An Overview of Studies on Cooperative Learning in ESL Classroom

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Abstract

Cooperative learning(CL) is considered an effective instructional practice in that it increases peer interaction opportunities and produces positive learning gains in students' language achievement. This study intends to review the literature on CL in ESL classroom setting in terms of the principles, benefits, problems involved in it, and measures to make CL more effective. Although the potential benefits of CL have been acknowledged, further research needs to investigate the implementation of CL from a sociocultural perspective to see how different students perceive CL and how cultural factors influence the perception. Solid evidence is also needed to demonstrate its effectiveness to improve language proficiency and maximize second language acquisition.

1.Introduction

Cooperative learning(CL) has been extensively studied since 1970s and later has become a prevalent instructional practice in every subject matter from elementary school to college throughout the world. 1980 and 1990s has witnessed a boom of the research concerning cooperative learning. It is widely believed that CL plays a significant role in promoting interaction, boosting task achievement, developing social skill and lowering students' anxiety (Johnson & Johnson, 1994; Slavin, 1991). Furthermore, CL is in accordance with the prevailing teaching approaches, i.e. student-centered and communicative approach, since it provides students with increased opportunities for positive peer interaction and encourages active participation in genuine conversation (Ghaith, 2003). Therefore, it is also accepted as a significant concept in the field of second language acquisition. Research has been carried out to investigate the pedagogical and psychological rationale of its use and possible benefits in second or foreign language acquisition (Long &Porter, 1985; Bejarano,1987; McGroaty, 1989; Ghaith,2003). This paper intends to review the studies of cooperative learning, restructure its effects and identify the problems and issues involved in it.

2.Cooperative Learning

Although commonly used to describe any form of group work in classroom, cooperative learning(CL) is actually a more highly structured approach than group work. It is defined as, "Group learning activity organized so that learning is depended on the socially structured exchange of information between learners in groups and in which each learner is held accountable for his or her own learning and is motivated to increase the learning of others."(Olsen & Kagan, 1992, P. 8). CL is not necessarily identical to group work, and it is more than just

putting the students into groups and asking them to work together. Essentially, it involves structuring the group and tasks properly to guarantee real interaction and communication among group members to achieve a common goal. CL is used to be in contrast to the traditional competitive classroom atmosphere where the teacher-fronted instruction and knowledge transmission are conducted. It means the students work in groups to accomplish shared goals, such as solving a problem, completing a project, and having a group discussion etc. CL can be conducted in small groups composed of three to six people or pair work. The role of teachers also changes from a knowledge transmitter to facilitator of learning and organizer of group activities, who encourage students to engage in cooperation and communication.

Cooperative learning helps achieve the goals of second language acquisition through the five principles (Johnson & Johnson, 1994)

Positive interdependence: the success of the whole group depends on the efforts and the contribution of each individual. Each one's efforts not only benefit oneself but the others in the group. It can be attained by setting the goals, rewards, roles, and rules.

Individual accountability: each individual in the group is supposed to assume responsibility for completing his/her share of work. Individual's work is assessed and graded. The ways to improve individual accountability: keeping the size of group; randomly calling on one student to report their group finding to the class; assigning each member a role of checker; observing or recording the group discussion to ensure the contribution of each member (Johnson & Johnson,1994).

Face-to-face promotive interaction: Group members work to solve a problem by exchanging information, providing feedback and assistance to each other, and praising their efforts.

Appropriate use of social skills: effective cooperation is based on skilled teamwork. Students should be taught to make decisions, trust and support each other, and resolve conflicts constructively. These social skills will contribute to building more positive relationship among group members and promote students to engage in more meaningful cooperation.

Group processing: group members discuss and evaluate how well their group functions. Group members should frequently reflect on which action is conducive to academic performance and make decisions about which actions to continue or change.

There are a variety of models of CL, which according to Oxford(1997) can be divided into three approaches: Learning Together, Structural Approach and Curriculum Package. The second approach is based on the use of content-free, repeatable classroom behaviors, such as class-or team building structures(Line-up, Roundtable, Round Robin), division-of-labor structures(Jigsaw), communication-creating structures(Talking Tokens, Paraphrase Passport, Match Mine), and mastery and review structures (Numbered Heads Together, Pairs Check, Inside-outside Circle, Co-op Cards, Student Teams Achievement Divisions, and Teams Games Tournaments), concept-development structures (Group Discussion, Three-Step Interview, Pair Interview, Think-Pair-Share, Solve-Pair-Share) and project structures(Co-op/Co-op and Group investigation)((cited from Oxford, 1997, p.447). Teachers can employ specific techniques based on the specific circumstances.

3.Research on Cooperative Learning

Numerous studies have been conducted on cooperative learning. They can be categorized into three aspects: effects of CL in ESL classroom, L2 learners' perception of CL and the cultural aspects of CL in ESL/EFL classroom.

3.1 Research on the effects of cooperative learning in ESL classroom

Evidence for the effectiveness of CL in second language acquisition classroom has been documented. It is

believed that cooperative learning can promote second language acquisition by increasing the opportunities for language practice, creating a positive affective environment, heightening students' motivation and enhancing academic achievement (Long & Porter, 1985; Slavin, 1991; McGroaty, 1993; Fathman & Kessler, 1993; Jacob et al, 1996; Ghaith, 2003).

Benefit 1: CL increases language practice opportunities

In traditional teacher-centered classroom, teachers dominate the class conversation by lecturing and asking the   whole class questions, where students seldom contribute their talk. In contrast, cooperative learning provides students with increased opportunities to communicate in the target language, more frequency of language use and peer interaction, thus facilitating the second or foreign language acquisition (Long & Porter, 1985; Doughty & Pica, 1986). Doughty & Pica (1986) compared teacher-fronted discussions and small-group discussions in an ESL classroom setting. They found that individual students had more opportunities to practice using English in groups than in teacher-fronted discussions through taking more turns, producing more target language and receiving more feedback from other group members.

According to communicative approach to language teaching, when students participate in genuine conversation, they will naturally attain communicative competence in target language, which is the ultimate purpose of language learning. Cooperative language learning in groups provides students such opportunities to communicate. Through the meaningful interaction, students receive large amount of "comprehensible input"(Krasen,1982) and produce "comprehensible output"(Swain, 1985). Enough comprehensible input and output contributes to language acquisition (Swain, 1985).

Benefits 2: the effects of CL on language achievement

Not too much evidence of the effectiveness of CL in improving language achievement has been documented in bilingual, second and foreign language classes. Most researchers used comparison method between a control group and experimental group in which a specific CL approach was conducted, such as Student Team Achievement Division(STAD), Group Investigation, or Jigsaw. For instance, Bejarano(1987) studied the English as a foreign language students in an Israeli junior middle school who participated in programs involving STAD and discussion groups and reported significant improvements in overall EFL achievement. There is also evidence to show the correlation between the implementation of a specific approach of CL and the improvement in students' reading achievement. (Ghaith,2003).

A study done by Jacob et al(1996) tried to explore L2 learner's acquisition of academic language in CL contexts. Their findings presented a complex picture of the influence of Learning Together on the acquisition of academic English. Although they found CL provided a wide range of opportunities for students to acquire academic language, the opportunities occurred relatively infrequent. Then he proposed that later researchers or teachers on this study should monitor the implementation of group work and properly structure tasks to suit the purpose.

Benefit 3:   Effects of CL on students' affect and social skills

The benefit in this aspect is based on the assumption that students experience less anxiety and feel much freer to communicate in target language due to the absence of teacher as an authority and casual atmosphere in the group. Effects of CL on students' self-esteem and motivation have been examined in ESL and EFL context (Long and Porter, 1985; Slavin, 1996; littlejohn, 1983; Dörnyei, 1994). The studies show that CL is conducive to positive psychological outcome and more developed interpersonal skills. Long and Porter (1985) argued that "group work promotes a positive affective climate" and "a relatively intimate setting and, usually, a more supportive environment in which to try out embryonic SL skills " (P:211). Students, even the low-achiever, may have more self-confidence to have interaction with others in such a context.

Littlejohn (1983) found that small-group independent study could lead to increased motivation to study

Spanish among beginning students. The reason lies in the fact that students feel freer to speak and make mistakes in groups than in the teacher-centered class. Dörnyei also noted that "cooperative goal structure is more powerful in promoting intrinsic motivation in that it leads to less anxiety, greater task involvement, and a more positive emotional tone". (1994, p.7)

Furthermore, in creating a community that promotes acquisition through positive relationship among the students, CL also develops students' communicative competence and social skills. Just as McGroaty stressed(1989, p.139)

Such arrangements give students practice in discerning different meanings, asking questions, constructing and defending various solutions to learning tasks, and eliciting each other's strengths, thus developing skills in social management as well as language.

3.2 Research on CL and L2 learners' perceptions

The benefits of CL are mainly examined from a researcher or teacher's perspective. Then how do students evaluate such an instructional technique? The opinions of researchers and teachers cannot offer a whole picture of the situation, for it is the students who are involved in it and benefit most from the teaching approach. Therefore, the investigation into students' belief and perception about CL is worthwhile and necessary.

Not quite a plenty of research has been done in this aspect. However, conflicting findings have been presented about students' attitude towards CL. Sachs et al(2003) implemented CL in a Hong Kong secondary school classroom and reported encouraging feedback of the students: the majority of students liked the idea of undertaking cooperative learning, and they felt relaxed and freer in such context. However, the opposite opinion informs us of a different story. Reid(1987) reported that nearly none of the participants in her study preferred group learning. As a matter of fact, many students demonstrated negative attitude to group learning. Kinsella(1996) also noted that during her teaching experience with the linguistically and culturally diverse students in San Francisco, not all students embraced collaborative classroom learning with the same enthusiasm as their teachers did.

Why do students display sharply contrasted perceptions about CL? What can account for their negative attitude towards CL, the innovative teaching practice, which is supposed to be beneficial? Further research needs to explore the deep meaning behind this contradictory picture and how students' cultural and educational background influence their perceptions（Liang et al, 1998）.

3.3 Research on cultural aspects of CL in ESL/EFL classroom

Though the sociocultural aspects of CL in ESL/EFL classrooms have not been paid enough attention to, it is noteworthy. Researchers have noted that the Asian students who study in North American schools experience anxiety and depression when working in small groups because they are accustomed to teacher-fronted teaching, with the teacher transmitting knowledge and students listening passively, taking notes and trying to learn these knowledge by heart. Therefore, these students tend to be overly dependent on their teachers and exhibit less autonomy and willingness to communicate (Ning, 2011). But on the other hand, Asian students, especially Chinese students, under the influence of Confucianism, value collective responsibility, interdependence and cooperation (Flowerdew, 1998). Moreover, the fear of losing face in the whole-class situation discourages Chinese students from voicing their opinions unless they are quite certain about the accuracy of the answer. In this sense, CL in the form of group work appears to be a suitable teaching approach to enhance students' participation and interaction. Since they don't have to take the sole responsibility for the answer and just present it as a collective opinion, it will be less face-threatening and less stressful.

In view of this paradoxical nature of Chinese learners(Ning, 2011), teachers must be careful when implementing CL in Chinese EFL classrooms. There are two things Chinese EFL teachers should bear in mind. First, simply putting students in groups and asking them to work together cannot generate desirable outcome.

Students should be taught that it is an essential way to acquire a foreign language through genuine communication and practical use of language. Second, teachers should structure the groups and activities appropriately to ensure the students' active participation.

4.Problems and Measures to Make CL More Effective

4.1 Problems

Just as mentioned above, though a large quantity of evidence proves CL is beneficial to students in linguistic, cognitive, psychological and social domains, the contrary voice remains from both teachers and students. Numerous problems have been detected such as excessive and undesirable reliance on students' mother tongue, reluctance to cooperate on the part of some introvert students, and complaints about the time-consuming nature of CL. Moreover, some groups undertake quite limited conversation, limiting themselves to "nominal exchange of information" to meet the teachers' requirement (Naughton, 2006). Certain students may dominate the conversation, and other low-achievers may be just passive listeners, seldom participating in the group discussion. Besides, high-achievers may tend to like individualistic learning or competitive learning better than cooperative learning, because they think they cannot make too much progress using a cooperative learning approach (Oxford, 1997). Some other learners also think they cannot learn too much from their group members because most of them cannot guarantee the accuracy of their utterance (Slimani-Rolls, 2003). Too much incorrect input may lead to the reinforcement of such mistakes, which is harmful to the language learners. They may fail to pay attention to linguistic forms when teachers are absent (Naughton, 2006), or they may pretend to understand to save face.

Some researchers account for the failure of group work as it not being cooperative since group work is not necessarily equivalent to cooperative learning (McGuire, 1992). Dörnyei (1997) puts forward three components to make learning entirely cooperative: first, learners should spend most of the class time working in groups between 3 to 6 learners; second, the learning should be structured so that every member is motivated to ensure their peer has achieved the teaching goal; third, it is more important to evaluate the group work than just evaluate the individual achievement.

4.2 Possible solutions to such problems

A good body of literature in recent years tried to investigate the ways to make CL effective, which can be classified into three aspects. The first is from the perspective of the type of task(Courtney, 1996); the second studies the effectiveness of CL from the group dynamics, analyzing the factors that affect CL in classroom setting including group formation, group cohesion and the role of teachers(Dörnyei, 1997; Dörnyei &Malderez, 1997); the third kind of research proposes training on SL learners about the interaction strategies to help students participate more actively in the group activities (Bejarano, 1997; Naughton, 2006). The solutions are as follows:

Task: design the tasks to make everyone's contribution or participation indispensable to the group. Two-way task, which entails the exchange of information among participants, rather than one-way task, which does not require an exchange of information, is more suitable and promote more interaction among learners(Doughty & Pica, 1986). One-way tasks such as group discussion in which the exchange of information is optional do not ensure an active participation of all members. On the other hand, two-way tasks can generate larger quantity of communication and modified interaction. For example, jigsaw serves as an effective model of information-gap task. This task requires that each student become expert in only one portion of the material given to the whole group. The students who are responsible for the same part form a new team in which they help each other master their shared section. Then they return to their original group and all teach the mastered

knowledge to their group members.

Group goal: a proper goal is needed to guarantee the degree of learners' commitment to the group goal. The goal should be a specific and single team product rather than an abstract or inaccessible objective.

Group role: assign a role to each student in the group to increase their accountability, such as a note-taker, a time-monitor, a summarizer, a reporter, or a language watcher.

Group reward: not only the group work but also the individual achievement should be evaluated and rewarded. Then the individual gets the incentive to work hard to earn the reward, thus increasing their responsibility.

Group rule: setting rules that emphasize the shared responsibility for the group product.

Group cohesiveness: group cohesiveness is directly related to the quantity and quality of group interaction (Dörnyei, 1997). The members of the cohesive group are more likely to participate actively, and are concerned about the benefits of each member and the whole group(Dörnyei, 1997). To enhance the cohesiveness of the group in order to ensure effective CL, such factors should be taken into consideration, such as the amount of time spent together, positive intermember relations, rewards to the members and capable group leaders.

Strategy training on the SL Learners about CL: researchers in this area hypothesized that students can be taught to negotiate for meaning and maximize the interaction opportunities inherent in CL. An empirical study done by Bejareno et al(1997) asserted that one way to improve the quality of communication in small groups was to increase the use of modified-interaction and social-interaction strategy. The findings indicated that the experimental group who had received strategy training made more use of modified-interaction and social interaction strategies than the control group, which led to the improvement of interactive communication in small groups. Another similar study conducted by Naughton(2006) revealed that the cooperative organization of strategies for oral interaction program(COSOI) was successful in making students engage more actively in the interaction sequence.

5.Conclusion

Cooperative learning is a complex instructional technique involving a variety of elements in teaching and learning. Though it often emerges in the form of small group, it is not equivalent to group work. A large amount of empirical evidence shows CL is beneficial to ESL/EFL students cognitively, psychologically and socially. It can facilitate language acquisition by offering increased opportunities for both language input and output; it helps build up a highly supportive and less stressful environment to learners, which can alleviate their anxiety, heighten their self-esteem and self-confidence. It can also improve learners' interpersonal skills such as asking for assistance or giving feedback. As to the problems that emerge during the use of CL, the suggested measures may help to overcome them. Meanwhile, further research needs to be done in cultural perspective, and the perception of students, and solid evidence is also demanded to establish its effectiveness in promoting students' language proficiency.

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