# A Comparative Study on Cooperative Learning in Multimedia and Network Environment Used by English Majors between China Mainland and Taiwan

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## ABSTRACT

This paper first based on the theory of cooperative learning research. It analyses the characteristics and advantages of cooperative learning under the multimedia network environment.And then take China Three Gorges University and Taiwan I-Shou University English major students for example, using questionnaires and interviews to investigate the students's cooperative learning in the network environment. Survey results showed that cooperative learning teaching mode has been widely used in English classrooms across the Taiwan Strait. Students think highly of cooperative learning in the multimedia-aided, and it can have a positive effect on learning; but on cooperative learning ability and the specific learning process, students still have some problems. Nowadays,cooperative learning in the network environment has various ways, but there exist certain differences in the learning styles across the Strait. Taiwan students rely more on teachers' help and teachers feedback, while students in mainland depend mainly on networking and panel discussion. On qualitative analysis of interview is a supplement to the questionnaire and further explore its deeper causes, which provide valuable evidence for the study and learning practice. Finally, according to the comparative analysis,the author puts forward some constructive suggestions.

## INTRODUCTION

Cooperative learning is one of the greatest success teaching methodology in the history of educational research.And it is also the most creative and effective education system since it was designed and studied for cooperative learning classroom contexts in 1970s (Slavin, R.E.,1996). It has been extensively applied in cooperative learning teaching. In the early 1970 of the 20th century, European and American educators and psychologists (e.g. Vygotsky, L.S.,1978; Johnson, D. W. & Johnson, R. T., 1989) had made substantive progress through the study of cooperative learning system. Researches on cooperative learning in China began in the late 1980 of the 20th century.The research started late, but it developed faster. Some Chinese scholars (e.g.Wang Tan, 2002; Li Xijin, 2002) have made some progress. Nowadays, for some theoretical and practical experience, it is very common of cooperative learning applied in the higher education. Cooperative learning is focusing on the teacher-students and student-student interaction and the cooperation is a beneficial attempt to reform teaching model(Wang Tan,2005). Cooperative learning takes students work as groups, which help realize the shift from traditional teacher-centered pattern to student-centered and teacher-guiding pattern. Meanwhile, cooperative learning can foster students' ability to employ the language and the ability to learn language knowledge and skills autonomously. Besides, such a pattern tends to enhance students' motivation to learn, increase students' confidence to study, relieve anxiety in the study and create a harmonious environment of cooperative learning (Liu Yujing, &Gao Yand,2011).

Today the improvement of multimedia network technology caused a revolution in education(Zhang Sirui, Yang Yue, & Yang Qian, 2008). The Web Based Cooperative Learning is the cooperative learning that supported by multimedia network technology. It has drawn greater attention by many instructors and scholars.Using the Internet for college students is almost universal, and particularly for the English major. Network information resources for cooperative study offer facilities and adequate resources. Whether it obtains information or not, cooperative learning in class or teacher information sharing and other aspects of cooperation, the Internet has played a crucial role. Students and teachers will no longer be limited to time and geographical constraints.They can communicate and acquire learning anytime and have abundant resources. Students will be able to comprehend the var-

ious types of knowledge. The learning environment will be in a variety of different ways, such as video, audio and other information to alleviate a dull cooperative learning way.

In order to adapt to new developments in higher education in China, furthering teaching reform to improve teaching quality and meeting the state and society in the new era of talent teaching demanding, College English Curriculum Requirements (hereafter called Requirements) is drawn up (Ministry of Education of The People's Republic of China 2004). Requirements(2004) advocated the new teaching models of cooperative learning which should be prepared on the basis of modern information technologies. In particular, it needs network technology supported and makes English teaching towards personalized learning, which is not limited by time and place of learning, active learning direction. Importantly, it should emphasize students' cooperative learning to train student's ability of innovation, experience and practice, as well as encourage students to participate in an exchange of learning styles. Multimedia network learning environment for English learners to provide space and support for cooperative learning methods. Cooperation learning under the multimedia network environment can foster the spirit of cooperation between learners, enhance mutual awareness, and develop collaboration skills.

Therefore, in this paper, the author aims to explore the similarities and differences in the current circumstances of English major students' cooperative learning across the Strait. By comparing the two groups' different patterns of cooperative learning and their perceptions of cooperative learning under the multimedia network, this study might bridge a research gap in cooperative learning. In other words, this study may help language learners, language teachers, and researchers know more about cooperative learning employed by Chinese mainland English majors and Taiwanese English majors as well as the similarities and differences between these two patterns. There are mainly questions about the research: 1) What is the current situation of English major students' cooperative learning ? 2) What is the difference styles of cooperative learning under the multimedia network between China Three Gorges University and Taiwan I-Shou University? 3) How are students' cooperative learning attitude and abilities under web? Through questionnaires and interviews, statistical data analyze cooperative learning in college English major between students across the Taiwan Strait under multimedia network environment, and analysis of difference to find out the causes of low rates in English cooperative learning skills, and makes suggestions for analysis results. According to the analyze of cooperative learning between the two schools under the multimedia network environment, The author will analyze the causes from the educational condition and the culture conventions. this study will provides insights into the reasons for the differences in cooperative learning between the two groups of English majors. Besides, the findings of this study may illustrate the merits of employing a cooperative learning approach to language learning. Furthermore, the present study also offers some implications for both language learners and language teachers. It is hoped that language learners could benefit from these implications and make progress with their English. It is also hoped that the implications for language teachers could assist them in English teaching.

## PURPOSE OF THE RESEARCH

At present, research and application of cooperative learning to be prevalent, cooperative learning have also been given increasingly higher expectations and realistic meaning(li Guangmei,2002). But the research of cooperative learning under the network environment is insufficient.The current papers are mainly to explore college students' cooperative learning circumstances, and their attitude and abilities of cooperative learning and so on(Li Xijin,2002). However, about cooperative learning under the multimedia network, there exist many problems needed to be researched and solved. For instance, what are the problems of cooperative learning under the network environment? How to make network utilization to maximize?How teachers and students deal with the problems under new circumstances? These questions are urgently needed to be explored by more scholars in this field, so as to better guide the practice and to contribute to the reform of English teaching. In order to study and analysis of the present situation and existing problems of cooperative learning under the multimedia network in the college English.The author made some questionnaires and interviews in the universities between China mainland and Taiwan to try to raise some practical strategies and methods.

## LITERATURE REVIEW

### The definition of Cooperative Learning

By Vygotsky and situated cognition advocates (Brown, J. S., Collins, A., & Duguid, P. 1989) emphasize the influence of social factors to construct knowledge, many learning strategies wanted to affect learning effect through social interaction. And cooperative learning is an essential part of the domain.

Since 1970 cooperative learning has been widely advocated, it is a very effective way of teaching(Wang Tan,2002). According to social constructionist, many scholars considered cooperative learning is to divide student into several groups, and members of the group interacted in the process of learning to reach a common goal. Cooperative learning is a systematic, outcome of the teaching strategy(Xu Xueping,2012). In the teaching situations, teachers have complete plans for students to be guided and actively build an interdependent group where allows students to work together to reach a common learning goal. Cooperative learning is a systematic research and promoted in the 70's. The cooperative learning is defined as positive interdependence, individual and group accountability, face-to-face promotive interaction, interpersonal skills, and constant or regular reviews to improve team effectiveness (Johnson, DW, Johnson, RT, Stanne, M. & Garibaldi, A.,1990).A number of studies have found that cooperative learning can enhance learners' achievements (Johnson D W, Johnson R T.,1994; Slavin, RE,1996), promote learners' attitudes, and can in-

*A Comparative Study on Cooperative Learning in Multimedia and*
*Network Environment Used by English Majors between China Mainland and Taiwan*

**129**

crease learner's self-esteem and improve their interpersonal relationships.

Since 1970, many scholars developed a variety of cooperative learning strategies depending on different theories of cooperative learning (Wang Tan,2002).Cooperative learning is currently a worldwide used teaching theory and strategy system of great originality and actual effects(Wang Tan 2005). During the process of cooperative learning, learning strategies are hereby fixed, but in the teaching field, there are subject to students' personal characteristics, learning materials, teacher quality, teaching time and so on. Teachers must adjust their teaching methods and strategies to ensure that students achieve meaningful learning. Both theory studies and laboratory studies have produced a great deal of knowledge about the effects of many types of cooperative learning activities and the mechanisms responsible for these effects(Liu Yujing, &Gao Yand,2011). It is the positive effects of cooperative learning.

### Computer-supported Cooperative Learning

Computer-supported cooperative learning is a teaching approach.It is achieved by a computer or the multimedia network of interaction. The way of language learning is characterized by the construction of knowledge among students using the multimedia network as their basic ways of communication or as resource (Levy. M.,1997). Computer-supported cooperative learning can be achieved in Internet and traditional classroom learning surroundings as well as can teach and learning synchronously or asynchronously.

Cooperation learning under the multimedia network environment is using virtual environments created by computer and Internet technology to share information between participants(Zhang Sirui, Yang Yue, & Yang Qian,2008). Its essence is the interaction of teaching's various factors. It consists of several learners to exchange and work in partnership on the same learning content in order to achieve the goal of students' active development. (Jacob.E., 1999) Cooperative learning under the multimedia network environment provides students with a learning environment to share information, exchange and cooperation. This will not only contribute to the development of the learners' cognitive abilities, formation of healthy emotional and creative thinking of students, but also it can help to enhance awareness of cooperation, social skills and foster learners' learning spirit of cooperation and common progress.

## METHOD

### Research Questions

In order to get a detailed information of the current circumstance of English majors' cooperative learning under the multimedia network, there are 300 students from China mainland and Taiwan to take part in the research. The author uses Internet tool to gain qualitative and quantitative statistics. Questionnaire for quantitative data collection, while qualitative data collection needs using the interview so as to provide better data and survey. Besides, the author inter-

viewed 20 students to take part in the questionnaire investigation in order to get a further understanding of the questions about cooperative learning under the multimedia network from various perspectives.

The study is conducted in order to get a detailed information of the current circumstance of cooperative learning under media network of the English majors from China Three Gorges University and Taiwan I-Shou University. Based on previous studies, the author hopes that the results of the current research may provide some new ideas and give some practical suggestion for future studies.

The purpose of this research is very obvious, and it mainly concerns three questions as follows:
1) What is the current situation of English major students' cooperative learning?
2) What is the different styles of cooperative learning under the multimedia network between China Three Gorges University and Taiwan I-Shou University?
3) How are students' cooperative learning attitude and abilities under the multimedia network?

### Research Participants

300 participants from two different universities of China Three Gorges University and Taiwan I-Shou University took from different regions of China in the investigation.The characterized with different educational backgrounds leads to different thought patterns, cognitive styles, experiences and opinions, etc. In the university, English is their major, the participants have received well learning of listening, speaking, reading and writing. By the time they were invited to attended this investigation, they had studied English for at least 10 years and they will finish their college English learning, so they could get a better feedback about their English learning in these years of college English learning career. All the participants of the questionnaires and interview are selected in a simple and random way.

### Research Instruments

To attain more reliable information concerning the research to the three parts of research questions, the author uses two kinds of instruments: questionnaire and interview, which are very common and frequently used survey tools to gain large amount of information from a large quantity of people in a relatively short-period of time.

In the questionnaire, item1 to item 3 are about the general information of the participants: gender, country or region, grade. Item 4 to item 14 is approximately the current circumstance of cooperative learning in the two sides of the Taiwan Strait English major. Item 15 lists some of the main ways of English learning under the multimedia network.And item16 surveys students' cooperative learning under the multimedia network.

The interview is concerned with participants' knowledge and attitude toward cooperative learning under the multimedia network. The author also combines the analysis and discussion with the previous section.Item1 to item3 are about participants' attitude toward cooperative learning under

the multimedia network in the English major.Item 4 wants to know different communication ways in the cooperative learning between two sides in schools. Item 5 asks the role of teachers in the different schools in detail.

According to the theory of cooperative learning and knowledge of pedagogy and psychology, the author designed a questionnaire for cross-strait students. And author wanted to research students' attitudes and cooperation issues under the background of the multimedia network. Through interviews and the author want to more insight into students' understanding of cooperative learning and realize network utilization in cooperative learning and some difficulties and obstacles when implementing cooperative learning. In order to make cooperative learning to adapt in the future network and a modern information society, the author would provide theoretical guidance and sound advice.

### *Student Questionnaires*

Student questionnaire is aimed at the entire mental and learning needs during the process of students in cooperative learning. Author is divided into three parts to investigate the current circumstances of cooperative learning under the multimedia network.The first part is about cooperative learning. Author set up several dimensions: attitudes and awareness, cooperative learning classroom discussions, after cooperative learning, communication, and evaluation methods. The second part is the multiple choice.Author lists some of the main ways of English learning under the multimedia network.And the third part is the matrix scale question. This part surveys students' cooperative learning under the multimedia network. Every part has some dimensions and each dimension is provided with several questions involving network usage problems, so as to understand the network runs through the cooperative learning and student use of real psychological experience.

### *Interviews*

After the questionnaire investigation, in order to learn further learners' authentic notions about cooperative learning in English learning under the multimedia network, the author carried out a follow-up interview among 20 participants randomly chosen from the participants in the questionnaires. The interview is conducted in the form of free talk so as to create a comfortable and friendly atmosphere, in which the students can talk whatever they want to say. Besides, author sends an E-mail about cooperative learning to ten students in Taiwan I-Shou University which are convenient and easy statistical analysis. The interview concerns about some matters not only in the questionnaires, as well as some questionnaire items which need further explanation with the hope of digging out some reasons behind students' answers for the questionnaires.Item1 to item3 are about participants' attitude toward cooperative learning under the multimedia network in the English major.Item 4 wants to know different communication ways in the cooperative learning between two sides in schools. Item 5 asks the role of teachers in the different schools in detail.Please to refer to Appendix III to look over the questions of the interview.

## MAJOR FINDINGS

### Data Analyses and Discussion of Questionnaire

The author distributed 200 questionnaires. There are 16 questions in the questionnaire, which is divided into three parts, in which the first part is about cooperative learning.The second part is the multiple choice. Author lists some of the main ways of English learning under the multimedia network. And the third part is the matrix scale question. This part surveys students' cooperative learning under the multimedia network. This will be discussed analyzed in detail later.

Item1 to item3 are for the general information of the participants: gender, country or region, grade. Item 4 to item 14 is about the current circumstance of cooperative learning in the two sides of the Taiwan Strait English major. Item 15 lists some of the main ways of English learning under the multimedia network.And item16 surveys students' cooperative learning under the multimedia network.
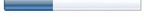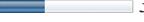
The following is about the whole picture of the research results for item 4 to item 14:

**Table 5.1.1.** Cooperative learning in the two sides of the Taiwan Strait English major

**Item 4.** In the English classroom, how will teachers organize learning tasks?

| Options | percentage |
|---|---|
| Group, but have designated team members, team leader and tasks by teacher (China Mainland) | 50% |
| Group, but have designated team members, team leader and tasks by teacher ( Taiwan) | 42.86% |

**Item 5.** In the English class, how do you accomplish assignments?

| Options | percentage |
|---|---|
| Face to face discussion to complete together (China Mainland) | 63.64% |
| Face to face discussion and online discussion ( Taiwan) | 50% |

**Item 6.** Have you ever known about the cooperative learning?

| Options | percentage |
|---|---|
| Not fully understanding (China Mainland) | 59.09% |
| Understanding clearly (Taiwan) | 64.29% |

**Item7.** Have you ever participated in cooperative learning?

| Options | percentage |
|---|---|
| Occasionally attend (China Mainland) | 63.64% |
| Usually attend ( Taiwan) | 64.29% |

*(Contd...)*

*A Comparative Study on Cooperative Learning in Multimedia and*
*Network Environment Used by English Majors between China Mainland and Taiwan*

**131**

**Table 5.1.1.** (*Continued*)

**Item 8.** Before group work, how do teachers arrange the students in groups?

| Options | percentage |
|---|---|
| Group divided freely (China Mainland) | 63.64% |
| Group divided freely ( Taiwan) | 71.43% |

**Item 9.** How many students in a group?

| Options | percentage |
|---|---|
| 3-6 (China Mainland) | 63.64% |
| 3-6 ( Taiwan) | 78.57% |

**Item 10.** Do you think cooperative learning is helpful to students' English learning in class?

| Options | percentage |
|---|---|
| Helpful (China Mainland) | 59.09% |
| Helpful ( Taiwan) | 42.86% |

**Item 11.** Who usually evaluate the results in groups?

| Options | percentage |
|---|---|
| By teacher (China Mainland) | 68.18% |
| By teacher and team member (Taiwan) | 35.71% |

**Item 12.** Do you think what's the point of using cooperative learning in English class?

| Options | percentage |
|---|---|
| Group discussion can improve my ability, but I still want to learn more knowledge in English class (China Mainland) | 50% |
| Group discussion can improve my ability, but I still want to learn more knowledge in English class ( Taiwan) | 71.43% |

**Item 13.** By cooperative learning, what do you think you have improved in English class?

| Options | percentage |
|---|---|
| Expressing ability (China Mainland) | 54.55% |
| Cooperation ability ( Taiwan) | 35.71% |

**Item 14.** What do you think is the biggest problem in groups learning

| Options | percentage |
|---|---|
| Group members focus only on their performance, but not listen to others opinion (China Mainland) | 40.91% |
| Group members focus only on their performance, but not listen to others opinion ( Taiwan) | 35.71% |

This part is about students' general attitude toward cooperative learning in college English major. From the results, we can see some of the same point in the two sides of the Taiwan Strait English major.Most teachers would use cooperative learning to organize tasks in learning English, and they would divided into some small groups, but the teachers appointed group leaders and the specified task; Before carrying out cooperative group learning, more than 60%students think teachers are usually grouped by free association and team members are usually formed by 3-6; About 50% students think use of cooperative learning methods of English cooperative learning is good; But,more than 50% also think that cooperative learning in English cooperative learning not have special meaning for them.Generally, panel discussions makes they improved capacity, but they hope to learn more knowledge in the cooperative learning classroom; More than 35% students think the biggest issue in the cooperative learning groups is when other groups talked, they are unwilling to listen to others and just focus on learning outcomes of this group.

The results of question also have many differences between China Three Gorges University and Taiwan I-Shou University. The results of question 5 tell us that 63.64% of the students from China Three Gorges University would use face-to-face discussions when teacher requires the group complete the job or tasks, and 50% students from Taiwan I-Shou University use face-to-face and web discussions to complete the job or task.63.64% students from China Three Gorges University tell that they occasionally participated in cooperative learning; while 64.29% students from Taiwan I-Shou University often attend cooperative learning in the cooperative learning class.For question 11, 68.18% students from China Three Gorges University think the teacher assessed learning outcomes. But in Taiwan university,it is evaluated by the teacher and students.

From Table 5.1.2, the result of question 15 reflects that Taiwan and continental students' favorite ways to learn English under the multimedia network environment. The top three ways of learning English in China Three Gorges University English major: 63.64% of students usually used Baidu, Google and Kimo's network service products, such as Baidu Wenku, Google Calendar, Google notebook, Gmail when learning English.There are 54.55% students usually use some English learning websites, such as BBC, New York Times, Time, the Economist. 50% of the students search various online courses through the colleges and universities or English videos such as TED to improve English. However, the top three ways of learning English in Taiwan I-Shou University has a little difference.It is obvious that 78.57% students are likely to use e-Learning courseware by teacher. 64.29%, of the students usually used Baidu, Google and Kimo's network service products, such as Baidu Wenku, Google Calendar, Google notebook, Gmail when learning English. 57.14% students prefer through some networking platforms, such as Blogs (Blogs), Twitter, and Facebook to exchange some information with teachers and students.

From the above figures, we can analyze from several parts.The first part is about students' attitude and participation on cooperative learning under the multimedia network environment. For the subject, Taiwan and mainland students showed a great deal of difference. It is not clear for most Chinese students to know cooperative learning, and only occasionally is invited to attend. Taiwan students have a better understanding of cooperative learning, and attend regularly.

**Table 5.1.2.** Main ways of English learning under the multimedia network

| **Item 15.** How do you learn English under the network environment? ( Multiple Choices) | |
| --- | --- |
| **In China Three Gorges University** | |
| e. When learning English, I always use some network services products, for example Google Scholar, Baidu Scholar, Yahoo, Gmail and so on. | 63.64% |
| g. When learning English, I always search for English website to study, for example, BBC News, Wall Street Journal, Financial Times, New York Times, or The Economist magazine to broaden English learning. | 54.55% |
| F. By online courses and some English videos like TED to improve English. | 50% |
| **In Taiwan I-Shou University** | |
| a. When learning English, I always learn from electronic courseware provided by teachers. | 78.57% |
| e. When learning English, I always use some network services products, for example Google Scholar, Baidu Scholar, Yahoo, Gmail and so on. | 64.29% |
| J. By some network platform, like Blog, MicroBlog and Facebook, I can communicate with teachers and classmates in English learning. | 57.14% |

Moreover, mainland students do not feel that the network environment for cooperative learning has brought a lot of help, and they think it cannot make their learning more efficient. Taiwan students believe that the network can promote cooperative learning, and to enhance their learning environment. It can be seen that Chinese students' awareness of cooperation learning is not enough. Although teachers use teaching way of cooperation learning in the class, it does not form system, and teachers also did not often carry out cooperation learning. Next, in the today's class, it is a good way to use the multimedia network to assist the cooperative learning, but teachers are unconscious for it. Students and teachers do not treat network resources as an important factor into cooperation learning.

The second part is the teaching preparation. Author mainly considers the two aspects: one is how to group, and the second is data collection before class. From the survey, almost all classmates chose the group which is divided freely and the number of the group is controlled by the 3-6, which is a more reasonable size. With regard to the data collection, Chinese students rely on the network to collect information, and fewer students are choosing teachers for advice. Teachers occasionally will offer English resources like learning websites, audio and video for reference. However, Taiwan students are far more dependent on the teachers to provide information rather than looking for information on the network by themselves. Summarizing, Chinese students do better at class preparation process, but teachers in China do not usually collect network resource in advance such as some useful websites, video, text, and other information to be shared with students.

How to use cooperative learning in the classroom is the most important aspect of cooperative learning. As can be seen from the survey, grouping is universal, but the teachers will appoint group leaders and consisting of the specified task. But upon completion and evaluation, Chinese students can take the form of face-to-face discussions, and the results are evaluated by the teacher. Taiwan students are using online discussions and face-to-face form and there are teachers and students work together to evaluate scores. We can see

that teachers full certainly have awareness of cooperation learning in the class. They think teachers should guide students in the discussion of process. Second, teacher' guidance is limited.Teachers of participation will produce effects. It sometimes makes students feel embarrassed or fear expression himself of the idea. Therefore, in most cases, teachers did not participate. There's no doubt that today's college classrooms have multimedia, which plays a supplementary role for students' cooperative learning.

**Data Analyses and Discussion of Interview**

The follow-up interview is consisting of five questions, aiming at finding out why the learners have made certain choices in the above questionnaire investigation.Author invites ten students from China Three Gorges University to ask five questions about cooperative learning under the multimedia network. It is conducted in the form of free talk so as to create a comfortable and friendly atmosphere, in which the students can talk whatever they want to say. Besides, author sends an E-mail about cooperative learning to ten students in Taiwan I-Shou University. The interview is concerned with participants' knowledge and attitude toward cooperative learning under the multimedia network. The author also combines the analysis and discussion with the precious section: learners hold the view that cooperative learning under the multimedia network can provide them with more opportunities to experience new learning styles. We can infer why participants hold positive attitude toward cooperative learning under the multimedia network. They regard the cooperative spirit as the essential to survive the society at the present time. However, some learners complain that what they have got form cooperative learning under the multimedia network cannot live up to what they have spent on, which means they spend more but get little. When participants were asked about studying online, their answers differed: especially some low-level ones complain that they are bewildered about the rich contents and wish that the teachers assign specific tasks for them to finish. They need the teachers to show the key points, important contents to which they should pay much

more attention to. While some suggest that they are interested and excited about the rich resources in the computers and online, they can learn fruitfully at anytime. Sometimes, when they are confronted with confusing problems in they can just pull out their mobiles, open Wechat or Facebook and send a post on moments of Wechat or Facebook. Then, they can get responses and get confusion resolved. If problem still unsolved, they can just send a text or video message to their teachers, through which way, communication between students and teachers has been greatly increased.

## DISCUSSION

The theory of cooperative learning in college English has developed considerably, but problems still exist in practice. In particular, the development of information technology and the popularity of the network open up new paths for cooperative learning in the college English (Li Jiancang, 2004). Through comparing Taiwan and China mainland university's study of cooperative learning in English, the analysis shows that there are still some problems of cooperative learning under the multimedia network.

Based on the analysis above, we can conclude that equipped network device in university is universal, so students and teachers have access to computers for learning and teaching. University teachers obtain some computer skills, and students also have more extensive computer knowledge. Second, teachers use cooperative learning under the multimedia network to help students learn English. College students also are better adapted to utilize multimedia resources for collaboration learning.Comparing with Taiwan university, China mainland university has many advantages in cooperative learning under the multimedia network. Certainly there will be some problems.For example, currently teachers in China mainland who adopted the cooperative learning is carried out students in small groups.Before the class, the teacher layout problems for students in groups and asked students to check data on the net, and then present the results of tasks.So, this approach raises a lot of problems.Before the group cooperation learning, teachers lack the needed attention, and it is not clear for students what is the purposes and steps of cooperation learning and students do not understand what they will learn and how to prepare.They just check information from online to meet the teacher's request. Teachers cannot help students accurate to put unknown information and experience together, and select best of knowledge needed, as soon as possible to find solution problem.

The main reason that caused this situation is the difference of network equipment and resources. Taiwan university has the more completed platform Moodle for Internet resources and interaction between teachers and students. Nevertheless, the school on the Mainland is insufficient in this regard. For example, in some school computer room computers are antiquated and resources not updated in time. Second, Taiwan and the Mainland have the different education systems, which lead to mainland students in learning is more rigid, and the spirit of innovation is not enough. Taiwan students have active thinking, but they are more reliant on the teacher's help in learning. Moreover, these differences are mainly

due to the mainland and Taiwan for different understanding of the education.Education in Mainland and Taiwan is fully belong to different types.Taiwan, as an emerging democracy(not country), is quality-oriented education.Although their education exists some unsatisfactory areas and Taiwan's education reform movement is also contentious, we can clearly find that Taiwan is modern education in a democratic society, which emphasis on the individual inner development. While education in the mainland is still examination-oriented education. Although some educators advocate the way of education shifts to a quality education, from course designed to teaching methods, it is still examination-oriented education. The examination-oriented education can lead to students more annoyingly, and they will focus more on how to get higher scores.Therefore, we can see that in the cooperative learning lesson, Taiwan students are more willing to discuss and express their ideas, even they are willing to argue with teachers when they have different opinions.And mainland students focus more on the search for information and listen to teacher's opinions. Finally, teachers have different educational philosophy between the two sides, so teachers would take different ways in the class.Taiwan teachers prefer to cooperative learning to keep every student actively thinking in the class.Teachers think cooperative learning in the course will enable students to learn more knowledge. Mainland college class is more academic.Teachers tend to explain the text and are more willing make students to analyze the text so as to acquire knowledge.So they are likely to take the independent learning method. Even if teachers use cooperative learning approach, they always require students to search for data and information and display in the next class. They consider learned knowledge is more important.These differences in education cause the different performance in cooperative learning under the multimedia network in the two sides of the Taiwan Strait English major.

## CONCLUSION

The survey reveals that cooperative learning is widely used in university, which is conducive to the conduct of cooperative learning under the multimedia network. The author suggests some possible implications for administration and further development of cooperative learning under the multimedia network.Education institutes need to reconcile what is desirable and possible optimize the multimedia network for college English teaching and learning. Universities should also make an appropriate teaching goal and evaluation system and open some courses that are conducive to develop students' awareness and skills of gathering information from information technology. Teachers should be provided more opportunities to obtain technology education and professional development.

The following suggestions, the author hopes, can be made to create a benign cooperative learning environment to improve students' cooperative learning effectiveness under web-based environment in English learning.The first one is enriching resources on the Internet.Cooperative learning under the multimedia network requires a certain amount of resources on the Internets. The resources under this environ-

ment are much more than those in a traditional environment. Students can both use the learning software, the ready-made cooperative learning under the multimedia network activities and some original materials provided by the Internet, and also they can use the processed materials and activities made by teachers or the students themselves. For instance, they can use web page software to create their own teaching system.Furthermore, the teachers also should learn and improve their computer literacy like offering some user-friendly and easy inquiry systems to students; therefore, the students can choose and use material more conveniently. The resources under the multimedia network environment the resources on the Internet, but also Internet be greatly enriched by re-creation. Compared with cannot only keep the essence of the resources on can save students' energy spent on discriminating and selecting on the Internet. Besides, such kind of resources is more aim-oriented and is conducive to students' cooperative learning.Secondly, teachers should also choose suitable cooperative learning tasks to guide learners to participate in activities coming from the materials of the textbook which is recombined by teachers. They should arrange suitable cooperative learning tasks by processed analyzing mastering students' learning situation and choose the suitable "raw material" based on students prior knowledge and ensure individual accountability. The cooperative learning tasks satisfy "the zone of proximate development" so that they are conducive to promote students' development.

In conclusion, the author introduces computing in English education field, and also provides some suggestions for improving the circumstances of learners' cooperative learning under the multimedia network, in which the author also brings out many other pedagogical technical requirements for the teachers.It is indicating that the development of computer and Internet doesn't replace the role of teachers but requires them to do more special and demanding jobs. After the students have acquired some kinds of knowledge and done enough practices under guidance and assistance, they may perform better when they carry out cooperative learning under the multimedia network. Teachers also play an important role. Because it has many limitations that could cause the learning process to be more complex than first thought, so it's not easy for the teachers to carry it out in foreign language teaching. Only when the group members participate actively in the activities and the learning group works well can the advantages of cooperative learning be seen and the effective learning be gotten. Therefore, it requires the teachers to practice cooperative learning repeatedly in classroom teaching and improve it to make it more perfect. It also mainly makes several recommendations for future research according to the major findings and the limitations of the present study. It was hoped that these recommendations could help future studies on the use of cooperative learning. On the one hand, further exploration of the comparison between Chinese mainland English majors' cooperative learning use is needed. It would be very valuable to conduct with larger samples from both mainland China and Taiwan, such as English majors studying at different universities or in different university grades. Further, more studies are needed to

examine other major students' cooperative learning use in both mainland China and Taiwan. On the other hand, further research might investigate the correlations between cooperative learning and the independent variables such as gender, age, years of prior English learning, proficiency self-rating, motivational orientation, and so on. It would be fruitful to compare these variables' different effects in different learning environments such as mainland China and Taiwan.

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*A Comparative Study on Cooperative Learning in Multimedia and*
*Network Environment Used by English Majors between China Mainland and Taiwan*

**135**

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