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Learning English Conversational Skills with Collaborative Learning: A Case at a Taiwanese University

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Abstract

Taiwanese students begin learning English in primary school, but most of them are not able to fluently communicate in English. The present study employs a collaborative learning activity in an experiment to investigate its influence on 106 Taiwanese non-English major freshmen's learning situation for English speaking and listening. Data were collected by observing students' learning behaviours in both the experimental and control groups for a term, their pre-test and post-test scores, and a questionnaire survey. From these observations, the experimental group participants transitioned to having more active learning behaviours than the control group by the end of the term. The statistical results show that studying with collaborative learning can promote learners' communicative competence. Furthermore, all participants gave positive feedback on the course arrangement, but the experimental group participants indicated a significantly stronger attitude towards the collaboration experience. Having more opportunities to practice speaking and listening to English, the participants received the language more favourably after learning it using collaborative learning.

1. INTRODUCTION

Learning English has become a nationwide activity in Taiwan because of globalisation and internalisation (V. W.-C. Chang, 2006). In the past, Taiwanese children started to learn English when they began secondary school. However, the Taiwanese Ministry of Education has officially brought English into the course outline for primary school since 2001, which gives people the opportunity to learn English earlier. Although English education has been in primary school in Taiwan for about two decades, English learning is still influenced by the imperial examination system, which is derived from ancient Chinese culture. Accordingly, the design of English courses is still driven by examinations (Chen & Tsai, 2012; Wang, 2016). As the ultimate purpose is to help students get high scores on each test, teaching English may mostly be accomplished by telling students to memorise chunks of English phrases (Wang, 2016). This kind of teaching may result in the students memorising many vocabulary words and grammatical rules without the ability to apply them to what they have learnt in the real world. In other words, what students learn is the 'form' but not the 'cognitive ideas' of the language. For instance, Chang (2006, 2014) points out that Taiwanese TOEFL scores are lower than the

global average. C.-C. Lin (2017) also reports that Taiwanese English proficiency has become even worse in the globalised world, although Taiwan's English education system was reformed many years ago.

Wang (2016) suggests that Taiwanese English education is still governed by the stimulus-response relationship. Since students have to take various tests, schools aim to help students give the correct answers to specific questions. While the specific questions are thought of as the stimuli, the correct answers are the responses. Students who have learnt English under this passive stimulus-response relationship for a long time may not know how to correctly use English once they are given a new stimulus. Their barely memorised grammar and vocabulary do not function well because they do not know how to apply them in active communication.

Hinkel (2006) and Oxford (2001) both argue that language learning should focus on pragmatic usages in everyday communication. Thus, Taiwanese English education should not overly rely on teaching students how to memorise varied linguistic chunks and reproduce them in tests, but should instead train students' communicative abilities. S. Chen (2014) indicates that linguistic ability can be generally divided into four skills: listening, reading, speaking, and writing. However, listening and speaking have been overlooked for a very long time because higher education in Taiwan selects prospective students according to a written examination. In addition, Vandergrift (2007) argues that the four skills occupy different proportions in people's lives. The most frequently employed skill is listening (> 45%), followed by speaking (30%), reading (16%), and writing (9%). Hence, if the most frequently used skills are listening and speaking in people's everyday communication, it is questionable that Taiwanese English education overly emphasises writing and reading. Furthermore, it has been found that Taiwanese students, especially those not majoring in English, do not have enough confidence to talk to others in English because their English training is mostly focused on writing and reading.

The purpose of this study is to improve non-English major students' English speaking and listening abilities through collaborative learning activities. Overly emphasising English writing and reading results in a lack of opportunities to train communication skills. Moreover, Taiwan is an EFL environment. When students do not practice in class, it is even harder to practice speaking English outside of class. If students do not practice English communication in class, teachers cannot observe their difficulties in learning to speak English. In addition, this study hired several English tutors to assist and facilitate students' discussion. To investigate the effect of collaborative learning on non-English major students' English speaking and listening, three research questions were formed: (1) Does collaborative learning have a positive influence on non-English major students' English speaking and listening performance? (2) Does collaborative learning have any influence on students' behaviour? and (3) What are students' viewpoints on collaborative learning?

2. LITERATURE REVIEW

The Taiwanese Ministry of Education has valued English as an important subject since it was plunged into the primary education curriculum two decades ago (Ministry of Education, 2005). Despite, English programmes from primary to secondary school being designed and outlined using the communicative language teaching (CLT) method, the ancient imperial Chinese examination culture still leads Taiwanese English education to be mainly focused on learning

linguistic knowledge in order to pass examinations (V. W.-C. Chang, 2014). Therefore, Taiwanese students do not have much time to learn English communication skills. With the aim of providing more English-speaking opportunities with varied learning tasks, the next section will review the theory of collaborative learning and the ideas proposed in CLT.

2.1.Communicative Language Teaching

The origin of the communicative language teaching method can be traced to an educational revaluation of language learning in England in the late 1960s. Before CLT was invented, teaching and learning languages was mainly based on structuralism. However, Chomsky argues that structuralism cannot explain every individual's uniqueness and creativity in their language performance, so other new teaching methods are generated. Thereafter, British linguists emphasised that the purpose of language learning was to communicate with others; therefore, language education should focus on training learners in practical competency rather than linguistic structure. CLT was one of the new teaching methods proposed during that time (Dörnyei, 2009; Richards & Rodgers, 2014; Savignon, 2006).

According to Liang (2002, p. 157), the goal of CLT is to help students acquire communicative competence. Hymes (1972) explains that all abilities needed by an individual to successfully communicate in a speech community can be referred to as communicative competence. It not only includes knowing vocabulary, grammar, and correct pronunciation but also understanding what to speak at a specific time, how to interact with others, how to be polite when speaking, and metaphors. In other words, other than listening, speaking, reading, and writing, language learners additionally need to master social, cultural, and interpersonal contexts to courteously talk to others.

Richards and Rodgers (2014) and Nunan (2006) point out that CLT has five major suggestions. Firstly, CLT highlights that learners should communicate and interact with others using their target language. Next, the learning and teaching aspects of CLT should employ authentic materials and social contexts for practice. In addition, language learners need to pay attention to the language itself and learn how to manage the language. Furthermore, in a CLT class, it is important to reinforce students' personal experiences of using the language and encourage them to contribute to class activities. Lastly, CLT also suggests connecting in-class practice with real linguistic activities in the community. Accordingly, every material that can advance students' practical communication skills can be included in the lessons. Learners can master language via group discussions and problem-solving tasks. Savignon (2006) argues that, to some extent, learning with CLT can train learners' critical thinking, leading, cooperation, information exchange, and negotiation abilities.

Task-based language teaching is a popular teaching model derived from CLT. Tasks are thought of as practical tools requesting students to solve problems by discussing in the target language (Richards & Rodgers, 2014). Learners have to actively join the discussion and focus on understanding, manipulating, and producing the target language to interact with others. Instead of linguistic forms, task-based language teaching aims to train students' communicative competence (Nunan, 2006) by practicing expressions and interpersonal interactions in the real world (Santhosh & Meenakshi, 2017). Learning via problem solving, students can gain different experiences that are structured by interacting in an authentic context. These

experiences may become helpful knowledge or educative experiences informing future communication (Putri, Artini, & Nitiasih, 2017).

Unlike in the case of traditional lectures, teachers and students play varied roles in a CLT class. Instead of being listeners, students are negotiators in a CLT class. To learn, they have to contribute their acquired knowledge and interact with classmates via the target language. At the same time, teachers play the role of facilitators by guiding students' discussion, or they can be participants by joining the students' conversation. In addition, teachers can function as researchers or learners by observing students' learning process in a CLT setting (Breen & Candlin, 1980, p. 99). Noticeably, collaborative learning proposes similar arguments, which will be reviewed in the next section.

2.2.Collaborative learning

Collaborative learning (CL) refers to an educational model that homogeneously or heterogeneously classifies students into several groups for carrying out class learning activities (S. R. Chang, 2019; Huang & Lin, 1996; Sato, 2012, 2013; van Leeuwen & Janssen, 2019). Learning is based on students' practical activities, including class discussion, communication, negotiation, and cooperation. Except for developing knowledge and abilities related to the teaching subject, students learning via this model are believed to also perform better in other interpersonal relationships, communicative competence, thinking, interaction, leading, cooperation, and learning (Ministry of Education, 2013).

Additionally, Sato (2013) argues that CL can be explained from two perspectives, including collaborative learning and cooperative learning. When engaging in collaborative learning, students are grouped according to their personal characteristics. The member who has a relatively better learning achievement leads others to complete a class task. Cooperating with others is the main focus of the activity. By contrast, students are randomly assigned to different groups when participating in cooperative learning. Each member has to join the discussion, and learning is achieved when students listen to others' opinions and reflect. In cooperative learning activities, students with a higher learning competence can help other members who are struggling with the class task and help them regain their learning competence. In addition, by guiding members to think and learn, students with a higher learning competence can become disciplined in other skills, such as self-comprehension, organisation, interpretation, and leadership. Furthermore, they can have the opportunity to take on more advanced challenges.

For collaborative learning, S. R. Chang (2019) and Ormord (2011) suggest classifying students into groups of four. This size is considered appropriate for class discussions, as it ensures that every group member has an equal opportunity to participate in class activities. Sharing and discussion, mastery, and inquiry are popular methods used when teaching with CL. Each of these methods has several varieties. For instance, sharing and discussion activities include pair-learning, Phillips 66, Jigsaw, and brainstorming. Activities designed in light of mastery are student team-achievement division (STAD), Jigsaw II, reciprocal teaching, and cognitive apprenticeship. For training students' inquiry competence, group investigation, learning together, problem-based learning, and learning community can be employed (S. R. Chang, 2019; Ministry of Education, 2013; van Leeuwen & Janssen, 2019). All of these methods can advance students' learning.

Some of the CL activities introduced above are thought to be comparable to the methods used in language teaching and learning (Kagan, 1995; Richard, Platt, & Platt, 1992). For instance, the rationale of Jigsaw II is similar to the information gap task (Ellis, 2003). Jigsaw II requires students to actively interact with each other to exchange information and combine the fragmented information into a whole. Furthermore, problem-based learning, a branch of inquiry activity, is similar to the task-based language learning method. In it, learning is gradually completed as students are performing their tasks. Therefore, when students learn English via CLT and CL activities, their English speaking and listening is believed to be improved.

Liang (2010) points out several advantages, e.g. reducing learning anxiety, creating interaction, and improving learning motivation, to teaching English with CL activities. Horwitz, Horwitz, and Cope (1991) argue that when leaning a foreign language, students may experience anxiety associated with learning, speaking, and being testing on the new language. Anxiety negatively influences individuals' foreign language learning. However, CL activities can make students feel safer. CL not only reduces student's learning anxiety, but also provides them with more chances to practice. Furthermore, learners may feel more comfortable when learning in a group, as then the students do not have to face the whole class individually. They work as a team. As has been pointed out, CL creates more interaction among group members (Brown, 2001). Interaction is significant in learning a language because people may unconsciously employ varied paralanguage in their communication. Additionally, interaction can improve learners' language proficiency as well as their negotiation, self-reflection, leadership, and problem-solving skills (S. R. Chang, 2019; Ghaith & Shaaban, 1995; Kagan, 1995; Sato, 2012). Furthermore, CL may lead to learners' self-actualization and further increase their learning motivation. According to Dörnyei (1997), most students' learning motivation was improved when they studied in a CL setting classroom. CL brings about more progressive learning achievements.

3. METHODOLOGY

3.1.Research Design

To address the three research questions, an experimental method (Blaxter, Hughes, & Tight, 2010; Nunan, 1992) was employed to investigate the influence of collaborative learning on non-English major students' English speaking and learning performance. Accordingly, an experimental group and a control group were set up to compare learning results. For Mertens (1998), the experimental method functions to investigate the relationship between cause and effect by testing the research hypothesis. A total of 106 non-English major freshmen who study 'English speaking and listening for use in everyday life' at a private university in northern Taiwan were invited to join the study. The aim of this course was to expand students' communicative competence. Each group contained 53 members. The average age of the experimental group (Female: 12, Male: 41) was 19.27 years, with a 0.79 standard deviation, while the mean age of the control group (Female: 1, Male: 52) was 19.12 years, with a 0.47 standard deviation.

The experiment was conducted to introduce in-class activities that were based on CLT and CL theories for 18 weeks. From the perspective of CLT (Hymes, 1972; Nunan, 2006; Richards & Rodgers, 2014), any authentic material can be employed in class to train students' speaking and listening competence for successful communication. The researcher designed the in-class

learning tasks according to the textbook arrangement appointed by the school language centre. Furthermore, students in the experimental group were organised into groups of four or five (Ormord, 2011). Each collaborative group was assigned various tasks that were meant to be solved via cooperation and discussion (Huang & Lin, 1996; Sato, 2012). Therefore, after learning a textbook unit, participants were given a related article for self-learning before the subsequent learning activity. If an individual did not finish self-learning, they could hardly contribute to the discussion. The researcher asked several questions about the article when starting the discussion. Participants had one hour to engage in the activity and find their answers by exchanging ideas. After the discussion, each group was asked to share their ideas with the other participants in English. Every individual student in the experimental group had at least one or two chances to speak to the entire class before the end of the term.

In addition to the CL activity, some English tutors, who were English majors at the same university, were invited to join and guide the participants' discussion. To ensure the tutors were able to provide assistance in the experiment, the researcher checked their English proficiency. Tutors' tasks were to help the non-English majors undertake their discussion in English. In other words, they could not only teach participants vocabulary, such as meaning and pronunciation, but also how to express ideas in English. Before each activity, the researcher conducted a meeting with every tutor to confirm the tutors' understanding of the learning goals of the coming activity and their responsibilities. Moreover, both the researcher and tutors rotated among different collaborative groups and joined their discussions to inspire more communication among participants.

For the control group, the setting was identical to that of the experimental group but lacked a group discussion activity and tutors' assistance. Participants in the control group were taught by the same teacher using the same textbook. Likewise, students in the control group had to read the article at home and answer questions on their own. They could still share their ideas during class; the only difference was they did not have collaborative learning tasks with help from tutors.

3.2. Data Collection

A pre-test and post-test score comparison, classroom process observation, and a questionnaire survey were used to collect the research data. The pre-test and post-test were administered by the university's language centre before and after the treatment. Students who took 'English speaking and listening for use in everyday life' have to take these tests containing 50 multiple choice questions, with a total score of one hundred. Hence, students' learning achievements were examined by comparing the pre-test and post-test scores. Next, classroom process research observation (Ellis, 1990; Nunan, 1992) was conducted throughout the whole course. According to Robson (2002), observation means to watch what people do in order to record, describe, analyse, and report on it. It is a direct method of assessing the influence and effectiveness of the variable. Observation can be further dichotomised into formal and informational. Informal observation refers to a more flexible structured process, which gives the researcher a wider range to decide what information should be collected and how to gather it. Robson (2002) argues that researchers should be more skilful in order to manage the process of informal observation because its unstructured data are relatively more complex. In contrast,

when a researcher decides to conduct formal observation, it means the researcher has already specified what types of data are going to be gathered in the study. Irrelevant information is excluded when conducting this type of observation. In the present study, formal observation was continuously conducted in both the experimental and control groups to investigate participants' learning during class time. In addition, the researcher acted as one of the participants by joining the discussion and observing students' behaviours. Furthermore, at the end of the experiment, participants in both groups were invited to fill out a questionnaire for the researcher to understand their opinions on the course. Fifteen questions were planned using a 5-point-Likert-type scale (Joshi, Kale, Chandel, & Pal, 2015; Pimentel, 2010), ranging from 5: strongly agree, 4: agree, 3: neutral, 2: disagree, to 1: strongly disagree. Participants were instructed to answer the survey questions to show their degree of agreement with the given statements. In addition, Cronbach's alpha (.943) showed that the questionnaire was highly reliable (Gadermann, Guhn, & Zumbo, 2012; Tavakol & Dennick, 2011).

3.3. Data Analysis

In the present study, various methods were employed to analyse the collected data. Firstly, participants' learning behaviours were reported based on observation. The aim was to examine the learning situation and students' behaviour when participants were engaging in discussion. Next, the pre-test and post-test scores were analysed via a paired sample *t* test (Lind, Marchal, & Wathen, 2006; Putri, et al., 2017) to investigate whether there was a significant difference between the two tests within each group. Accordingly, the alternative hypothesis for the paired sample *t* test is that the post-test scores were greater than the pre-test scores (H_1: post-test score > pre-test score). In other words, the null hypothesis is that the pre-test and post-test scores were equal or the pre-test scores were higher than the post-test scores (H_0: post-test score ≤ pre-test score). The significance level was set at .05 throughout the present study. That is to say, the alternate hypothesis will be accepted if the *P* value is less than .05. Furthermore, the difference between the experimental group and control group was tested via an independent sample *t* test (Bowen & Starr, 1982; C. S. Lin, 2014) by testing the research hypothesis, which is that the means of the experimental (EG) and control groups (CG) are not equal (H_1: EG mean ≠ CG mean). In other words, the null hypothesis is that the mean scores of the two groups are identical (H_0: EG mean = CG mean). For the questionnaire survey, the mean scores for each statement were calculated to present participants' average ideas. The neutral value for each statement is 3. Hence, when the mean is greater than 3 and closer to 5, this means students are inclined to agree with the statement. On the contrary, when the mean is less than 3 and closer to 1, participants' disagreement with the statement can be perceived. Moreover, a one-way ANOVA was employed in order to understand if there were different views between the two groups (Chen & Wu, 2009).

4. FINDINGS AND DISCUSSION

4.1.Classroom Observation

Participants' behaviours in the experimental group gradually changed during the experiment while they almost remained the same in the control group. In order to improve non-English majors' English speaking abilities and give them more opportunities to practice English, participants in the experimental group were classified into ten groups and given four articles during the term. Each group had some designated questions that they had to discuss and answer. In the beginning, most participants were passive. They did not follow the instructions, which were to do self-learning at home before the task. It was observed that many groups started to

read the article during the collaborative learning activity. When discussing, they simultaneously checked vocabulary words. Although the tutors could provide some assistance during the group discussions, the focus of the discussions was not answering the questions. Instead, they mainly concentrated on reading comprehension. Furthermore, participants could only share their ideas based on the contents of the article using limited expressions. They could hardly provide their own personal viewpoints on the questions.

Nevertheless, the learning situation progressively became better. With experience in the 1st activity, participants were more familiar with the learning process and were more skilled at cooperating and solving tasks. More and more participants finished their self-learning at home so they could start to discuss the allocated tasks straight away. In addition, since the time participants took to read and check vocabulary words was reduced, the tutors had more time to listen to participants' expressions and join the discussion. The tutors and the researcher not only listened to students' answers but also inspired participants to generate related opinions. For example, students were encouraged to consider questions from different perspectives to evoke more discussion. When the experiment came to an end, most participants finished their reading before the class, which resulted in them having more time to practice their speaking and listening. Although some participants could not speak fluent English, to some extent they had more chances to practice English and became more confident with public speaking. Moreover, students were found to voluntarily provide their own solutions to the task.

By contrast, identical articles were given to the students in the control group, but the participants were found to continuously remain passive throughout the term. For instance, most participants in the control group did not read the articles at home. In addition, it was observed that some participants even refused to read the articles and join the class activities. It may be because their learning motivation was not evoked, and some were afraid of finishing the task individually. Further, when the researcher tried to prompt discussions or ask questions about the article, specific students joined the conversation. However, when the researcher invited other participants to answer questions, they often stayed silent. These behaviours did not change throughout the term.

Due to the CL activity, it was found that participants in the experimental groups gradually became more active and confident. By contrast, most participants in the control group remained passive and hardly joined class activities or shared their ideas with others. The results are in line with the findings discussed in CL. In this study, students' active learning entails a rise in motivation (S. R. Chang, 2019; Huang & Lin, 1996; Liang, 2010; Santhosh & Meenakshi, 2017; Sato, 2013). Furthermore, when studying in a group, students may feel more comfortable practising speaking English because their anxiety is reduced to some extent, and they start to engage in the learning activity (Horwitz, et al., 1991; Liang, 2010). In addition, the researcher and tutors can ensure that each student participates in the learning task with small group sizes. On the contrary, participants in the control group may feel relatively more anxious during the activity due to lacking cooperation with a partner. Each participant in the control group read the articles by themselves and had to face each task individually. Their learning motivation might not have been inspired and may have even decreased because they did not understand the article or how to express their opinions to the class. In addition, since no tutors were joining the control group, the participants got less individual attention during the class.

To sum up, this study's observations present a similar result to studies conducted in a collaborative learning setting (S. R. Chang, 2019; Ghaith & Shaaban, 1995; Huang & Lin, 1996; Kagan, 1995; Sato, 2012). The members of the experimental group became more active by the end of the experiment. Compared to the beginning of the experiment, they were more confident in speaking in English and sharing their ideas. Lacking the inspiration of the collaborative learning task, the members of the control group remained stable and passive throughout the whole term.

4.2. Learning Achievement

Participants' learning outcomes were assessed via the pre-test and post-test. Although 106 non-English major students joined this experiment, only 77 students, including 34 students in the control group and 43 in the experimental group, finished both tests. Thus, the statistical analysis was applied to these 77 participants.

Table 1 presents the mean scores of both tests for the two groups. As can be seen, participants in the experimental group have higher scores in both tests (pre-test: 37.67, post-test: 43.40) than those in the control group (pre-test: 34.59, post-test: 37.65).

Table 1. Participants' mean scores in the pre-test and post-test

		Mean	N	Std. Deviation	Std. Error Mean
Control Group	Pre-test	34.59	34	10.646	1.826
	Post-test	37.65	34	12.065	2.069
Experimental Group	Pre-test	37.67	43	14.774	2.253
	Post-test	43.40	43	15.908	2.426

Table 2 provides the paired sample *t*-test results for both groups. It shows that there is a significant difference between the pre-test and post-test scores of participants in the experimental group (t=-3.24, p <.05) but not in the control group (t=-1.61, p >.05). Accordingly, the research hypothesis, which was that the post-test scores would be greater than the pre-test scores (H1: post-test score > pre-test score), is supported by the experimental group but not the control group. With a higher mean score shown in Table 1, the English proficiency of the experimental group's participants has been improved after learning English speaking and listening via CL activities for a term. That is to say, compared to the beginning of the term, the English competence of the experimental group's participants was different and greater by the end of the training. By contrast, students in the control group did not progress after taking the course for 18 weeks because their pre-test and post-test scores did not present a significant improvement. Hence, their English proficiency remained stable throughout the term.

Table 2. Paired sample t-test result

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Control Group	Pre-test – Post-test	-3.059	11.111	1.905	-6.936	.818	-1.605	33	.118
Experimental Group	Pre-test – Post-test	-5.721	11.568	1.764	-9.281	-2.161	-3.243	42	.002

Table 3 demonstrates the independent sample *t* test result between the two groups. The variances of the samples are not significantly different between the pre-test (F=3.24, *p*>.05) and the post-test (F=1.37, *p*>.05); therefore, it is assumed that the sample variances of the experimental and control groups are equal. As illustrated in Table 3, it is salient that the pre-test result between the experimental and control groups does not present a significant difference (*t*=1.59, *p*>.05). This does not support the research hypothesis, that the mean scores are not equal between the two groups. In other words, the null hypothesis, that the mean scores between the two groups are equal, is supported. Therefore, it is believed that participants in both groups had an identical level of English proficiency at the beginning of the experiment.

Table 3. Scores between the experimental and control groups

		Levene's Test for Equality of Variances		T-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Experimental and control group pre-test	Equal variances assumed	3.241	.075	1.594	86	.115	4.747	2.978	-1.174	10.668
Experimental and control group post-test	Equal variances assumed	1.369	.245	2.185	83	.032*	6.910	3.162	.620	13.200

*. The mean difference is significant at the 0.05 level.

However, the independent *t*-test result on the post-test supports the research hypothesis (*t*=2.19, *p*<.05). It shows that the experimental group participants' post-test score is different from that of the control group members. Comparing this with the results shown in Table 1, the members of the experimental group have a higher mean score (43.4) in the post-test than the control group (37.6). The outcome in Table 2 also indicates that the experimental group has a significant difference in their learning achievement. Therefore, it can be suggested that learning

English speaking and listening with CL activities positively influences learners' English proficiency because the experimental group obtained a significantly greater learning outcome by the end of the experiment, while the control group participants presented stable proficiency levels between the pre-test and post-test (t=-1.61, p >.05).

4.3.Questionnaire Survey

In order to address the third research question and to understand participants' points of view on the course design, a questionnaire survey was conducted at the end of the experiment. Eighty-three participants, including 40 from the experimental group and 43 from the control group, anonymously and voluntarily finished the questionnaire survey. Table 4 presents the mean scores on each statement in the questionnaire survey, designed using a 5-Point-Likert-type scale. It can be observed that students in both groups had a positive degree of agreement on each statement, which means they were satisfied with the organisation of the course. Noticeably, participants in the experimental groups presented a higher mean score on each statement than the control group.

Table 4. Mean scores of each questionnaire statement between the two groups

Statements		N	Mean	Std. Deviation	Std. Error
1. I am satisfied with the course textbook.	Control Group	43	3.814	0.7321	0.1116
	Experimental Group	40	4.15	0.6998	0.1107
	Total	83	3.976	0.7321	0.0804
2. I am satisfied with the course progress.	Control Group	43	3.767	0.7819	0.1192
	Experimental Group	40	4.075	0.7299	0.1154
	Total	83	3.916	0.7683	0.0843
3. I am satisfied with the arrangement of course activities.	Control Group	43	3.674	0.8652	0.1319
	Experimental Group	40	4.1	0.8102	0.1281
	Total	83	3.88	0.861	0.0945
4. I am satisfied with the method of course assessment.	Control Group	43	3.744	0.7896	0.1204
	Experimental Group	40	4.15	0.6998	0.1107
	Total	83	3.94	0.7706	0.0846
5. I am satisfied with the teaching methods.	Control Group	43	4.047	0.7545	0.1151
	Experimental Group	40	4.25	0.7763	0.1227
	Total	83	4.145	0.7672	0.0842
6. I think my English has improved after taking the course for a term.	Control Group	43	3.372	1.0006	0.1526
	Experimental Group	40	3.6	0.9282	0.1468
	Total	83	3.482	0.9673	0.1062
7. I had the opportunity to practice speaking English during the class.	Control Group	43	3.558	0.9077	0.1384
	Experimental Group	40	4	0.8165	0.1291
	Total	83	3.771	0.8879	0.0975

8. I had the opportunity to cooperate with others during the class.	Control Group	43	3.326	0.9933	0.1515
	Experimental Group	40	4.275	0.7506	0.1187
	Total	83	3.783	1.0006	0.1098
9. Compared to the beginning of the term, I think I now have better English proficiency at the end of the term.	Control Group	43	3.372	1.1132	0.1698
	Experimental Group	40	3.675	0.9711	0.1535
	Total	83	3.518	1.0518	0.1155
10. After taking this course, I think I like English better.	Control Group	43	3.233	0.9961	0.1519
	Experimental Group	40	3.7	0.9923	0.1569
	Total	83	3.458	1.0157	0.1115
11. Compared to the beginning of the term, I am relatively unafraid of communicating with others in English.	Control Group	43	3.163	1.0896	0.1662
	Experimental Group	40	3.35	1.1886	0.1879
	Total	83	3.253	1.1353	0.1246
12. When speaking English, I better understand how to communicate now than at the beginning of the term.	Control Group	43	3.512	0.883	0.1347
	Experimental Group	40	3.7	1.0178	0.1609
	Total	83	3.602	0.9492	0.1042
13. I am more confident when speaking in English than at the beginning of the term.	Control Group	43	3.349	1.0665	0.1626
	Experimental Group	40	3.5	1.0377	0.1641
	Total	83	3.422	1.049	0.1151
14. During the term, I communicated with others in English.	Control Group	43	3	1.0465	0.1596
	Experimental Group	40	3.125	1.381	0.2183
	Total	83	3.06	1.2132	0.1332
15. Compared to the beginning of the term, I have a better understanding of why learning English is important.	Control Group	43	3.814	1.0061	0.1534
	Experimental Group	40	3.9	0.9819	0.1553
	Total	83	3.855	0.9894	0.1086

In addition to the mean scores, Table 5 presents the one-way ANOVA results, which indicate that participants have significantly different degrees of agreement on specific statements, such as statements 1, 3, 4, 7, 8, and 10. According to the results in Table 4, participants in the experimental group present a higher mean score on every statement. That is, compared to the control group, the experimental group gave comparatively positive feedback on the selection of the teaching materials ($F=4.56$, $p<.05$), course activity arrangement ($F=5.33$, $p<.05$), assessment method ($F=6.10$, $p<.05$), opportunity to practice English speaking and listening ($F=5.41$, $p<.05$), opportunity to cooperate with other members ($F=23.85$, $p<.05$), and their positive interest in English ($F=4.53$, $p<.05$).

Table 5. One-way ANOVA results on participants' degree of agreement

Statements		Sum of Squares	df	Mean Square	F	Sig.
1. I am satisfied with the course textbook.	Between Groups	2.34	1	2.34	4.555	0.036
	Within Groups	41.612	81	0.514		

	Total	43.952	82			
2. I am satisfied with the course progress.	Between Groups	1.96	1	1.96	3.418	0.068
	Within Groups	46.449	81	0.573		
	Total	48.41	82			
3. I am satisfied with the arrangement of course activity.	Between Groups	3.753	1	3.753	5.33	0.024
	Within Groups	57.042	81	0.704		
	Total	60.795	82			
4. I am satisfied with the method of course assessment.	Between Groups	3.413	1	3.413	6.104	0.016
	Within Groups	45.286	81	0.559		
	Total	48.699	82			
5. I am satisfied with the teaching methods.	Between Groups	0.858	1	0.858	1.466	0.229
	Within Groups	47.407	81	0.585		
	Total	48.265	82			
6. I think my English has improved after taking the course for a term.	Between Groups	1.076	1	1.076	1.153	0.286
	Within Groups	75.647	81	0.934		
	Total	76.723	82			
7. I had the opportunity to practice speaking English during the class.	Between Groups	4.046	1	4.046	5.408	0.023
	Within Groups	60.605	81	0.748		
	Total	64.651	82			
8. I had the opportunity to cooperate with others during the class.	Between Groups	18.68	1	18.68	23.859	0
	Within Groups	63.417	81	0.783		
	Total	82.096	82			
9. Compared to the beginning of the term, I think I now have better English proficiency at the end of the term.	Between Groups	1.901	1	1.901	1.734	0.192
	Within Groups	88.822	81	1.097		
	Total	90.723	82			
10. After taking this course, I think I like English better.	Between Groups	4.528	1	4.528	4.58	0.035
	Within Groups	80.074	81	0.989		
	Total	84.602	82			
11. Compared to the beginning of the term, I am relatively unafraid of communicating with others in English.	Between Groups	0.726	1	0.726	0.56	0.456
	Within Groups	104.96	81	1.296		
	Total	105.687	82			
12. When speaking English, I better understand how to communicate now than at the beginning of the term.	Between Groups	0.735	1	0.735	0.814	0.37
	Within Groups	73.144	81	0.903		
	Total	73.88	82			
13. I am more confident when speaking in English than at the beginning of the term.	Between Groups	0.474	1	0.474	0.427	0.515
	Within Groups	89.767	81	1.108		
	Total	90.241	82			
14. During the term, I communicated with others in English.	Between Groups	0.324	1	0.324	0.218	0.642
	Within Groups	120.375	81	1.486		
	Total	120.699	82			
15. Compared to the beginning of the term, I have a better understanding of why learning English is important.	Between Groups	0.153	1	0.153	0.155	0.695
	Within Groups	80.112	81	0.989		

	Total	80.265	82

Noticeably, the significant value (0) of statement 8 indicates a solid difference between the two groups. The result is acceptable because the experimental group participants not only had to read the article before each activity but discussed it with group members in order to finish the task. Through the CL activity, every participant definitely experienced group cooperation. By contrast, the control group did not learn English speaking and listening with CL, so students in this group may have experienced less cooperation during class time. Moreover, the ANOVA result on statement 10 ($F=4.53$, $p<.05$) specifies that the experimental group participants approved of the language more after learning through CL activities.

Through the experiment, the research questions can be addressed. Learning English speaking and listening via CL can definitely bring about a positive influence on students' English learning behaviour as well as their learning achievements. In addition, participants showed positive feedback on the course design, and some significant differences can be observed between the two groups. In line with CL and CLT, learning English using an authentic context and discussion can improve students' communicative competence and other abilities (S. R. Chang, 2019; Liang, 2010; Nunan, 2006; Putri, et al., 2017; Sato, 2012). Classifying students into groups to learn can reduce their learning anxiety (Horwitz, et al., 1991), which in turn may inspire students' learning motivation. The experimental group participants' change in behaviour implies the promotion of their learning motivation as they gradually began to actively study the assigned articles, join the in-class discussions, and share their ideas with the other participants. Moreover, the paired sample *t*-test provides significant evidence that language learners can attain better learning achievements via CL or CLT activities. Furthermore, learners may come to like English more after learning with CL activities. (S. R. Chang, 2019; Huang & Lin, 1996; Sato, 2013). Besides, to a certain degree, the questionnaire presents participants with positive perceptions of the course. The experimental group showed that they have positive experiences of in-class cooperation, practising activities, and becoming more interested in English. Therefore, this study's findings are supported by the theories of collaborative learning and communicative language teaching. Students not only attain better learning results from cooperating with others but also become more motivated to learn.

5. CONCLUSION

This present study employs the experimental method to investigate the influence of collaborative learning and communicative language teaching on non-English major students' English verbal and auditory abilities. The results present several positive effects on the learners who underwent the designed experimental treatments. Through the CL activities, the non-English majors' motivation was promoted and they became relatively more active when participating in class discussions. Furthermore, they had better learning outcomes at the end of the experiment. All the students also showed positive attitudes toward the teaching design and activity arrangement. Learning via cooperation made the students fonder of English. To be brief, collaborative learning can provide many benefits to non-English major students learning to speak and understand English (S. R. Chang, 2019; Dörnyei, 1997; Huang & Lin, 1996; Kagan, 1995; Liang, 2010; Putri, et al., 2017; Sato, 2012). Further research can be done to investigate CL's influence on other communicative abilities.

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