Miyake, 2004), almost all of them indicating CL's superiority. One of the most noteworthy publications is Johnson and Johnson's (1989) meta-analysis. They reviewed 85 studies conducted at the University of Minnesota's Cooperative Learning Center. The results show that, compared with individual and competitive settings, learning in a cooperative setting is more effective in improving learner motivation, increasing academic achievement, developing a trusting relationship with teachers and other classmates, and maintaining mental health. It should be pointed out, however, the vast majority of such studies were conducted in Western countries; there has been a far smaller body of research

carried out in Asia, where learning cultures may be different from those in the West. Moreover, there have been far fewer publications on CL in the second/foreign language teaching field. In addition, even though some researcher-practitioners actively share their narratives about implementing CL in their language classrooms (e.g., Jones & Taylor, 2006; Joritz-Nakagawa, 2006; Wilhelm, 2006), there has been little empirical research to support this learning strategy. Nevertheless, several scholars speculate CL's effectiveness in English classes. For example, Dörnyei (2001) claims that "cooperative learning has been shown to generate a powerful motivational system to energise learning" (p.40).

What is Cooperative Learning?

As shown above, it could be suggested that CL is more effective than individual and competitive learning in many ways. Then, what is CL exactly? Johnson and Johnson, the extensively cited CL specialists, suggested five principles of CL as (a) positive interdependence, (b) *individual accountability*, (c) *promotive interaction*, (d) *appropriate use of social skills*, and (e) *group processing*. Positive interdependence, as explained above, is the perception among group members that they need each other in order to complete the group task successfully (Gilles, 2003; Johnson, Johnson, & Smith, 2006; McCafferty, Jacobs & Iddings, 2006). When individual accountability is realized, each group member contributes equally to the collective effort in order to complete the group task (Gilles, 2003; McCafferty, Jacobs, & Iddings, 2006). Promotive interaction occurs when each group member encourages and facilitates each other's efforts by sharing information and opinions and providing explanation and feedback (Gillies, 2003; Johnson, Johnson, & Smith, 2006). Social skills refer to interpersonal and small group skills that can be used to complete the group task and include communication, participation, and conflict management skills (Gillies, 2003; Johnson, Johnson, & Smith, 2006). With group processing, each group member reflects on what they have done well to achieve the group's goals and what should be done in the future (Gillies, 2003; Johnson, Johnson, & Smith, 2006).

The above principles of CL are well known and frequently cited by researchers in the ESL/EFL field as well as others (e.g., Fushino, 2008; McCafferty, Jacobs, & Iddings, 2006; Sugie et al., 2004). However, not many researchers or practitioners strictly follow all these principles. Rather, CL often refers to different entities depending on the study, which has blurred its definition. Moreover, terms such as collaborative learning and group/pair work sometimes add confusion to the already opaque definition of CL. Some researchers use co-

operative learning and collaborative learning interchangeably (e.g., McWhaw, Schnackenberg, Sclater, & Abrami, 2003), while others include collaborative learning in CL (e.g., Sharan & Sharan, 1992). Additionally, some have adopted an even broader definition, considering group work cooperative/collaborative learning (i.e., they simply divide students into small groups to work on a task and call it cooperative or collaborative learning) (e.g., Beck, Chizhik, & McElroy, 2005). On the other hand, several researchers have argued that there are clear distinctions between group work and CL (e.g., Fushino, 2007) and CL and collaborative learning (e.g., Bruffee, 1993; Matthews, 1995). This confusion brings about the necessity of clarifying the terms, and thus, as the first objective of this paper, I set forth to establish definitions of group/pair work, CL, and collaborative learning.

Provided that there are differences between CL and collaborative learning, there might be differences in situations where one or the other should be applied in the classroom. As a practitioner/researcher in English education, I would like to find out what is more suitable in what situation. The second aim of this paper then is to seek the conditions for proper applications of CL and collaborative learning in EFL classrooms in Japanese universities.

Part 1: Defining CL and Collaborative Learning

Method

With the aim of establishing definitions of group/pair work, CL, and collaborative learning, approximately 60 books and articles on CL and collaborative learning, all of which but three were collected outside of the ESL/EFL field, were reviewed. Based on the available literature, Fushino (2007), McCafferty, Jacobs, and Iddings (2006) and Oxford (1997) were the only works that explicitly explained or discussed the definition of CL in the ESL/EFL field. I reviewed works published from 1990 on because CL gained popularity among educators approximately two decades ago and there has been a large amount of research conducted since 1990. As the books and articles were reviewed, a list of definitions and features was created. This list was then reorganized by clustering the same definitions and features together and aligning similar and related definitions next to each other. A table was then created by placing the remaining definitions and characteristics into three columns: (a) distinctive characteristics of CL under strict definitions, (b) common characteristics of CL and collaborative learning under broader definitions, and (c) distinctive characteristics of collaborative learning under strict definitions (see Table 1). I did not create a comparison table for CL and group work because distinctions between these were found relatively easily.

Table 1 Comparison of CL and Collaborative Learning

<p>distinctive characteristics of CL by strict definitions</p> <p>enhances cognitive and social skills via a set of known techniques (Oxford, 1997)</p> <p>high degree of structure (Oxford, 1997; McWhaw, et al., 2003; Phung-Mai et al., 2005)</p>	<p>overlapped characteristics of CL and collaborative learning by broader definitions</p> <p>individual accountability</p> <p>positive interdependence</p> <p>(face-to-face) promotive interaction</p> <p>appropriate use of social skills</p> <p>group processing (e.g., Johnson & Johnson, 1989, 2003)</p> <p>individual accountability and positive interdependence as crucial components (Jacobs, McCafferty, & Iddings, 2006)</p> <p>There is a cooperative learning technique which allows students a great deal of choice over matters such as topic selection, group forming, and collaboration procedure (Sharan & Sharan, 1992)</p> <p>joint learning goals are set to structure an activity (Johnson et al., 1991; Olsen & Kagan, 1992)</p> <p>student roles are used to structure an activity (Johnson et al., 1991; Olsen & Kagan, 1992; Oxford, 1997)</p> <p>rewards/evaluation are used to structure an activity (Olsen & Kagan, 1992)</p>	<p>distinctive characteristics of collaborative learning by strict definitions</p> <p>acculturates learners into knowledge communities (Oxford, 1997)</p> <p>lower degree of structure (McWhaw, et al., 2003; Phung-Mai et al., 2005)</p> <p>students are given more power over their learning (e.g., students are responsible for the governance and evaluation of the group; delegation of decision-making to the students is allowed) (McWhaw, et al., 2005)</p>
<p>structures are imposed by the teacher (McWhaw, et al., 2003)</p> <p>Materials are used as devices to structure an activity (Johnson et al., 1991, 2006; Olsen & Kagan, 1992)</p> <p>Rules are set to structure an activity (Olsen & Kagan, 1992)</p>	<p>group environment where members aim to grow together (Sugie, 2003)</p> <p>by collaborating with others, learners can achieve something unattainable alone (Saeiki, 1995)</p> <p>Learning is, in essence, collaboration (Sato, 2006)</p>	
<p>high prescriptiveness of activities (Oxford, 1997)</p> <p>more appropriate for learning fundamental knowledge such as facts and formulas (McWhaw, et al., 2003; Phung-Mai et al., 2005)</p> <p>for younger (primary and secondary) students (McWhaw, et al., 2003; Oxford, 1997)</p> <p>requires lower social skills (Matthews et al., 1995)</p> <p>depends on extrinsic motivation (Matthews et al., 1995)</p> <p>artificial (Matthews et al., 1995)</p>		<p>low prescriptiveness of activities (Oxford, 1997)</p> <p>more suited for learning non-fundamental higher order knowledge, which requires a critical approach to learning (Bruffee, 1995)</p> <p>for older (university and adult) students (McWhaw, et al., 2003; Oxford, 1997; Romney, 1997)</p> <p>for students who have the necessary social skills and motivation (Matthews et al., 1995), who are more open with new ideas, free thinking and willing to take risks (Phung-Mai, Terlouw, & Pilot, 2005)</p> <p>ZPD, cognitive apprenticeship, acculturation, scaffolding, situated cognition, reflective inquiry, epistemology as key words (Oxford, 1997)</p> <p>possibly deeper epistemological basis and focuses on social relationships in a community of learners (Oxford, 1997)</p>

CL and Group Work

Implementing the process described above, distinctions between CL and group/pair work become clearer. Several studies state positive interdependence and individual responsibility as crucial concepts of CL; however, such concepts are absent in mere group/pair work. In terms of positive interdependence and individual responsibility, Jacobs, McCafferty, and Idings (2006) stated that the two concepts appear in “almost everyone’s definition” (p. 4) of CL. Fushino (2007, p.20) clearly claims what makes group work CL and what does not:

To be deemed cooperative learning, group work must have at least the following two principles in its structure: positive interdependence and individual accountability. [...] Simply forming a group and having students work together does not mean implementing cooperative learning.

Therefore, it can be said that the existence of positive interdependence and individual responsibility creates the specificity of CL and distinguishes it from many other types of group work which may not have positive interdependence or individual responsibility. Then, group/pair work can be defined as any learning activities that are conducted in pairs or groups.

Following the definition above, the term group/pair work that I will henceforth use in this paper refers to a generic category that CL and collaborative learning fall within.

CL and Collaborative Learning

As for CL and collaborative learning, differences between them are more equivocal; there are characteristics common to both. For example, both CL and collaborative learning entail the two essential elements of CL (i.e., positive interdependence and individual accountability). Furthermore, in many cases, both CL and collaborative learning involve three more concepts, in addition to the above two promoted by Johnson and Johnson (e.g., Johnson & Johnson, 1989; see also Table 1) as basic cooperative elements (i.e., promotive interaction, appropriate use of social skills, and group processing). Nevertheless, it is safe to say that whereas CL tends to be more meticulously prescribed and teacher-led, collaborative learning is less structured and thus, students are given more power over their learning (e.g., McWhaw et al., 2003; see also Table 1). In addition, since CL has a higher degree of struc-

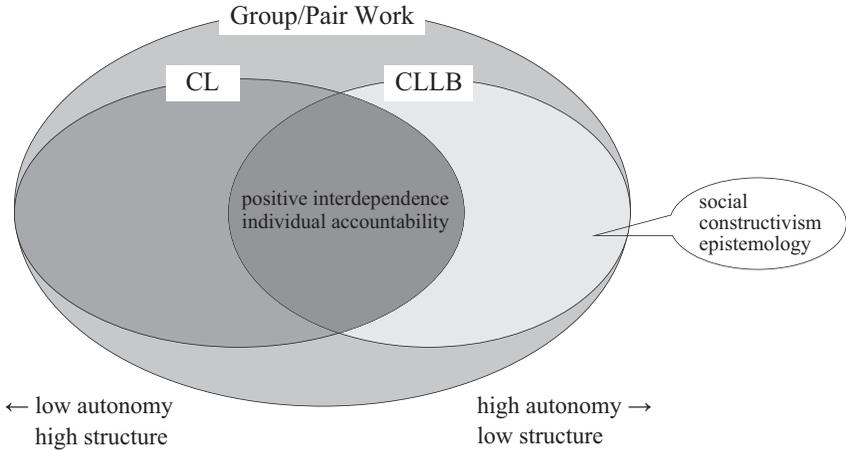


Figure 1. Key features of CL, collaborative learning, and group/pair work.

ture, imposed by the teacher, as a natural consequence, CL usually has a higher prescriptiveness of activities. On the other hand, collaborative learning, which depends more on the discretion of learners, usually has a lower prescriptiveness of activities. Another point worth mentioning is that collaborative learning is often based on epistemological principles where learning is considered to be acculturation into knowledge communities (Oxford, 1997; see also Table 1).

Based on the above discussion, key features of CL, collaborative learning, and group/pair work are proposed below (see also Figure 1).

- **Cooperative learning:** Group or pair work where positive interdependence and individual accountability are prescribed in its design. In addition, promotive interaction, appropriate use of social skills, and group processing may be designed in a CL activity. The high degree of structure, imposed by the teacher, consequently results in a higher prescriptiveness of activities; however, lower learner autonomy in the learning environment.
- **Collaborative learning:** Group or pair work where positive interdependence and individual accountability are expected to emerge autonomously among learners. In addition, promotive interaction, appropriate use of social skills, and group processing may be achieved by the learners. A collaborative learning activity tends to have a lower degree of structure. Additionally, it may have a deeper epistemological basis where learning is consid-

ered as acculturation into knowledge communities.

It must be noted that CL and collaborative learning share several elements and characteristics and thus should not be dichotomously divided into two different entities. Rather, they should be understood as learning activities on a continuum that allow different degrees of learner autonomy, have different degrees of structure and a deeper epistemological basis.

CL or Collaborative Learning in University EFL Classroom

Given that CL allows a low level of learner autonomy, whereas collaborative learning allows a high level of learner autonomy, teachers may think that CL is for younger students, such as primary and secondary, and collaborative learning is for older students, such as university and adults. Indeed, some researchers argue that CL is for the younger and collaborative learning is for the older (e.g., McWhaw, et al., 2003; see also Table 1). Basically, the basis of researchers' opinions is the assumption that university and adult learners are "mature" and hence are autonomous, have high social skills, and have motivation to successfully engage in collaborative learning (e.g., Bruffee, 1995; see also Table 1). Then the question is, is it really the case, even in culturally different places, for example, Asian countries such as Japan?

The following sections search for the answer to this question, which will be the basis for the choices between CL and collaborative learning in the classroom.

Part 2: Applications of CL and Collaborative Learning in Japanese Universities

This part of the paper, based on the literature on autonomy, (a) examined learner autonomy in different cultural spheres and (b) contemplated the applications of CL and collaborative learning in university EFL classrooms in Japan.

Method

In an attempt to capture learner autonomy in different cultural settings, information from previous studies was collected. All studies focused on at least one of the following points: (a) different degrees of learner autonomy in different cultural spheres (i.e., the East and West) and (b) autonomy development in the classroom. The literature was then discussed from the above viewpoints. Finally, based on the discussion, suggestions were put forward as for the applicability of CL and collaborative learning in the EFL classrooms at Japanese

universities.

Degrees of Autonomy

Littlewood (1999) considered language learners' autonomy in East Asia. In his influential article, he reviewed the concept of autonomy and suggested two kinds of autonomy: (a) *proactive autonomy*, and (b) *reactive autonomy*. Following Holec's (1981) definition, which is usually referred to when autonomy is discussed in the West, Littlewood defined proactive autonomy as the "ability to take charge of learning, determining objectives, selecting methods and techniques, and evaluating what has been acquired" (p. 75). Expanding this conventional concept, he proposed an additional form of autonomy: reactive autonomy. Reactive autonomy may be a preliminary step toward proactive autonomy as well as an aim in and of itself. It is defined as "the kind of autonomy which does not create its own directions but, once a direction has been initiated, enables learners to organize their resources autonomously in order to reach their goal" (p. 75). Through his careful observation and discussion of learners in different cultures, Littlewood proposed that East Asian students would have a high level of reactive autonomy; at the same time, he predicts that such students would be able to develop proactive autonomy. Another noteworthy point is that he suggested that the distinction between reactive and proactive autonomy corresponds to Flannery's (1994) distinction between cooperative and collaborative learning. Based on this, Littlewood argued that in CL, a group form of reactive autonomy is exercised and in collaborative learning, a group form of proactive autonomy is exercised.

Iyengar and Lepper (1999) shed light on autonomy in different cultures via an empirical study. They investigated the relationship between the degree of self-determination (i.e., the degree of autonomy allowed) and intensity of intrinsic motivation in children. They compared Anglo-American and Asian-American pupils between 7 and 9 years old and found out that Anglo-American children were more intrinsically motivated when they could choose what they would learn than when others made those choices for them. In contrast, Asian-American children were more intrinsically motivated when the choices were made by trusted authority figures (i.e., their mothers) or peers compared to themselves.

Asian students may retain a lower degree of autonomy even after finishing secondary school. Wen (2009) conducted a survey at Ningxia University in China. She investigated autonomous ability (i.e., ability to make plans, meet overall objectives, effectively evaluate progress) of 120 English-major sophomores who were also enrolled in an out-of-class exten-

sive reading program. The results indicated that the students did not have the skills necessary to work autonomously outside the classroom. In addition, it was shown that they lacked confidence in controlling or taking responsibility for their own learning. As tentative solutions to these problems, Wen suggested cooperative reading and learning portfolios that may develop learners' reactive autonomy. Similarly, Nakata (2006, 2010) suggested that upon entrance to a university, many students have a low degree of learner autonomy. In explanation of this phenomenon, he points to the educational context in Japanese junior and senior high schools where most learners are exposed to exam-oriented learning with a teacher-centered approach in a large class (usually 35–40 students).

Based on the previous literature, it can be said that Asian students, in general, have a preliminary level of autonomy compared with Western students. More specifically, it can be said that (at least in the first year at Japanese universities) many students are at the beginning stages of autonomy development¹⁾. Therefore, CL learning should be appropriate for freshmen in Japanese universities and collaborative learning could be introduced later.

Autonomy Development at Japanese Universities

In the previous section, I presented support that Asian, including Japanese, students have a lower level of autonomy, which rationalizes the use of CL in the EFL classroom for freshmen at Japanese universities. In addition, I briefly mentioned Wen's (2009) suggestion for the use of CL to develop learner autonomy. In this section, additional studies are reviewed to demonstrate how CL and collaborative learning can help develop learner autonomy in a language classroom. The studies discussed here were chosen because all were published by researchers in the ESL/EFL field and thus, the researchers had language learners in mind.²⁾ Together with Littlewood's (1999) concepts, key words of those studies are summarized in Figure 2. Since this paper does not intend to describe concrete steps for how CL can be implemented in the classroom, detailed information regarding this point is not provided here. Rather, in order to show the relevancy of the instructions for facilitating learner autonomy in CL and collaborative learning, the relationship between autonomy development instructions and key concepts of CL and collaborative learning are presented and discussed.

Nakata (2010) proposed three stages of autonomy depending on the degree of learners' self-regulation: (a) *Preparation Stage*, (b) *Developmental Stage*, and (c) *Self-regulated Stage*. As its name suggests, learners in the Preparation Stage have the lowest level of autonomy and Nakata notes that many Japanese EFL learners are in this stage, at least upon

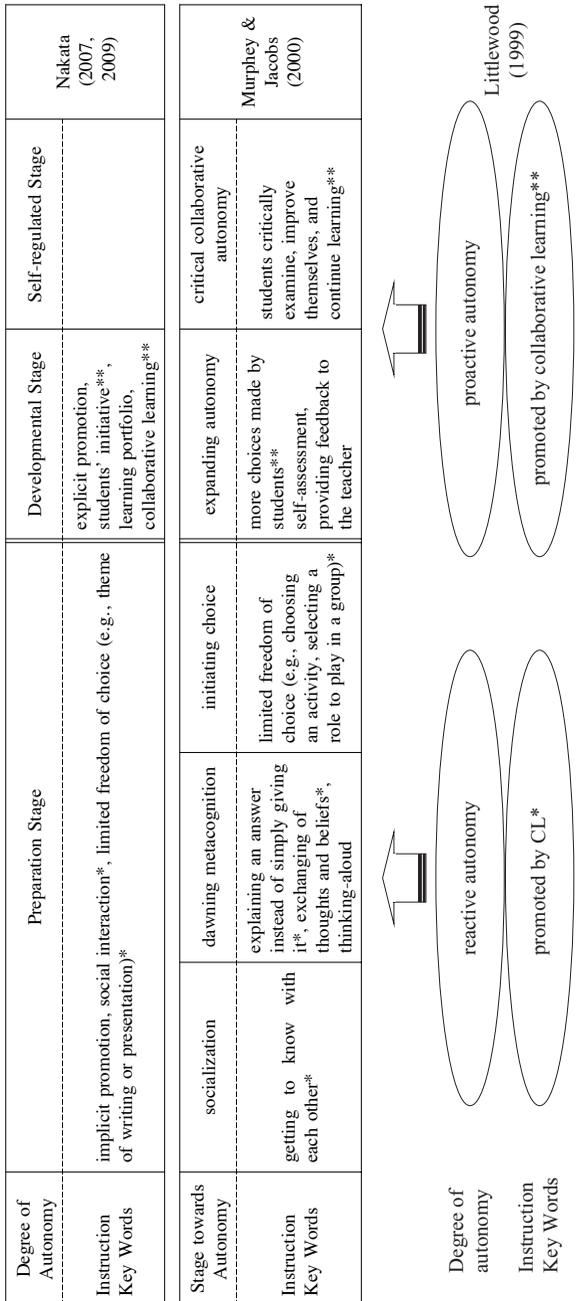


Figure 2. Degrees of autonomy and instructions in a language classroom.

entry to a university. In order to develop autonomy of learners during this stage, he suggested implicit autonomy promotion, all elements of which are learner-centered rather than teacher-centered. For instance, implicit autonomy promotion includes offering learners opportunities for social interaction and freedom of choices (e.g., theme of writing or presentation). Social interaction is essential for CL to be successful because it can promote a sense of trust among learners; without this trust, there will be no positive interdependence or promotive interaction. As for the “freedom of choice,” it should be noted that the amount of freedom given to learners is quite limited, which coincides with the high structure of CL. In his 2000 article and elsewhere (Nakata, 2006; 2007), he emphasized the importance of gradual introduction of autonomy promotion to learners in the Preparation Stage and pointed out that sudden and vast exposure to learner-centeredness may even demotivate learners.

During the Developmental Stage, Nakata (2006, 2010) proposed that explicit autonomy promotion is appropriate. At this stage, Nakata suggested that the teacher discuss how learners can start taking initiatives in their learning activities. Further, he stated that learners can be led to engage in collaborative learning. It goes without saying that instructions used during this phase are parallel with those used in collaborative learning.

The final and most advanced step toward learner autonomy is the Self-regulated Stage. During this stage, naturally, the teacher “provides learners with much less support,” and “many opportunities for self-regulated learning” (Nakata, 2010, p. 6).

Murphey and Jacobs (2000) proposed ways to facilitate learner autonomy in language classes. They conceptualized a process of five stages or “movements” toward learner autonomy: (a) *socialization*, (b) *dawning metacognition*, (c) *initiating choice*, (d) *expanding autonomy*, and (e) *critical collaborative autonomy*. According to Murphey and Jacobs, the first three movements can be introduced simultaneously in class, even when students’ level of autonomy is elementary. In contrast, the latter two movements should not be introduced until learner autonomy develops to a certain level.

Specifically, the first movement toward autonomy, socialization, refers to “learners in the initial phase of joining a group or class, getting to know their fellow group members and feeling comfortable in their group” (Murphey & Jacobs, 2000, p. 234). At this stage, it is crucial for group members to feel they belong to the group. It should be noted that, in CL, such perception of group identity is called positive interdependence.

Dawning metacognition, the second movement toward autonomy is defined as “learners examining on their own learning process” (Murphey & Jacobs, 2000, p. 234). During this

stage, rather than simply giving an answer to a question, learners are encouraged to discuss what they think and do in class. This process is called promotive interaction in CL, where learners encourage and facilitate each other's efforts by sharing information and opinions. With Murphey and Jacobs' dawning metacognition stage, learners can be aware of and reflect on their own thoughts and behavior easily by making comparisons with those of others. It should be noted that a similar process, called group processing, is encouraged in CL.

Initiating choice, the third movement toward autonomy, refers to "students making choices about learning" (Murphey & Jacobs, 2000, p. 235). During this stage, students are allowed to decide what activity they will engage in, how they will give a presentation, and which role they will play in their group. Again, there is similarity between the instruction used at the "initiating choice" stage and that used in CL. Specifically, with CL, learners are given a controlled amount of choices such as deciding roles within their group.

A more advanced stage, the fourth movement toward autonomy, is called expanding autonomy. During this stage, students have more power over their own learning. For example, they can decide their learning procedure inside and outside of the classroom, evaluate their own performance, and give feedback for the teacher on his or her teaching. Based on the distinction between CL and collaborative learning, discussed earlier, the degree of autonomy, power, and freedom that the learners have while in this stage seems equivalent to that in collaborative learning, not CL.

The last and most advanced stage toward autonomy is labeled critical collaborative autonomy. This stage allows learners to critically examine an issue rather than simply accommodate to the group's opinion and still maintain a sense of trust among members (Murphy & Jacobs, 2000). For learners who have reached this stage, collaborative learning is more appropriate.

CL and Collaborative Learning in the EFL Classrooms at Japanese Universities

At the beginning of this paper, I described how CL has been shown to promote learners' academic achievement and motivation. In addition, discussions in the later sections provided support that CL may help develop learners' reactive autonomy. Given that many freshmen in Japanese universities have a lower degree of autonomy, CL, rather than collaborative learning, can be introduced in an EFL class for freshmen. Where CL is appropriate as the first step toward autonomy, students can be given small opportunities to make their own choices. For example, they can decide which role to play in an activity. During this stage,

teachers should structure the activity quite rigidly so that individual accountability is realized. In other words, even though students can choose their role within their group, the responsibility of each role should be prescribed by the teacher so everyone in the group contributes equally to the task completion. Another way to facilitate learners' reactive autonomy is to offer students opportunities to interact socially,³⁾ which might promote positive interdependence. Further, teachers can have students share information and opinions that may facilitate promotive interaction as well.

Later, when students' autonomy is developed and they are ready to take on more responsibility of their learning, collaborative learning can be introduced. With enough autonomy, students should be able to realize positive interdependence and individual accountability without the teacher's intervention. In collaborative learning, learner autonomy can be further developed via explicit promotion, where learners take more initiatives, exchange thoughts and beliefs critically with teachers and peers, and monitor and critically evaluate their own learning.

Conclusion

We have seen how CL can promote learners' reactive autonomy and, for learners with somewhat developed autonomy, collaborative learning can be introduced. However, when exactly teachers should begin introducing collaborative learning remains uncertain. To my knowledge, there is no concrete way to judge whether learners have reached a more advanced stage of autonomy and there is only one study that has discussed this issue. Nakata (2006) argued that the teacher should decide (whether or not) to bring more autonomy into the class via negotiation with the students and suggested that qualitative inquiry is more appropriate for this purpose. Further research is needed to explore this issue.

In Part 1 of this paper, definitions of CL and collaborative learning were synthesized from an analysis of the literature. Part 2 discussed the degrees of learner autonomy in the West and Asia as well as possible means of autonomy promotion in Japan. The following recapitulates the definitions, together with pedagogical implications for promotion of learner autonomy:

- (1) Cooperative learning is group or pair work where positive interdependence and individual accountability are prescribed in its design. In addition, promotive interaction, appropriate use of social skills, and group processing may be designed in a CL activity. The high degree of structure, imposed by the teacher, results in a higher prescriptiveness of

activities and lower learner autonomy in the learning environment. CL may be implemented in an EFL classroom for Japanese freshmen because it is suggested that many of these students have a lower level of autonomy. Through CL, learners' reactive autonomy can be promoted.

- (2) Collaborative learning is group or pair work where positive interdependence and individual accountability are expected to emerge autonomously among learners. In addition, promotive interaction, appropriate use of social skills, and group processing may be achieved by learners. A collaborative learning activity tends to have a lower degree of structure and may have a deeper epistemological basis where learning is considered as acculturation into knowledge communities. Collaborative learning is more appropriate for students with developed reactive autonomy. Through collaborative learning, learners can promote their proactive autonomy.

Finally, it must be noted that CL and collaborative learning share several elements and characteristics and thus, they should not be dichotomously divided into two different entities. Rather, they should be understood as learning activities on a continuum that allow different degrees of learner autonomy, have different degrees of structure, and epistemological basis.

Acknowledgements

I would like to thank to Dr. Osamu Takeuchi at Kansai University for his valuable suggestions and detailed comments. All errors are, of course, my own.

This research was supported by JSPS KAKENHI Grant Number 23520763.

Footnotes

- 1) The author believes that the development of autonomy may be beneficial for English learners because proactive autonomy enables them, if they wish, to take control of their English studies and continue learning in the future.
- 2) However, some ideas proposed here could be used in class for other subjects.
- 3) Social interaction in an English classroom can be accomplished either in English or in the learners' L1 (Qian, Tian, & Wang, 2009).

References

- Beck, L. L., Chizhik, A. W., & McElroy, A. C. (2005). Cooperative learning techniques in CS1: Design and experimental evaluation. *SIGCSE Bulletin*, 37, 470–474.

- Dörnyei, Z. (2001). *Teaching and researching motivation*. Harlow: Longman.
- Flannery, J. L. (1994). Teachers as co-conspirator: Knowledge and authority in collaborative learning. In K. Bosworth & S. J. Hamilton (Eds.), *Collaborative learning: Underlying processes and effective techniques* (pp. 15–23). San Francisco, CA: Jossey-Bass.
- Fushino, K. (2007). Kyoudou gakusyuu no kihon genri to syuyou na jissen houhou [Basic principles of and main methods to implement cooperative learning]. *The New English Classroom, May*, 19–21.
- Gibbons, P. (2002). *Scaffolding language, scaffolding learning: Teaching second language learners in the mainstream classroom*. Portsmouth, N. H.: Heinemann.
- Gillies, R. M. (2003). Structuring co-operative learning experiences in primary school. In R. M. Gillies, & A. F. Ashman (Eds.), *Co-operative learning: The social and intellectual outcomes of learning in groups*. London: Routledge Falmer.
- Holec, H. (1981). *Autonomy in foreign language learning*. Oxford: Pergamon.
- Iyengar, S. S., & Lepper, M. R. (1999). Rethinking the value of choice: A cultural perspective on intrinsic motivation. *Journal of Personality and Social Psychology*, 76, 349–366.
- Jacobs, G. M., Power, M. A., & Inn, L. W. (2002). *The teacher's sourcebook for cooperative learning: Practical techniques, and frequently asked questions*. Thousand Oaks, CA: Sage Publications.
- Johnson, D. W., & Johnson, R. T. (1989). *Cooperation and competition: Theory and research*. Edima, Minnesota: Interaction Book.
- Johnson, D. W., & Johnson, R. T. (2003). Student motivation in co-operative groups: Social interdependence theory. In R. M. Gillies, & A. F. Ashman (Eds.), *Co-operative learning: The social and intellectual outcomes of learning in groups* (pp. 136–176). London: Routledge Falmer.
- Johnson, D. W., Johnson, R. T., & Smith, K. A. (1991). *Active learning: Cooperation in the college classroom*. Edima, Minnesota: Interaction Book.
- Johnson, D. W., Johnson, R. T., & Smith, K. A. (2006). *Active learning: Cooperation in the college classroom* (3rd ed.). Edima, Minnesota: Interaction Book.
- Joritz-Nakagawa, J. Integrating global education and cooperative learning. In S. G. McCafferty, G. M. Jacobs, & A. C. DaSilva Iddings. (2006). *Cooperative learning and second language teaching* (pp. 134–152). Cambridge: Cambridge University Press.
- Littlewood, W. (1999). Defining and developing autonomy in East Asian contexts. *Applied Linguistics*, 20, 71–94.
- Masutani, M. (2009). Kodomotachi no kyoudouteki na kankei ga gakusyuiyoku ni oyobosu kouka no jissenteki na kenshou [Practical evaluation of cooperative relationship and its effect on children's motivation to learn.]. *Cooperation and Education*, 5, 59–60.
- Matthews, R. S, Cooper, J. L., Davidson, N., & Hawkes, P. (1995). Building bridges between cooperative and collaborative learning. *Change*, 27, 34–40.
- McCafferty, S. G., Jacobs, G. M., & Iddings, D. A. C. (2006). *Cooperative learning and second language teaching*. Cambridge: Cambridge University Press.
- McWhaw, K., Schnackenberg, H., Sclater, J., & Abrami, C. P. (2003). From co-operation to collabora-

- tion: Helping students become collaborative learners. In R.M. Gillies, & A.F. Ashman (Eds.), *Co-operative learning: The social and intellectual outcomes of learning in groups* (pp. 69–86). London: RoutledgeFalmer.
- Murphey, T., & Jacobs, G. M. (2000). Encouraging critical collaborative autonomy. *JALT Journal*, 22, 228–244.
- Nakata, Y. (2007). Social-interactive tools for the development of learner autonomy: From reactive autonomy to proactive autonomy. In L. Miller (Ed.), *Autonomy 9: Autonomy in the classroom*. Dublin: Authentik.
- Nakata, Y. (2010). Towards a framework of self-regulated language learning. *TESL Canada Journal*, 27(2), 1–10.
- Olsen, R. E. W. B., & Kagan, S. (1992). About cooperative learning. In C. Kessler (Ed.), *Cooperative language learning: A teacher's resource book* (pp. 1–30). Englewood Cliffs, NJ: Prentice Hall.
- Oxford, R. L. (1997). Cooperative learning, collaborative learning, and interaction: Three communicative strands in the language classroom. *The Modern Language Journal*, 81, 443–456.
- Phipps, M., Phipps, C., Kask, S., & Higgins, S. (2001). University students' perceptions of cooperative learning: Implications for administrators and instructors. *The Journal of Experimental Education*, 24, 14–21.
- Phuong-Mai, N., Terlouw, C., & Pilot, A. (2005). Cooperative learning vs Confucian heritage culture's collectivism: Confrontation to reveal some cultural conflicts and mismatch. *Asia Europe Journal*, 3, 403–419. doi: 10.1007/s10308-005-008-4.
- Romney, J. C. (1997). Collaborative learning in a translation course. *Canadian Modern Language Review*, 54, 48–67.
- Qian, X., Tian, G., & Wang, Q. (2009). Code switching in the primary EFL classroom in China: Two case studies. *System*, 37, 719–730.
- Saeki, Y. (1995). *Manabu to iukoto no imi: Kodomo to kyōiku*. [The meaning of 'learning &': Children and education]. Tokyo: Iwanami Shoten.
- Sato, H. (2004). Scaffolding ga group katsudou wo tōshite communication nouryoku ya bumpou nouryoku ikusei ni ataru kouka no kenshō. [Examination of effects of scaffolding in group work: Development of communication and grammar ability]. *STEP Bulletin*, 16, 153–161.
- Sharan, Y., & Sharan, S. (1992). *Expanding cooperative learning through group investigation*. New York: Teachers College Press.
- Sharan, S., & Shaulov, A. (1990). Cooperative learning, motivation to learn and academic achievement. In S. Sharan (Ed.), *Cooperative learning: Theory and research* (pp. 173–229). West Port, CT: Praeger.
- Sugie, S. (2003). *Kyōdō gaku shū sōsho 4: Manabiai takameau jūgyō no sōzō*. [Cooperative learning 4: Creating classes where learners learn from each other and grow together]. Aichi: Hitotsubusha.
- Sugie, S., Sekita, K., Yasunaga, S., & Miyake, N. (2004). *Daigaku jūgyō wo kasseika suru hōhō*

[How to revitalize university classes]. Tokyo: Tamagawa University Press.

Swain, M. (2000). The output hypothesis and beyond: Mediating acquisition through collaborative dialogue. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 97–114). Oxford: Oxford University Press.

Vygotsky, L. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.

Wen, L. (2009). Learner autonomy of English majors in an out-of-class English reading program. *Sino-US English Teaching*, 6, 43–47.