



วารสารอิเล็กทรอนิกส์
ทางการศึกษา

OJED, Vol. 17, No. 1, 2022. Article ID: OJED-17-01-019

Article Info: Received 12 November 2021; Revised 26 November, 2021; Accepted 29 November, 2021

OJED

An Online Journal
of Education

www.tci-thaijo.org/index.php/OJED

ผลของการสอนแบบเรียนรู้ร่วมกันในลักษณะออนไลน์ต่อความสามารถในการสื่อสารด้วยวาจาเป็น ภาษาอังกฤษของนักเรียนชั้นมัธยมศึกษาตอนต้นที่ใช้ภาษาอังกฤษเป็นภาษาต่างประเทศ

The Effects of Using Online Collaborative Learning on English Oral Communication Ability of EFL Lower Secondary Students

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บทคัดย่อ

การศึกษาค้นคว้าครั้งนี้มีวัตถุประสงค์เพื่อ 1) ศึกษาผลของการสอนแบบเรียนรู้ร่วมกันในลักษณะออนไลน์ (online collaborative learning) ต่อความสามารถในการสื่อสารด้วยวาจาเป็นภาษาอังกฤษของนักเรียนชั้นมัธยมศึกษาตอนต้นที่ใช้ภาษาอังกฤษเป็นภาษาต่างประเทศ และ 2) ศึกษาความคิดเห็นของนักเรียนต่อการสอนแบบเรียนรู้ร่วมกันในลักษณะออนไลน์ กลุ่มตัวอย่างคือนักเรียนชั้นมัธยมศึกษาปีที่ 3 จำนวน 30 คน จากโรงเรียนเอกชนแห่งหนึ่งในจังหวัดพระนครศรีอยุธยา ใช้วิธีเลือกโดยการสุ่มตามสะดวก เครื่องมือที่ใช้ในการศึกษาค้นคว้าคือ แบบทดสอบก่อนและหลังเรียน และการสัมภาษณ์ความคิดเห็นต่อการสอนแบบเรียนรู้ร่วมกันในลักษณะออนไลน์ การวิเคราะห์ข้อมูลใช้ paired-sample t-test, ค่าเฉลี่ย, ส่วนเบี่ยงเบนมาตรฐานและการวิเคราะห์เนื้อหา ผลการศึกษาค้นคว้าพบว่า ความสามารถในการสื่อสารด้วยวาจาเป็นภาษาอังกฤษของผู้เรียนเพิ่มขึ้นอย่างมีนัยสำคัญทางสถิติที่ระดับ .01 และผู้เรียนส่วนใหญ่มีความคิดเห็นในทางบวกต่อการเรียนรู้ร่วมกันในลักษณะออนไลน์

คำสำคัญ : การสอนแบบเรียนรู้ร่วมกันในลักษณะออนไลน์, ความสามารถในการพูดภาษาอังกฤษ, การเรียนการสอนแบบออนไลน์

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Abstract

This study aimed to 1) investigate the effects of online collaborative learning in enhancing the English oral communication ability of EFL lower secondary students, and 2) explore the opinions of EFL lower secondary students towards the use of online collaborative learning. The participants of this study were thirty 9th grade students studying at a private school in Phra Nakhon Sri Ayutthaya province and were selected based on convenience sampling. The current study employed one group pre-test and post-test design. The research instruments utilized were pre-test, post-test, and semi-structured interviews. The data analysis employed the statistics of paired-sample *t*-test, mean, standard deviation, and content analysis. The results of this study indicated that the English oral communication ability of the students significantly improved after the implementation of online collaborative learning instruction ($p = .01$), and most participants had positive opinions towards online collaborative learning.

Keywords: online collaborative learning, oral communication ability, online learning

Introduction

English has now become the language of international communication (Kirkpatrick, 2007). It is a crucial tool for communication in different situations and exploring knowledge to move forward with the change of society resulting from the digital age in the 21st century (Sakulprasertsri & Vibulphol 2014). Apart from four language skills, oral communication ability seems to be a priority of various second language learning since it is the most basic medium of human communication (Gold et al., 2011). Moreover, oral communication ability allows speakers to express all knowledge they have learned to others (Harmer, 2007). Thus, oral communication ability has been considered an important part of English language instruction.

However, the oral communication ability of Thai students has been found to be a problem (Choomthong, 2014; Karnnawakul, 2004; Kimsuvan, 2004). For instance, Thai students have oral communication problems when they have to speak English in class (Arunsirot et al., 2019; Olivares, 2020; Nilnopakoon et al., 2015). According to the study by Olivares (2020), lower secondary students have limited English speaking ability to use English in the classroom. Apart from lacking speaking ability, Arunsirot et al. (2019) found that lower secondary students lack interest and motivation in learning English and lack opportunities to use English in daily lives so these may be the reasons that make them not be able to speak English efficiently. Therefore, according to these studies, the English oral communication ability of Thai students should be improved.

Researchers discovered various theories regarding the aspects of oral communication ability, in the same way, Goh & Burns (2012) proposed three key components for increasing oral communication ability which are *Knowledge of Language and Discourse*, *Core Speaking Skills*, and *Communication Strategies*. According to Goh & Burns (2012), knowledge of language and discourse concerns the production of the sound patterns of language which means being able to pronounce the language intelligibility at segmental and suprasegmental levels, knowing grammar and vocabulary, and discourse and genre. The second component is core speaking skills. There are four broad categories of core speaking skills: pronunciation, speech function, interaction management, discourse organization. The last component is communication strategies which refer to the development of cognitive strategies to compensate for the limitations in language knowledge, metacognitive strategies, and interaction strategies in order to handle the communication breakdowns.

In Thailand, the Ministry of Education had implemented the Common European Framework of Reference of Languages (CEFR), an international standard for describing language ability, to reform both learning and teaching English across the country (Office of the Minister, 2016). The implementation of the CEFR was divided into six levels which are A1, A2, B1, B2, C1, and C2. Meanwhile, A2 is equal to the ability of lower secondary students (The Ministry of Education, 2014). According to the level of students and the implementation of the CEFR in Thai education, the present study will evaluate students' English oral communication ability in only two categories from the knowledge of language and discourse component which are grammatical knowledge and lexical knowledge, one category from core speaking skills which is pronunciation, and one communication strategy which is interaction. The Cambridge A2 Preliminary Assessment Scales were adopted in order to assess three individual criteria: 1) Grammar and Vocabulary, 2) Pronunciation, and 3) Interactive Communication.

To conduct English speaking instruction, various approaches have been applied, such as Task-based Instruction, Content-based Instruction, or Communicative Language Teaching. Interestingly, Online Collaborative Learning (OCL) is another approach that could encourage learners to use the language to communicate in an online environment.

Online Collaborative Learning (OCL) is a combination of collaborative learning and online learning. To clarify, Collaborative Learning (CL) is grounded in Vygotsky's social constructivism. In it, Vygotsky (1962) postulated that social interaction is of great importance when it comes to learning. Among his theories is the zone of proximal development (ZPD),

the zone where students can learn with help of the teacher or peers (scaffolding). Meanwhile, online learning refers to the process of learning which includes the access of content and resources, learning materials, activities, tasks, assessment, and making interaction with teachers and other learners through digital technologies in the online environment

According to Harasim (2012), Online Collaborative Learning (OCL) is the integration of both constructivist approaches to learning and the development of the Internet. It has led to the development of a particular form of constructivist teaching, originally called Computer-Mediated Communication (CMC). OCL provides a model of learning in which students are encouraged and supported to work together to create knowledge by inventing, exploring ways to innovate, doing, and seeking the conceptual knowledge needed to solve problems. Harasim (2012) proposed three key phases of knowledge construction through discourse. The idea generating stage encourages learners to brainstorm to collect the divergent thinking within a group. The idea organizing stage pushes learners to compare, analyze, categorize the different ideas previously generated through discussion or argument. The intellectual convergence advocates learners to reach a level of intellectual synthesis, understanding, and consensus (including agree to disagree) through the joint construction of piece of work such as an assignment.

In this study, the OCL approach was implemented in an English speaking course for lower secondary students. The three key phases of knowledge construction in OCL should be able to allow students to achieve learning outcomes and English oral communication ability (Badr, 2020; Wang, 2020; Jeong, 2019).

Recent studies presented that OCL approach represents a crucial change from teacher-centered instructional practice and has increasingly become an option of instructional approach in both face-to-face and online education settings because of several positive effects on students' outcomes and students' attitudes (Badr, 2020; Wang, 2020; Marimuthu et al., 2017; Ramos, 2020; Jeong, 2019; Chiu et al., 2010; Graham & Misanchuk, 2004).

Whereas most studies on OCL focus on English writing and reading among undergraduate students, studies on the effects of OCL on oral communication ability among beginner or lower proficiency level students are still limited. Therefore, this present study attempted to fill this gap by investigating the use of OCL in the English speaking course for EFL lower secondary students to see its effects on the students' oral communication ability.

Objectives

This study pursued two objectives:

1. To investigate the effects of online collaborative learning in enhancing English oral communication ability of EFL lower secondary students.
2. To explore the opinions of EFL lower secondary students towards the use of online collaborative learning.

Methodology

Research Design

This study employed a one-group pre-test and post-test research design.

Participants

The participants of this study were thirty 9th grade students studying in a regular program in a private school in Thailand. The age group of the participants ranged from fourteen to fifteen years. The students comprised ten males and twenty females who enrolled for the English-Speaking Course, an additional course for lower secondary students. They were an intact group and selected based on convenience sampling. In addition, six students were selected as participants for the interview. The selected students were based on their post-test scores (two high achievers, two medium achievers, and two low achievers).

Research Instruments

Oral Communication Test

To investigate the effects of online collaborative learning on English oral communication ability, an English oral communication ability pre-test and post-test were conducted online with EFL lower secondary students. This study adapted a speaking test from the Cambridge English Assessment speaking test for A2. The A2 key qualification refers to the ability to use English to communicate in simple situations which is suitable for EFL lower secondary students (Cambridge Assessment English, 2020). The researcher worked as an interlocutor with one co-teacher who worked as an assessor. The participants were assessed by using a holistic rubric adopted from the Cambridge A2 Preliminary Assessment Scales (Cambridge Assessment English, 2020) to evaluate their English oral communication ability. The criteria assessed three individual criteria: 1) Grammar and Vocabulary, 2) Pronunciation, and 3) Interactive Communication. These assessment scales were divided into six bands from 0 to 5, with 0 being the lowest and 5 being the highest. It was validated by three experts, using IOC (Item-Objective Congruence), yielding 0.67, which indicated validity. As for reliability, the Cohen's Kappa inter-

rater reliability was employed to examine the consistency between two raters using the holistic rubric adopted from the Cambridge A2 Preliminary Assessment Scales (Cambridge Assessment English, 2020). The result of applying the Cohen's Kappa interrater reliability is 0.82. It implied that the two raters had an almost perfect agreement (McHugh, 2012).

Interview Questions

To seek the opinions of EFL secondary students towards online collaborative learning, the semi-structured interview was conducted on the eleventh week of the study after the completion of the post-test. The selected participants were asked to participate in the interview for eight to ten minutes per person. To ensure the quality of the interview questions, three experts were asked to evaluate the instruments by using IOC (Item-Objective Congruence), yielding 0.67, which indicated validity.

Instructional Instruments

The content of the course was based on the English standards of the revised version of Basic Education Core Curriculum B.E. 2560 (A.D. 2017). The materials were adapted from Aim High Student's Book 3 textbook, videos, and instructional materials such as photographs, recorded voices. There were nine online collaborative learning teaching English oral communication lesson plans that covered nine teaching weeks. The duration of each lesson plan was ninety minutes. The online collaborative learning teaching English oral communication lesson plans were taught by online collaborative learning principles. It was validated by three experts, using IOC (Item-Objective Congruence), yielding 0.67, which indicated validity. To ensure that the lesson plans would work well, after validation, two lessons were rehearsed with another class of thirty 9th grade students who had similar characteristics, English proficiency, and educational background, with the participants of the study. According to the level of students, the teaching activity was conducted interchangeably in both Thai and English. The result of the pilot was that the students were able to understand the instruction of each activity and complete all activities in time.

Data Collection Procedure

The data collection procedure lasted for a total of eleven weeks. The lesson plans were divided into nine lessons with ninety minutes per period. The pre-test was administrated during the first week. During these eleven weeks, the participants had to participate in an online collaborative learning teaching English speaking course through Zoom meeting application and Google Classroom. The procedure of instruction was stated as follows.

Idea generating

The participants were encouraged to brainstorm about previous knowledge from the lesson learned, opinions, and ideas about the task with a small collaborative group. In this stage, the participants were required to discuss and interact with their peers.

Idea organizing

The participants began to compare, analyze, and categorize the different ideas previously generated through discussion.

Intellectual convergence

The participants reconstructed ideas and information through online collaborative tasks such as a presentation or role-play activities.

After the eleven-week implementation, the post-test was administrated in the last week. Following the post-test, the semi-structured interview was conducted to explore participants' opinions towards the use of online collaborative learning.

Data Analysis

The data analysis consisted of both quantitative and qualitative data. To investigate the English oral communication ability of the participants, the scores from the pre-test and post-test were analyzed by a paired-sample *t*-test. The quantitative data were calculated by using SPSS to measure means and standard deviation.

To analyze the qualitative data, the information from the semi-structured interview was analyzed through content analysis.

Results

Quantitative Data

The quantitative data were calculated using SPSS to measure the mean and standard deviation. The scores from the pre-test and post-test were analyzed by using a paired-sample *t*-test. The results are presented in Table 1.

Table 1

Result of post-test and pre-test for English oral communication ability

English oral communication ability	N	M	SD	Mean difference	t	df.	Sig.
Posttest	30	3.43	1.19	1.00	10.428	29	0.000**
Pretest	30	2.43	1.33				

**p* < .01

The results in Table 1 show the participants' post-test mean score ($M = 3.43$, $SD = 1.19$) and the pre-test mean score ($M = 2.34$, $SD = 1.33$). The total score of the two tests is 5. The mean difference is 1.00, T-value is 10.482, and the degree of freedom is 29. To clarify, the post-test mean score of the participants is higher than their pre-test mean score at the significant level of $p < .01$ after participating in the course.

Table 2 summarizes the results for each component of English oral communication ability and the details of the pre-test and post-test scores.

Table 2

Comparison of mean scores in English oral communication ability

English oral communication ability		Paired Differences		<i>t</i>	df	Sig. (2-tailed)
		<i>M</i>	<i>SD</i>			
Grammar and Vocabulary	Posttest - Pretest	1.133	1.008	6.158	29	0.000**
Pronunciation	Posttest - Pretest	0.600	0.932	3.525	29	0.000**
Interactive Communication	Posttest - Pretest	0.933	1.015	5.037	29	0.000**

* $p < .01$

Figure 1

Comparison between mean scores overall and in three aspects

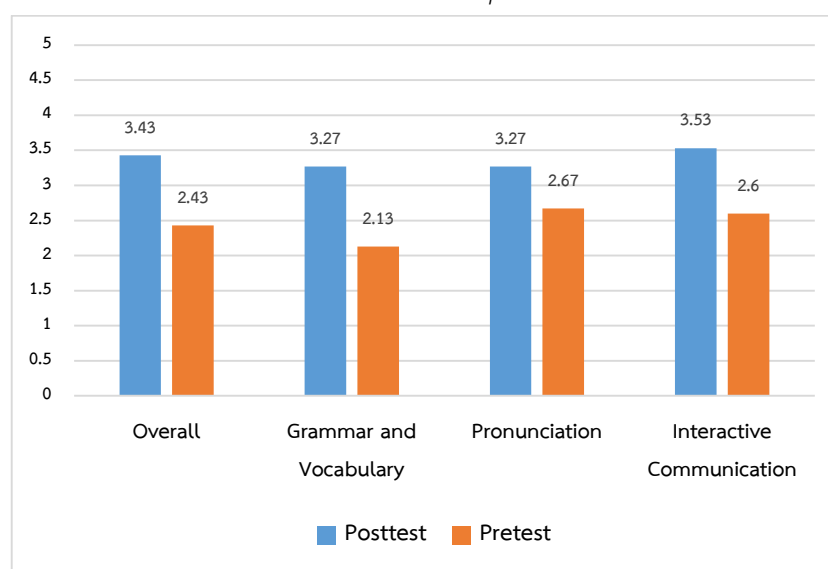


Table 2 and figure 1 illustrate that online collaborative learning significantly enhanced English oral communication ability in all aspects, including Grammar and Vocabulary, Pronunciation, and Interactive Communication at the significant level of .01.

Qualitative Data

To analyze the qualitative data, the interview was coded and categorized by using content analysis to capture student's opinions towards the use of OCL. The key themes emerged were 1) advantages of this approach, and 2) difficulties and limitations of learning through this approach.

For the first theme, advantages of this approach, the participants generally expressed their positive feeling towards OCL. They were satisfied with learning through this approach and they found OCL convenient to apply to their study lives at present. They encountered enjoyable learning experiences and they highlighted the benefits of the approach in increasing opportunities for them to practice English oral communication.

"I was happy to practice English conversation and had new experiences in online learning."

"I liked to learn English speaking and it was convenient and comfortable to study at home."

"Although we couldn't meet face-to-face, I enjoyed doing activities with friends."

"I enjoyed studying this course, and it was fun to practice English speaking through online learning."

"It was fun to practice various English-speaking skills. I improved my self-confidence and leadership skills in doing group activities."

However, some participants also mentioned some difficulties and limitations they encountered while learning through this approach. First, a few students expressed their fear and lack of confidence when they have to speak English in class. Nevertheless, these problems seem to be diminished afterwards.

"At first, I spoke with lack of confidence, but I think I improved a lot after studying this course."

"I was shy to speak, lacked confidence, and was afraid of making mistakes. But the activities made me feel more confident."

"My groupmates didn't want to practice speaking. I thought they might be shy or lack confidence because we didn't know one another. However, when we had to do more group works, we were more familiar with one another and could talk in English better"

In terms of limitations, some participants pointed out the inconvenience that they encountered while learning English oral communication through online collaborative learning. A few interviewees mentioned the problems of unstable internet connection or electricity problems.

“Sometimes, I couldn’t join the activity because of the unstable internet connection.”

“The power went out when I was studying, so I couldn’t catch up with friends.”

Discussion

The findings from the quantitative data indicated that online collaborative learning could significantly enhance the English oral communication ability of the students. This is consistent with several previous studies, for instance, (Badr, 2020; Wang, 2020; Marimuthu et al., 2017; Ramos, 2020; Jeong, 2019; Chiu et al., 2010; Graham & Misanchuk, 2004). These studies indicated that online collaborative learning allowed students to achieve English language skills.

English oral communication ability of the participants possibly increased after the implementation of the instruction because they were provided with sufficient opportunities to use English oral communication during online collaborative learning. In particular, three key principles of online collaborative learning (Harasim, 2012), idea generating, idea organizing, and intellectual convergence, were implemented in all teaching procedures. Throughout the online collaborative learning, students had a new virtual experience in which they learned to brainstorm, generate, compare, and reconstruct ideas and information online through the online collaborative tasks without time limitation and limited accessibility in sources of information. In addition, in this study, the teacher was a facilitator who provided information and assisted students. As suggested by Pozzi & Persico (2011), the teacher’s role should be to be a facilitator for students to complete their tasks, a provider of suitable tools and necessary materials, and a creator of criteria for individual and group work tasks.

Another possible factor that could lead to the improvement of participants’ English oral communication ability after learning through online collaborative learning is online collaborative learning tasks. Chocholatá & Babičová (2021) mentioned that online collaborative learning tasks significantly improved students’ English language skills including speaking. Furthermore,

students improved through zones of proximal development with the help of their groupmates or teachers by active learning, sharing, and implementing interpersonal skills, and building meaning in the language (Luzzatto & Dimarco, 2009). In this study, the participants were driven to participate and practice their oral communication ability through online collaborative learning tasks, involving practicing the required discussion and attentively responding to the speaking tasks. In addition, online collaborative tasks provided students with opportunities to participate and speak English in a nonthreatening environment where students had enough time for discussion with their groupmates, searched for information, checked vocabulary and grammar, and practiced their pronunciation before presenting to the class.

Interestingly, technological tools significantly supported online collaborative learning in enhancing English oral communication ability. New technologies were combined with a learning management system that provides students with a more active learning environment in which they can collaborate or connect with other classmates and teachers in a more interactive and engaging way (Lowenthal et al., 2014). Moreover, most young learners have no difficulties with using digital technology as they are considered digital natives (Joseph, 2020). In this study, a videoconferencing tool, Zoom meeting application, provided students with more practice time to acquire their oral communication ability and it allowed the teacher opportunities to observe students' speaking progress along with their presentation or online collaborative discussion.

The findings from the qualitative data analysis indicated that the participants reported positive feedback towards the use of online collaborative learning.

The participants were satisfied with learning through this approach and they found OCL convenient to apply to their study lives at present. They encountered enjoyable learning experiences and they highlighted the benefits of the approach in increasing opportunities for them to practice English oral communication. However, some participants also mentioned some difficulties and limitations they encountered while learning through this approach.

In conclusion, online collaborative learning could enhance students' English oral communication ability due to sufficient opportunities to learn, collaborate, and connect with their classmates and teachers through online collaborative learning principles and tasks. In

addition, online collaborative learning was reported to be an enjoyable, convenient, and helpful instruction.

Limitations and Recommendations for Future Research

Although the present study was successful in enhancing English oral communication ability after the experiment, some limitations were also discovered. As the participants in this study were willing to enroll in the course, it can be assumed that they had high motivation in learning. Therefore, the results of the study might be different if the participants enrolled in the course without motivation. Moreover, the present study was conducted in a short period of time (nine weeks of instructions). It was recommended that the time allotment could be extended to gain further results and perspectives on the effectiveness of online collaborative learning in enhancing English oral communication ability.

Finally, future research should explore whether online collaborative learning would be suitable for other aspects of English learning such as listening. In addition, it was recommended for further study to conduct a study with other levels of participants to explore the effectiveness of online collaborative learning with different groups of learners. Moreover, further study should investigate the effect of online collaborative learning on English speaking skills with other fields of education.

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