



Employing blended learning to enhance learners' English conversation: A preliminary study of teaching with Hitutor

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Abstract

Taiwanese learners find it hard to communicate with others in English in their daily lives because of living in an EFL environment. However, ICT and blended learning have recently been recognised as being beneficial to English learners who live in a non-English-speaking country due to the formation of a virtual native-like setting based on online learning. The purpose of this research is to assess whether teaching English conversation in both online and offline settings can improve learners' communicative performance as well as feedback from both instructors and learners. A pre-experimental method was used to investigate the effect of blended learning on the English speaking and listening performance of 136 participants, who were divided into 3 groups and invited to join an 18-week English conversation course based on both face-to-face teaching and online learning. The data was collected and analysed from the students' pre-test and post-test scores, a questionnaire survey and semi-structured interviews. As expected, the results indicated that blended learning had an overall positive effect on the students' English conversation performance. The students themselves had a positive attitude toward the blended course arrangement and agreed that blended learning supported their learning of English conversation, while the instructors also indicated that the online course had helped the students' learning of English conversation to some extent. However, more supportive policies are required for a more comprehensive implementation of blended learning. All in all, Hitutor was employed in this study to design a blended English conversation course and demonstrate its positive effect. Non-English native speakers can overcome the restriction of an EFL learning environment with both traditional lectures and ICT.

Keywords Blended learning · Hitutor · English conversation · Taiwan · CALL

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1 Introduction

Learning English has been a nationwide activity in Taiwan ever since 2001, when the Ministry of Education decreed that English was to be an obligatory course in primary education (Chern 2002; Chang 2006), which led Krashen (2003) to coin the phrase “English fever” to describe the crazy phenomenon of English learning in Taiwan. Subsequently, more and more English learning materials, as well as teaching methods, were introduced, especially those based on technology and the Internet, e.g. CALL, M-learning and blended learning, to bridge the gap between language teaching and learning, increase students’ motivation and provide teachers with more innovative teaching materials (Grabe and Grabe 2005; Azizinezhad and Hashemi 2013; Ghasemi and Hashemi 2011).

However, there are some factors restricting Taiwanese to practice English oral communication skills. Firstly, the English education in Taiwan is still deeply influenced by the traditional imperial examination system, which is rooted in the ancient Chinese culture (S. Chen and Tsai 2012; Wang 2016). Under this system, students’ every effort is accessed and defined by different tests. Most Taiwanese students believe that a high score in every subject will enable them to be accepted by a better school for future study, enjoy more educational resources and obtain a splendid job after completing their education. Hence, even though the Ministry of Education strongly emphasises that the purpose of English education in Taiwan is to train students in communicative skills so that they can better converse with foreigners, to some extent English teaching is still focused on grammar, reading and writing because students need to pass various examinations. In other words, Taiwanese students may have very little chance to improve their English speaking and listening skills because the Taiwanese entrance examination for higher education is not focused on testing their oral English, but only their ability to read and write English based on a pen-and-paper test (S.-C. Chen 2014). Secondly, since Taiwan is an EFL environment, the Taiwanese do not necessarily speak English in their everyday lives, and even if universities hire native English speakers to teach English, the ratio of local learners and foreigners is unbalanced. Therefore, English learners have very few opportunities to practice oral communication in English, either inside or outside school and their major learning focus is on reading and writing to some extent.

According to Hymes (1972), individuals’ ability to communicate successfully depends on their communicative competence and Vandergrift (2007) and S.-C. Chen (2014) both agree that English competence generally refers to four skills, which are listening, speaking, reading and writing. However, these skills are not equally used in everyday communication. Vandergrift (2007) proposes that listening is the most frequently-used skill (>45%), followed by speaking (30%). Although reading and writing are regarded as the two key competences in Taiwanese English education, they only occupy 16% and 9% of people’s communication respectively. This implies that Taiwanese English education needs to be reconsidered and reformed. In addition, Taiwan is a country in which English is a foreign language (EFL), which means that students have very few opportunities to talk to others in English, especially outside the classroom. Therefore, most Taiwanese have relatively weaker English listening and speaking competence than reading and writing because reading and writing skills are overly highlighted in schools. Besides, the lack of an English-speaking environment

makes it difficult for Taiwanese to frequently practice communication skills in order to internalise English.

Technology is believed to be the means to break this restricted learning environment because computer-assisted language learning (CALL) (Levy 1997) not only alters the educational setting, but also the style of the language education, especially in terms of foreign languages. Many authentic teaching and learning materials can be found on the Internet and it is easy for people in different places to communicate with each other online. Hence, computers have been used in language education for decades and this style of teaching and learning has been proved to benefit both instructors and learners (Asad et al. 2020; Tafazoli 2019). For instance, languages can be taught by introducing computers and other multimedia equipment in the class to make the teaching and learning more interesting. In addition, teachers are able to provide sufficient online materials to meet their students' needs from the abundant language-learning materials on the Internet, while students can study the subjects that match their interest. Learning that is partly undertaken with a computer and partly with face-to-face teaching is called blended learning (McCarthy and Murphy 2010; Zumor et al. 2013).

With the aim of improving Taiwanese learners' English communicative competence by providing them with an opportunity to converse with English speakers, CALL and blended learning (Garrison and Kanuka 2004; Bielawski and Metcalf 2003) were utilised to design and implement a course based on an online English-learning platform and physical face-to-face teaching in a private university in Northern Taiwan. Although many researchers have used different platforms to teach English (K. Liu 2017; Kabilan et al. 2010; Mulyono 2016; Lai et al. 2016), few can be found to have used blended learning with Hitutor. Since the purpose of this study is to assess the effectiveness of using Hitutor to enhance students' communication skills and collect the views of both teachers and students of the course design, three research questions were set and are shown in Table 1. The first question was designed to determine if blended learning has a positive influence on learners' English communication performance and the second was aimed to ascertain their view of learning English conversation based on blended learning. The last question was directed to the teachers to obtain their opinion of the effect of blended learning on students' English conversation. Therefore, in order to answer the first research question of whether blended learning has a positive effect on the English communicative competence of Taiwanese language learners, their performance was assessed before and after the treatment. A questionnaire consisting of statements based on a 5-point Likert scale was anonymously distributed to the participating students to answer the second research question concerning their view of learning English conversation using blended learning. Semi-structured interviews were additionally conducted with the instructors to answer the third research question by ascertaining their view of teaching English conversation using blended learning. The collected data was analysed using a paired sample *t* test for RQ1, means and one-way ANOVA for RQ2 and finally, a content analysis for RQ3.

The implication of the study is that creating a virtual native-like English learning environment with blended learning and ICT is an effective method to teach an English conversation course. A Hitutor online platform can positively enhance students' English speaking and listening skills to some extent. In addition, both instructors and learners provided good feedback in terms of the course being based on blended learning. Therefore, this method of learning can be a helpful solution to increase the

Table 1 Research Questions and Corresponding Actions

Research Question No.	Question	Action (data collection and analysis)
RQ1	Does blended learning have a positive effect on language learners' English communicative competence?	<ul style="list-style-type: none"> • Pre-testing and post-testing participating students before and after the blended learning course • Paired sample <i>t</i> test analysis
RQ2	What is students' view of learning English conversation using blended learning?	<ul style="list-style-type: none"> • Conducting a questionnaire survey of students based on a 5-point Likert scale • Means and one-way ANOVA analysis
RQ3	What is teachers' view of teaching English conversation using blended learning?	<ul style="list-style-type: none"> • Conducting a semi-structured interview with teachers • Content analysis

opportunity of learners in EFL countries to practice their English communication skills by interacting with native English speakers. Blended learning with Hitutor can enable teachers to both train students' self-learning abilities and improve their English speaking skills.

This paper is divided into five major sections, including an introduction, a review of the literature, the research methodology, findings and discussion, and finally some conclusions drawn from the study.

2 Literature review

The purpose of reviewing CALL and blended learning is to understand the concepts and advantages of them. The literature review process started from some related studies (Levy 1997; K. Liu 2017; McCarthy and Murphy 2010) and further extended through their references. It is suggested that a review of the theories of CALL and blended learning will be useful in addressing the research questions, as well as the introduction of Hitutor, the online platform used for the study.

2.1 Technology and language learning

The strong influence of technology on everyday life in this digital age can also be witnessed in language teaching and learning with computers playing a central role to facilitate and motivate learning and teaching on the educational stage. CALL, which is a synonym for computer assisted language learning, is defined as “the search for and study of applications of the computer in language teaching and learning” (Levy 1997). ICT or information communication technology is a new term that has been recently coined and entails a similar concept. According to Ratnaningsih et al. (2019), CALL has many advantages for the educational field; for example, students are able to actively master the target subject by doing learning tasks and they can try to solve learning problems by using a computer. They also indicate that the use of CALL can improve

learners' English speaking competence. Moreover, learning with CALL is beneficial to students of all genders and ages, and can be applied to all learning topics (Tafazoli 2019). It is additionally believed that the use of CALL or ICT can positively increase learners' motivation and inspire their autonomous learning behaviour (Grabe and Grabe 2005). Besides, CALL also provides language teachers with innovative suggestions for pedagogical design (Azizinezhad and Hashemi 2013). For instance, both learners and instructors have greater freedom to select the materials and the learning environment is shifted from a physical classroom to a virtual online course. Learners can autonomously assess authentic language learning materials that match their interest and engage in self-learning anywhere and at any time they are free (Ghasemi and Hashemi 2011). Moreover, CALL may change the traditional relationship between students and teachers in learning and teaching settings because the students take more responsibility in choosing what to learn (Bi and Shi 2019). Computers and the Internet overcome the limitation of space and provide ubiquitous learning (Ogata et al. 2004; Liu 2009). It is not necessary for teachers and students to meet in the same place because they can complete a lesson or finish a discussion online. Teachers are able to acquire the most up-to-date information to teach and students can combine their language learning with a discussion of current events worldwide.

In addition to computers, mobile technology cannot be overlooked because it not only improves people's interaction via an ICT evaluation (Pachler et al. 2010), but it is also widely used in language learning. MALL, which is an acronym of mobile assistant language learning, is deemed to be a sub-field of CALL (Bateson and Daniels 2012; Lin et al. 2019). The characteristic of mobile devices enables people to learn a language while they are on the move. For instance, English can be studied by reading different contexts or listening to English online during a train journey.

2.2 Blended learning

In addition to the development and popularisation of computational technology, the Internet and other multimedia equipment have been broadly employed in the education field to evoke students' learning motivation, engagement, and further their learning efficacy (Esani 2010; Edward et al. 2018). A course based on a combination of both online and offline learning is defined as blended learning (Zumor et al. 2013; Garrison and Kanuka 2004; Edward et al. 2018; Bi and Shi 2019). Anthony et al. (2019) remind us that students' abilities can be trained using blending learning that consists of traditional lectures, activities, synchronous and asynchronous information, various teaching and learning resources, online and offline assessments, and feedback. Furthermore, Bielawski and Metcalf (2003) observe that "blended learning focuses on optimising achievement of learning objectives by applying the 'right' learning technologies to match the 'right' personal learning style to transfer the 'right' skills to the 'right' person at the 'right' time". Hence, individual learners are motivated to learn a skill at the time they need to learn it and teachers can use the various virtual learning resources on the Internet to flexibly modify the teaching materials to meet learners' needs (Ju and Mei 2018). Moreover, the teaching time can be freely allocated to online learning and face-to-face tutoring so that learners' learning hours at school can be reduced (AlKhaleel 2019; Saltan 2017). Educational institutes can also develop a different kind of teaching via the Internet; for instance, some programmes may be based

on distance learning or e-learning and others on newly-formed learning platforms, such as the Khan Academy and Coursera.

Researchers have found many more benefits of blended learning. For instance, blended learning can efficiently increase students' engagement in different learning activities (N. Wang et al. 2019; Towndrow and Cheers 2003), e.g. discussions, reflection and interaction. CALL-based learning saves time because the time learners used to spend commuting and sitting in a classroom can be spent more productively on learning from an online course (Saltan 2017; McCarthy and Murphy 2010). Besides, Zumor et al. (2013) suggest that courses appropriately designed based on blended learning can close the gap between teaching and learning. Course instructors can more easily bring various topics that are of interest to students into the educational field due to the convenience of assessing online resources (N. Wang et al. 2019). Language learners can also rapidly obtain what they need using technology and online resources, e.g. an online dictionary and grammar lectures, for ubiquitous self-learning. Furthermore, technology can bring people from different regions together (Bly et al. 1993) so that individual learners can join others on the Internet to learn and have a discussion. Interacting with people from another culture online not only enhances students' English communication skills, but also widens their view of the world. The role of the teacher is to provide additional information when needed, support students' learning and evoke their motivation to learn. Anthony et al. (2019) propose that blended learning has a positive influence on instructors' teaching production, evaluation, methods of information delivery and motivation. In summary, blended learning has various advantages for both instructors and learners and overcomes the limits of time and space. The learning activities can take place at any time and in any place, when and where learners need to learn and would like to learn. Many researchers (N. Wang et al. 2019; Anthony et al. 2019; Zumor et al. 2013; AlKhaleel 2019; Lai et al. 2016) have demonstrated that blended learning can be an efficient environment for learners who have a positive attitude toward this teaching method.

2.3 Hitutor online college

The Hitutor online college (Hitutor) was established by Guanzhou Edison Education in 2010 as an online platform that provides one-on-one personalised English tutoring (Hitutor 2018). The diverse courses it offers aim to systematically promote learners' English language competence and Hitutor strictly selects certified and highly qualified English teachers as online tutors to ensure the quality of its ESL-like virtual learning environment across 17 countries. Students can book an online course with a preferred foreign tutor to learn English at a time that suits them. They need to take a placement test to determine their level of English proficiency for their first online course to ensure that they will be allocated to the right level going forward. Furthermore, learners can take Hitutor online courses via computers or mobiles, but they will have to set up a microphone before the course starts if using a PC, whereas the in-built microphone of a mobile is more convenient.

3 Methodology

In order to inspect the effect of blended learning (Garrison and Kanuka 2004; Yu 2008; Anthony et al. 2019; N. Wang et al. 2019) on learners' communicative competence and ascertain the opinion of both educators and learners of teaching and learning English conversation face-to-face and online, the Hitutor online course was used to conduct pre-experimental research, also known as a one-group pre-test post-test study, (Mertens 1998; Nunan 1992; Robson 2002) based on a pre-test and post-test comparison, questionnaire survey and interviews at a private university in Northern Taiwan for an academic semester of 18 weeks.

3.1 Research design and participants

Figure 1 presents the flow chart exemplifying the research design. One hundred and thirty-six English major freshmen, who had enrolled in the summer of 2019 joined the study. Before the class starts, they had been assigned to one of three different groups based on their entrance examination scores. Those who ranked in the top third were assigned to Class A ($N=49$), the middle third were assigned to Class B ($N=44$), and the remainder to Class C ($N=43$). Since all three groups took the blended learning course, they were all experimental groups; hence, there was no control group. At the beginning of the autumn term in 2019, all participating students were required to join the pre-test or placement test administered by Hitutor online college. Moreover, three qualified teachers who normally teach English-related courses in the English department of the University were tasked with arranging the designed blended courses during the term. This enabled them to plan the course contents to enhance individual students' English speaking and listening skills based on their various levels of English proficiency.

Besides, a power analysis (Cohen 2013) was used in this study to assess the power of the sample size to ensure the reliability of the statistical test. According to Faul et al. (2007), “the power of a statistical test is the probability that its null hypothesis (H_0) will be rejected given that it is, in fact, false.” In other words, researchers frequently apply a power analysis to experimental studies to help to avoid making Type II statistical errors. Therefore, a post-hoc power analysis (Cohen 2013; Faul et al. 2007; Zhang et al. 2019) was employed to test the power of the sample size ($N=136$) of the present study via the G*Power 3 statistical programme (Mayr et al. 2007) and the results are illustrated in Table 2. When selecting a post-hoc power analysis of a two-tailed matched pairs t -test with a sample size of 136, the t value is shown as 1.98, $d_z = 0.5$, $\alpha = .05$, and the power ($1-\beta$) is significant, since it is 0.99 ($1-\beta > 0.80$). This power analysis result indicates that the sample size of the present study is sufficiently powerful

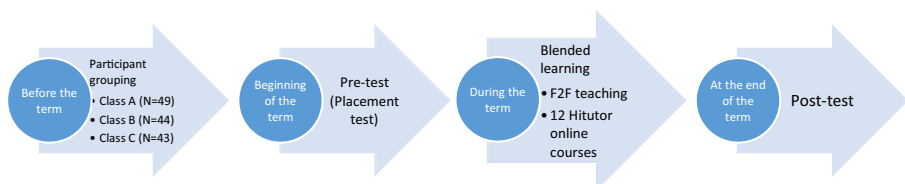


Fig. 1 Research design of the present study

Table 2 Post hoc power analysis result

Input:	Tail(s)	=	Two
	Effect size dz	=	0.5
	α err prob	=	0.05
	Total sample size	=	136
Output:	Noncentrality parameter δ	=	5.8309519
	Critical t	=	1.9776923
	Df	=	135
	Power (1- β err prob)	=	0.9999357

to avoid making Type II errors in a statistical analysis. In other words, the statistical results of this research are reliable.

During the experiment, participants not only joined the face-to-face teaching at school but they also need to take 12 Hitutor online courses autonomously on a regular basis. Each group was required to take the Hitutor online course at school every three weeks in rotation in order to provide a better understanding of the learning saturation with Hitutor. When a group of students were not scheduled to take the Hitutor online course at school, they were required to complete their online learning at home during the week. Each online session lasted for about 25 min. Students could make an appointment with a Hitutor teacher at their convenience to practice their English communication skills. After applying the Hitutor online course to the English conversation course for a term, the participating students were subjected to a post-test evaluation of the results of their learning to determine the likelihood of upgrading them to the next level of the online course.

3.2 Data collection

In order to answer the three research questions, the data was collected from the results of a pre-test and post-test administered by Hitutor on the online learning platform, as well as from questionnaires distributed to participating students and semi-structured interviews with the teachers. At the beginning of term, all the participating students were required to take the placement test, which was also the pre-test, at school. Their performance in the placement test decided the level to which they were assigned from the 1st to the 9th. They began each online course by being taught to speak and listen to English at the level commensurate with the previous course. After completing the 12 online courses, the students were subjected to a post-test at the end of the term.

After the post-test, an online questionnaire was distributed via google sheet in order to investigate the students' learning experience and obtain some feedback about learning blended with Hitutor and school face-to-face teaching. The questionnaire contained 15 questions, three of which were multiple choice, to collect the students' demographic information. One was an open-ended question to obtain the students' suggestions and comments about the course arrangement and the others were statements designed with a 5-Point-Likert-type-scale, ranging from 5: Strongly Agree, 4: Agree, 3: Neutral, 2: Disagree, and 1: Strongly Disagree, to investigate the students' degree of agreement with the course setting. They were invited to complete the

questionnaire anonymously, indicate their view of the statements and provide some suggestions for a course based on blended learning. The Cronbach's alpha (0.919) of the questionnaire confirmed that it was a highly reliable research instrument (Gadermann et al. 2012; Tavakol and Dennick 2011).

Furthermore, the teachers were invited to comment on teaching English conversation with a blended learning arrangement in a semi-structured interview at the end of the term (Mertens 1998; Dörnyei 2007). The aim of these interviews was to ascertain the instructors' observation of students' learning behaviour on the Hitutor online platform and their opinion of the blended learning course design. Each interview lasted for about 30 min during which notes were taken and an audio recorder was used with the teachers' permission to avoid losing any of the information they shared.

3.3 Data analysis

Figure 2 demonstrates the methods for data analysis. Firstly, the scores of the students' pre-test and post-test were assessed using a paired sample *t* test (C. S. Lin 2014; Lind et al. 2006) in order to determine if their English conversation performance had improved. Therefore, the hypothesis for a pre-test and post-test comparison is that the participating students' post-test scores were greater than their pre-test scores (H_1 : post-test score > pre-test score). Alternatively, the null hypothesis is that the participating students' post-test scores were equal to or less than their pre-test scores (H_0 : post-test score \leq pre-test score). As the alternative hypothesis presents an upward trend, a one-tailed paired sample *t* test was definitely used in the assessment (Lind et al. 2006). Since the significance level was set at .05 for all the statistical tests in this study, the null hypothesis was rejected and the alternative hypothesis was supported when the one-tailed *P* value was less than .05. The first research question could be answered by this comparison.

To answer the second research question, the data collected from the questionnaire was firstly analysed via the mean score of each statement to understand the participating students' attitude toward an English conversation course based on blended learning (S.-L. Chen and Wu 2009; Wang 2016). A mean greater than the neutral value of 3 and close to 5 would imply that the participant had a positive attitude toward the statement; on the contrary, a mean less than 3 and close to 1 would indicate a negative attitude. The data from the questionnaire was also tested using a one-way ANOVA in order to determine whether students in different groups had diverse opinions of the course design (Ames and Archer 1988; S.-L. Chen and Wu 2009). Therefore, the hypothesis for the ANOVA test was that the participants in the three groups had different opinions of the course design (H_1 : $A \neq B \neq C$). In other words, the null hypothesis could be deemed as there being no difference among the three groups' perspective of the course

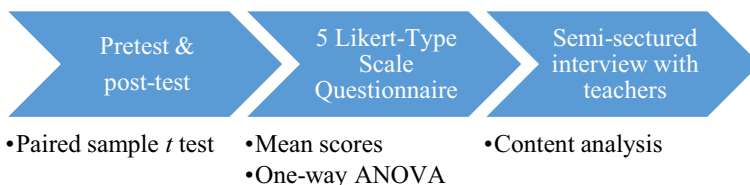


Fig. 2 Analysis methods for collected data

design ($H_0: A = B = C$). As mentioned earlier, the significance level was set at .05. Hence, if the P value was less than .05, the research hypothesis was accepted.

The third research question was expected to be answered by analysing the interview data via a content analysis (Krippendorff 2018; Dörnyei 2007). This involved firstly transcribing the data and then carefully examining, coding, classifying and reporting it in order to reveal the opinions and ideas of both the teachers and students of teaching and learning English conversation based on a blended learning course.

4 Findings and discussion

Since only 83 of the 136 participating students completed both the pre- and post-tests, the paired sample t test was based on 83 students' data. In addition, 108 of the 136 students completed a questionnaire; hence, the questionnaire data was analysed based on 108 responses.

4.1 Paired sample t test results

The first research question, does blended learning have a positive effect on language learners' English communicative competence, could be examined by a paired sample t test. The mean scores of all the groups in both the pre-test and post-test are shown in Table 3. It can be observed that the overall post-test mean is greater than the overall pre-test mean, but when examining the means among the three groups, Group A was surprisingly found to have a lower mean score in the post-test than the pre-test, while Groups B and C had a better score in the post-test than the pre-test.

After understanding the mean scores of the pre-test and post-test of each group, the results of the one-tailed paired sample t test are shown in Table 4. It is obvious from the overall results that there was a significant difference among the three groups between the pre-test and post-test ($t = -1.882, p < .05$). Therefore, the null hypothesis that the participants' post-test scores were equal to or less than their pre-test scores ($H_0: \text{post-test score} \leq \text{pre-test score}$) is rejected. In other words, the hypothesis that the participating students' post-test scores would be greater than their pre-test scores ($H_1: \text{post-test score} > \text{pre-test score}$), is supported. Interpreted together with Table 1, the overall

Table 3 Pre-test and post-test Means of all groups

Group		Mean	N	Std. Deviation	Std. Error Mean
A	Pre-test	4.6364	22	2.38139	.50771
	Post-test	4.4545	22	2.01724	.43008
B	Pre-test	3.9333	30	1.25762	.22961
	Post-test	4.3000	30	1.20773	.22050
C	Pre-test	2.0323	31	1.40200	.25181
	Post-test	2.4194	31	1.23218	.22131
All groups	Pre-test	3.41	83	1.988	.218
	Post-test	3.64	83	1.736	.191

Table 4 One-tailed paired sample *t* test results

Group	Paired Differences						t	df	Sig. (1-tailed)
	Mean	Std. Dev.	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
A Pre-Post	.182	1.790	.382	-.612	.975	.476	21	.320	
B Pre-Post	-.367	.718	.131	-.635	-.098	-2.796	29	.005*	
C Pre-Post	-.387	.667	.120	-.632	-.142	-3.230	30	.002*	
All Pre-Post	-.229	1.108	.122	-.471	.013	-1.882	82	.032*	

* The mean difference is significant at the 0.05 level

post-test mean (3.64) is better than the overall pre-test (3.41). Therefore, the results of the paired sample *t* test indicate that learning English conversation based on blended learning courses is certain to enhance learners' communicative performance (McCarthy and Murphy 2010; Saltan 2017; Ratnaningsih et al. 2019).

Nevertheless, in a detailed investigation, there was no significant difference between Group A's pre-test and post-test ($t = .476, p > .05$) but there was between both Group B and C's. One possible reason for this may be that the English proficiency of Group A participants was originally relatively better than that of the other two groups. One term of blended learning may be too short achieve more advanced learning; yet, it seems that blended learning had greatly and efficiently enhanced the communicative performance of Group B and C participants within the 18 weeks. In summary, learners who originally have relatively low English proficiency may efficiently improve their English conversation skills by taking a short-term blended learning course, whereas learners who have better English proficiency to begin with may need to become immersed in blended learning for a longer period for a significantly better learning outcome.

4.2 Questionnaire survey

The second research question, which was related to ascertaining the students' view of learning English conversation using blended learning, could be answered by inspecting the results of the questionnaire. The collected data was firstly assessed with the mean scores of each statement to determine the participating students' overall degree of agreement about various aspects of the course (S.-L. Chen and Wu 2009; Wang 2016).

The overall mean scores of each statement in the questionnaire and the means of each statement from each group are shown in Table 5. It is obvious that the overall mean of each statement is greater than the neutral value of 3. In other words, the participating students generally had a positive attitude toward the course design and use of blended learning to learn English conversation. This finding to some degree confirms the result of Tafazoli (2019) as they indicate different learners have similar attitude toward CALL learning. Moreover, the total mean score of "overall, I am satisfied with the experience of using Hitutor" was 4.11, indicating the students' positive satisfaction with the experience of the online course. Besides, the participants

Table 5 Mean scores of each questionnaire statement

Statement Group	N	Mean	Std. Deviation	Std. Error	
1. Overall, I am satisfied with the experience of using Hitutor.	A	32	4.09	.73	.13
	B	32	3.97	.86	.15
	C	44	4.23	.8	.12
	Total	108	4.11	.8	.08
2. I am satisfied with the operation of Hitutor.	A	32	3.94	.84	.15
	B	32	3.94	.8	.14
	C	44	4.11	1.02	.15
	Total	108	4.01	.9	.09
3. I am satisfied with the Hitutor teaching contents.	A	32	3.94	.76	.13
	B	32	3.97	.78	.14
	C	44	4.27	.79	.12
	Total	108	4.08	.79	.08
4. I am satisfied with the Hitutor teachers' qualifications.	A	32	4.	.72	.13
	B	32	4.	.92	.16
	C	44	4.3	.76	.12
	Total	108	4.12	.81	.08
5. I am satisfied with the blended teaching of Hitutor and school class.	A	32	3.97	.82	.15
	B	32	3.81	.82	.15
	C	44	4.32	.8	.12
	Total	108	4.06	.83	.08
6. I think the combination of school class and Hitutor online course is helpful and effective to my English learning.	A	32	3.84	.85	.15
	B	32	3.88	.79	.14
	C	44	4.18	.9	.14
	Total	108	3.99	.86	.08
7. I think my English listening and speaking are improved.	A	32	3.72	.68	.12
	B	32	3.75	.84	.15
	C	44	3.8	.82	.12
	Total	108	3.76	.78	.08
8. I can take the Hitutor online course regularly.	A	32	4.	.95	.17
	B	32	4.06	.98	.17
	C	44	4.14	.9	.14
	Total	108	4.07	.93	.09
9. I am willing to join this kind of online conversation course again.	A	32	3.84	.88	.16
	B	32	3.84	.95	.17
	C	44	4.14	.82	.12
	Total	108	3.96	.89	.09
10. I like to learn with online courses, e.g. Hitutor	A	32	3.69	.93	.16
	B	32	3.66	.79	.14
	C	44	3.89	.92	.14
	Total	108	3.76	.88	.09
11. I think the teaching speed of Hitutor online course is adequate.	A	32	3.19	.78	.14
	B	32	3.13	.79	.14

Table 5 (continued)

Statement Group	N	Mean	Std. Deviation	Std. Error	
C	44	3.16	.53	.08	
Total	108	3.16	.69	.07	

were inclined to agree with “I am satisfied with the Hitutor teachers’ qualifications” ($M = 4.12$), “I am satisfied with the Hitutor teaching contents” ($M = 4.08$), “I can take the Hitutor online course regularly” ($M = 4.07$), “I am satisfied with the blended teaching of Hitutor and school class” ($M = 4.06$), and “I am satisfied with the “operation” of Hitutor” ($M = 4.01$). Likewise, they believed that blended learning is able to effectively assist their English learning ($M = 3.99$) and they also considered that their English had improved ($M = 3.76$). The students’ learning motivation seems to have been inspired by blended learning (Esani 2010) because they pointed out that they not only liked to learn by blended learning ($M = 3.76$) but were also willing to participate in this kind of online course again ($M = 3.96$). The fact that the respondents could regularly take the online course also effectively evoked their motivation to learn. Additionally, the participants deemed that the online learning progress of Hitutor is adequate ($M = 3.15$). Remarkably, the means of each statement of Group C participants were slightly higher than those of the other two groups. This may imply that blended learning is more progressively influential to learners whose English proficiency is originally relatively lower than others. In summary, the results of the questionnaire indicated that the participating students’ experience of blended learning was a positive one and they would like to learn English with this method in the future.

Having determined the participants’ attitude toward a course design based on blended learning, the means of the three groups were further examined by a one-way ANOVA. The results are shown in Table 6, which indicates that the only significant difference ($p < .05$) among students in Groups A, B and C was their response to statement 5, “I am satisfied with the blended teaching of Hitutor and school class”. Therefore, the alternative hypothesis that the participants in the three groups would have a different opinion of the course design ($H_1: A \neq B \neq C$) was only partly supported because all the participating students had an identical opinion of all the statements with the exception of statement 5.

A post-hoc analysis was made of statement 5 using both Tukey HSD and Bonferroni criteria in order to acquire a more comprehensive understanding of this difference. The result is shown in Table 7 and it is obvious that there was a significant difference between the means of Groups B and C of statement 5, “I am satisfied with the blended teaching of Hitutor and school class”. In other words, the students in these two groups had a significantly different degree of satisfaction with Hitutor versus face-to-face teaching in the English conversation course.

The result of subjecting the data in Table 5 to a post-hoc ANOVA analysis were that Group B and C’s mean scores for “I am satisfied with the blended teaching of Hitutor and school class” were 3.81 and 4.32 respectively. Although there was a statistically significant difference between the two groups’ mean scores on the statement, they both absolutely referred to good feedback. This indicates that the students in Groups B and C had a positive attitude toward this statement, but those in Group C displayed an even

Table 6 One-way ANOVA results among different groups

Statement		Sum of Squares	df	Mean Square	F	Sig.
1. Overall, I am satisfied with the experience of using Hitutor.	Between Groups	1.252	2	.626	.975	.381
	Within Groups	67.415	105	.642		
	Total	68.667	107			
2. I am satisfied with the operation of Hitutor	Between Groups	.809	2	.404	.493	.612
	Within Groups	86.182	105	.821		
	Total	86.991	107			
3. I am satisfied with the Hitutor teaching contents.	Between Groups	2.679	2	1.339	2.212	.115
	Within Groups	63.571	105	.605		
	Total	66.250	107			
4. I am satisfied with the Hitutor teachers' qualifications.	Between Groups	2.276	2	1.138	1.779	.174
	Within Groups	67.159	105	.640		
	Total	69.435	107			
5. I am satisfied with the blended teaching of Hitutor and school class.	Between Groups	5.157	2	2.579	3.902	.023*
	Within Groups	69.389	105	.661		
	Total	74.546	107			
6. I think the combination of school class and Hitutor online course is helpful and effective to my English learning.	Between Groups	2.727	2	1.363	1.877	.158
	Within Groups	76.264	105	.726		
	Total	78.991	107			
7. I think my English listening and speaking are improved.	Between Groups	.113	2	.056	.090	.914
	Within Groups	65.628	105	.625		
	Total	65.741	107			
8. I can take the Hitutor online course regularly.	Between Groups	.351	2	.175	.198	.821
	Within Groups	93.057	105	.886		
	Total	93.407	107			
9. I am willing to join this kind of online conversation course again.	Between Groups	2.233	2	1.116	1.436	.243
	Within Groups	81.619	105	.777		
	Total	83.852	107			
10. I like to learn with online courses, e.g. Hitutor	Between Groups	.063	2	.031	.066	.937
	Within Groups	50.261	105	.479		
	Total	50.324	107			
11. I think the teaching speed of Hitutor online course is adequate.	Between Groups	1.215	2	.608	.773	.464
	Within Groups	82.526	105	.786		
	Total	83.741	107			

* The mean difference is significant at the 0.05 level

greater degree of agreement than Group B. A possible reason for the students in Group B to have relatively better English proficiency than those in Group C at the start of the experiment may be that the Group C participants had a more impressive learning experience with blended learning. When they learned in a face-to-face course, their English competence may have been too weak to finish a conversation in class, but

Table 7 One-way ANOVA post-hoc Analysis

Dependent Variable				Mean Difference	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
5. I am satisfied with the blended teaching of Hitutor and school class.	Tukey HSD	A	B	.156	.203	.723	-.327	.639
			C	-.349	.189	.159	-.798	.1
		B	A	-.156	.203	.723	-.639	.327
			C	-.50568*	.189	.023	-.955	-.057
		C	A	.349	.189	.159	-.1	.798
			B	.50568*	.189	.023	.057	.955
	Bonferroni	A	B	.156	.203	1.	-.338	.651
			C	-.349	.189	.201	-.809	.11
		B	A	-.156	.203	1.	-.651	.338
			C	-.50568*	.189	.026	-.965	-.046
		C	A	.349	.189	.201	-.11	.809
			B	.50568*	.189	.026	.046	.965

* The mean difference is significant at the 0.05 level

blended learning enabled them to simultaneously employ diverse technology and online resources to help them to learn and communicate (Bly et al. 1993). Besides, learners could be less anxious talking online where there is no physical contact than having a conversation in English based on face-to-face learning. Therefore, Group C participants may have had a better experience when learning online.

4.3 Teachers' view of the course setting

The interview data displayed some positive feedback from the participating teachers, as well as several suggestions about designing an English conversation course based on the Hitutor online platform and face-to-face teaching in the future. Accordingly, research question 3, what is teachers' view of teaching English conversation using blended learning, could be addressed.

4.3.1 Good features noted by participating teachers

The participating teachers identified some of the positive features of Hitutor during the interview. For instance, teachers A and C both expressed the opinion that the Hitutor online platform definitely provides students with more opportunities to practice English communication with foreigners, which inspires and motivates them to learn (Esani 2010; Bielawski and Metcalf 2003). As Teacher A (2019) explained:

Since there is only one foreign teacher in the department, students do not have many opportunities to practice their oral communication skills with foreigners. The Hitutor online platform can definitely solve this problem because students

have more chances to interact with foreigners in English by taking an online course. Some participating students really like to learn with Hitutor.

In addition, Teacher C (2019) observed that the students had simultaneously checked their vocabulary or grammar via their mobiles or other websites during the Hitutor online course, which helped them to complete the learning tasks online. Moreover, students' lexicon may be expanded by self-learning and their speaking may become more fluent by talking about various topics with English users on Hitutor for 18 weeks (Bly et al. 1993). Furthermore, participating teachers all thought that the duration of the Hitutor course was suitable for the students because most freshmen cannot concentrate for more than half an hour at this stage. In addition, teacher B pointed out that using blended learning was good for the students because they may gradually form the habit of autonomous learning and, in doing so, unconsciously raise their motivation to learn (Grabe and Grabe 2005).

4.3.2 Suggestions for improving the blended course with Hitutor

Nevertheless, the teachers also had some questions about using the Hitutor platform to teach English conversation. Firstly, Teacher B (2019) figured out that “the rubric of the Hitutor placement test is not transparent to the users so that she does not know whether students have been assigned to the appropriate level.” Similarly, some students find that the online courses are too difficult for them, which could imply that they have been wrongly placed. Furthermore, it is hard to assert that the students' English proficiency has been improved for the long term because the implementation of blended learning is too short for a more precise observation of their learning achievement. Thirdly, the teachers could not effectively check each student's online learning status because the students were assigned to different levels and various online courses. This made it hard to provide them with a series of teaching materials to support their online learning in the face-to-face class. Overall, the teachers thought that the blended learning course could have a positive effect on students' English oral communicative competence to some extent, but more supportive policies or studies were needed to make a comprehensive assessment.

5 Conclusion

The pre-experimental method (Nunan 1992; Robson 2002; Mertens 1998) was used in this study to examine the effect of blended learning on students' communicative performance in an English conversation course, as well as to obtain the opinions of both learners and teachers of the 18-week course design at a private university in northern Taiwan. 3 teachers joined the study and a total of 136 students, who were further classified into three groups. The data was collected and analysed via a pre-test and post-test comparison, a questionnaire survey of the students and semi-structured interviews with the teachers. Although no control group was set, the students' overall English communication performance had evidently improved by learning English conversation in the blended learning setting course. Moreover, based on the results of the questionnaire, the participating students had a positive attitude toward the course

design and thought that blended learning could enhance their English learning. They also believed that their English proficiency had improved after joining the blended learning experiment. The teachers also considered that the Hitutor platform is a good tool to train students in English communication skills because it provides them with more opportunities to talk with foreigners. However, they also indicated that the effect of Hitutor on students' long-term English competence remains unclear because of the short-term implementation of the blended learning English conversation course.

The results of this study correspond with the primary and previous studies related to CALL and blended learning (Grabe and Grabe 2005; McCarthy and Murphy 2010; N. Wang et al. 2019; Ogata et al. 2004; Saltan 2017; Towndrow and Cheers 2003). Students' learning achievement and motivation had improved to some extent after joining a course that combined face-to-face and online learning. Learners could not only practice their English communication skills with other English learners and speakers in the world, but also obtain immediate assistance from technology when learning online. Furthermore, the face-to-face teaching activity could reinforce and investigate students' learning. However, some limitations restrict the findings of the study. Firstly, it is suggested that future researchers in this field should set a control group to gather more convincing evidence of the benefits of blended learning with Hitutor. Secondly, the rubric of the Hitutor placement test is not transparent to users; hence, the participating teachers could not be sure that students had been properly allocated. Therefore, the Hitutor online platform should announce its placement rubric to users so teachers can support students' blended learning more efficiently. Besides, more effort should be made to make the design of the English conversation course more supportive and comprehensive in the future.

Data availability Not applicable.

Compliance with ethical standards

Conflict of interest The author states that there is no conflict of interest.

Code availability Not applicable.

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