Feature Article

Learners' Perceptions of Blended Learning and the Roles and Interaction of f2f and Online Learning

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Abstract:

The present study aims to probe into learners' perceptions of blended learning in relation to the respective roles of face-to-face learning (f2f learning) and online learning as well as their interaction in the blended EFL contexts. Questionnaires were used in the study to examine the attitudes of 296 university students towards a blended English course learned at the university. The results showed that students were generally positive about blended learning and they also acknowledged the interdependencies between f2f learning and online learning in the blended English course. The two learning modes were also considered to play different roles in English learning. Participants thought that online learning was more advantageous to listening and f2f learning promoted the learning of world knowledge and helped to improve learners' interests in learning English. The findings of the research shed light on how f2f and online learning interplay with each other in the blended learning context so that the learning environment can be better integrated for English learning.

Key words: blended learning, face-to-face learning, online learning

Introduction

Blended learning (BL) emerged as one of the most popular pedagogical concepts in higher education and in EFL contexts at the beginning of 2000 (Halverson et al, 2014). Scholars predict that blended learning will become the "new traditional model" or the "new normal" in course delivery (Graham, Woodfield & Harrison, 2011).

Researchers have tried to define "blended learning" in different ways. For example, Oliver and Trigwell (2005)

outlined three different kinds of blended learning: a combination of face-to-face and online learning, a combination of technologies, and a combination of methodologies. Neumeier (2005) regarded BL as a combination of face-to-face and computer-assisted learning in a single teaching and learning environment.

Osgathorpe and Graham (2013) defined blended learning as the combination of face-to-face (f2f) with distance delivery systems so that the benefits of face-to-face and online

methods can be maximized. They have actually suggested three models: blend of activities, blend of students in both face-to-face classroom and in online learning environment, and blend of instructors, which means students in face-to-face classroom can benefit from other instructors through online learning environment. As the term continues to develop, researchers tend to reach a consensus that blended learning refers to the integration of classroom face-to-face

learning experiences with online learning experiences (Owston, York, & Murtha, 2013).

Based on the definitions of blended learning,

researchers hold that blended learning usually consists of two main components: face-to-face (f2f) learning and online learning (Akkoyunlu & Vilmaz-Soylu, 2008; Drysdale et al, 2013: Gleason, 2013: Hubackova, Semradova & Klimova, 2011; Kern, 2006). F2f learning refers to the traditional environment where the instruction is conducted face-to-face between teachers and students in a contact teaching situation (Kaur, 2013; Neumeier, 2005). On the other hand, online learning allows learners to interact with learning materials, with or without the physical presence of peers and the instructor (Al-Qahtani & Higginst, 2013; Blake, 2011; Fryer et al, 2014).

The definitions of "blended learning", "face-to-face learning' and "online learning" vary a lot across different instructional contexts. In the present study, however, blended learning is defined as the combined instructional

environment where face-to-face learning and online learning are mixed within a single teaching and learning environment. Furthermore, face-to-face learning refers to the traditional classroom instruction where instructors and learners teach and learn face to face in physical classrooms. Online learning, then, refers to web-based and selfdirected learning either synchronously or asynchronously at computers. This involves the use of various virtual

> resources and tools such as online learning materials, chat, message boards, net meetings.

When it comes to its study in EFL contexts, blended

learning has also become an important concept. EFL researchers pointed out that the most important aim of a blended learning design is to find a better combination of the two modes of learning for the individual learning subjects, contexts and objectives (Neumeier, 2005). Sharma (2010) echoed this proposition by claiming that the overall focus of the research is concerned with the search for better practice, i.e., the attempt to identify the optimum mix of course delivery in order to provide a more effective language learning experience. In other words, it is actually more significant to investigate how blended learning can be more effective rather than whether it is more effective than other learning modes (Bonk in Zhan, 2009).

Literature review

Among numerous sub-areas of BL research, one of the common themes is

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participants' perceptions of blended learning, which incorporates perceptions, attitudes, preferences, expectations and learning styles. Review of relevant research in this area indicates that students were generally positive about the blended learning environment (Drysdale et al, 2013). Nevertheless, understanding how f2f and online learning interplay with each other to bring about more effective learning has remained somewhat blurred.

For example, Sagarra & Zapata (2008) investigated 245 second language Spanish learners' attitudes towards the pedagogy of blending four-hour classroom instruction with one set of online homework per week in relation to their scores of two different language assessment tests. Results revealed positive perceptions of students towards the blended environment in addition to a significant increase in grammar scores. The study emphasized the benefits of blended learning in terms of the easy accessibility to the material, userfriendliness, and instant error feedback. Besides, most students in the survey praised the usefulness of the online workbook in the blended environment for language learning, particularly in the areas of grammar and vocabulary acquisition.

Similarly, Owston, York, & Murtha (2013) studied 577 students' perceptions of blended courses in relation to their incourse achievement. Their perceptions were assessed in four areas: overall satisfaction with blended learning, convenience afforded by blended learning, sense of engagement in their blended course, and views on learning outcomes. Results showed that high achievers were the most satisfied with their blended course and they found the

course more convenient and more engaging. Compared with low achieving students, high achievers preferred blended format over fully face-to-face or online mode.

Another qualitative study conducted by Smyth, Houghton, Cooney & Casey (2012) also discovered several benefits and challenges of blended learning. Results showed that students appreciated the accessibility and flexibility that they thought characterized blended learning. Other benefits identified included greater freedom in planning their learning, more response in learning the content, and a better effect on learning the method. Despite some of the drawbacks like late feedback and poor internet connection, the study discovered that participants were generally positive about blended learning.

Together with other studies investigating perceptions of blended learning (Collopy & Arnold, 2009; Castle & McGuire, 2010; Farley, Jain, & Thomson, 2011), research findings in this area indicate that students favored blended learning as it combines the advantages of both face-to-face and online modes.

However, amongst numerous research articles that discovered students' preference towards blended learning are two studies that scrutinized the negative feelings of students towards blended courses. Stracke (2007) explored blended learning environment by focusing on three learners who left the class. Analysis indicated that students withdrew for three reasons: a perceived lack of support and connection or complementarity between the f2f and computer-assisted components of the blend; a perceived lack of usage of the

paper medium for reading and writing; and the rejection of the computer as a medium of language learning. With indepth scrutiny of the reasons why those students dropped out of the blended course, the researcher hoped that blended learning environments could be implemented more successfully in the future so that it would appeal to all learners.

Another study (Fryer, Bovee, & Nakao, 2014) investigated the role of motivation within the compulsory elearning component of a blended learning course at one Japanese university. The results of this longitudinal study revealed two key reasons for students' not engaging in the e-learning studies in the blended course: low task value and poor ability beliefs. Researchers suggested that classroom interventions could be undertaken to improve students' value for the online study component once students are identified as unmotivated. These findings suggest that poorly planned blended learning environment can result in lower satisfaction of students and eventually influence the fate of this type of course (Sagarra & Zapata, 2008).

It is held that students' preferences, together with their negative proposition, contribute to a complete picture in the area of blended learning research. In spite of its increasing popularity among instructors, researchers, and theorists, blended learning does not necessarily cater to every need of all learners, as learners vary in their performance, aptitudes, attitudes, motivation, expectations, and learning styles (Chandra & Fisher, 2009; Akkoyunlu & Sloylu, 2008; Chen & Jones, 2007). In addition, the positive effects of blended learning could be neutralized by

problems in the process of its implementation (Guzer & Caner, 2014). While most of the previous research tackles the overall perception of learners towards blended course as a whole, the present study targets learners' understanding of different roles of f2f and online learning and their interaction in a blended course, as well as whether and how the two learning modes complement each other as part of a whole to foster better practice.

Methodology

The goal of the study

The goal of the study is to probe into learners' perceptions of blended learning, especially of the respective roles of f2f learning and online learning, as well as their interaction across different areas of English learning. To be more exact, the present study intends to investigate three questions:

- 1) How do learners perceive blended learning, in this case, the blended English course?
- 2) How do learners perceive the interdependencies of f2f and online learning in the blended course?
- 3) What do learners think of the respective roles of f2f and online learning across different aspects of English learning?

The instructional design

The blended English course in question – The Integrative English Course is designed for non-English majors at universities. This blended English course lasts 36 weeks for a whole academic year. In basically every week, students have to complete

approximately four hours of classroom instruction face to face with teachers and two hours of web-based online learning by themselves in computer rooms. However, online exercises are also accessible after class in other places like dormitories if students cannot finish them in computer rooms.

The online learning program utilized by the blended English course includes various exercises ranging from listening, speaking, reading, and writing to exercises to prepare for the national English test. In addition to these learning resources, learner-learner interaction, learner-instructor communication, and feedback from instructors are also possible in virtual interaction areas on the learning center. However inclusive the online learning center is, students in the blended course are not required to cover everything offered to them there. Only some of the sections are compulsory, such as listening and reading, while others are optional, such as writing and speaking.

The f2f learning aspect of the course used traditional coursebooks, with 10 units in each volume and two longer reading passages in each unit, for the learning of vocabulary, sentence structure, reading comprehension skills, etc.

Participants

Participants were a total of 296 non-English majors at a university in southern China. All were attending the blended English course and were all first-year students at the same university. They were learning English in classes of similar sizes of around 50 students. In order to counteract possible bias in academic background, participants were mixed in their majors, which ranged from mathematics to financial management to business to journalism. When the investigation took place at the end of the second semester, the participants had all taken the blended English course for nearly one year.

As to the selection of the participants, the group of students volunteered to participate in the study. After the researcher made clear the nature and purpose of the academic research to students class by class, six classes (first the teachers and then the students) agreed to take part in the study. If either the teachers or the students refused to participate in the research, the entire class was then excluded. According to Wu (2012), a valid sample of a study should be 5 times of the number of questions in the questionnaire. The total number of 296 students in this study is more than 16 times of the 18 items in the questionnaire, which suggests that it is a valid sample.

Methods and instruments

The questionnaire in use (Appendix A) was adapted from the questionnaire in Sagarra and Zapata's (2008) study. The adapted questionnaire consists of 18 items that falls into four sections. The first section has only one question dealing with students' preferences to different learning modes in the course. Sections II and III respectively tackle the accessibility to the online learning system and the relationship between f2f and online learning. These two sessions contain 15 questions which students answered on a 7-point Likert scale. The last section includes 2 multiple-choice questions targeting the respective roles of the two learning modalities. To ensure that participants could understand the

English questionnaire properly, some terms, such as face-to-face learning and online learning, were given explanations in Chinese.

Data collection and analysis

Questionnaires were distributed to participants in class and then collected by the researcher after participants had finished them. Participants were assured

that the investigation was conducted solely for the purpose of academic research and would not affect their assessment in any way so that they

could respond to the questionnaire objectively and honestly. After all the questionnaires were collected, data was then input in the computer and then statistically analyzed with SPSS.

Results

Reliability of the questionnaire

The adapted questionnaire is comprised of two main kinds of questions. The first kind includes 15 questions on 7-point Likert scale and the second kind consists of 3 multiple-choice questions. Therefore, the reliability coefficient was calculated only on the 15 Likert-scale questions. The Cronbach's alpha value of these 15 questions was .822, which indicates that the questionnaire is a reliable instrument for the study.

Results of the questionnaire Learners' preferences

The first section of the questionnaire had only one question investigating

learners' overall preferences to blended learning context. Results of the study revealed that the blended mode combining online learning with f2f learning was preferred by 58.8% of the total respondents. Comparatively, 33.4% of the participants liked f2f learning more and very few students (6.1%) favored online learning alone. Finally, a tiny proportion of students (1.7%)

claimed that they had no interest at all in either mode of the course. Obviously, more than half of the students preferred

the blended mode to either f2f or online mode alone

Accessibility to online learning

In section two, participants (N=296) responded to five questions on 7-point Likert Scale dealing with different aspects of accessibility to online learning. The mean scores of these items, ranging from 1 (very easy) to 7 (very difficult), revealed how well the students can access online learning. In particular, the means of completing online exercises (4.41) turned out to be the highest, followed by login (3.58), getting technical support (3.56) and instructions to exercises (3.03) while checking grades had the lowest means (2.61). The results indicated that it was quite easy for learners to check grades and understand instructions to online exercises but they had some difficulty in getting technical support and login. Completing online exercises proved more challenging than the other four aspects.

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In this part, altogether 10 questions on 7-point Likert scale were designed to explore students' perceptions of the independencies between face-to-face and online learning, an area which is underresearched in the realms of BL (Drysdale et. al., 2013). Table 1 shows the results of the descriptive data of this part. Items 7 to 9 show that most of the students agreed that f2f learning assisted online learning (81.1%) and f2f learning made online learning more interesting (64.2%) and more effective (79.1%). In similar vein, students were also positive towards online learning's influence on f2f learning. As shown in items 12-14, the majority of learners said that online learning facilitated f2f learning (82.8%) and made it more effective (79.1%). However, fewer participants (58.5%)

were sure that online learning made f2f learning more interesting.

Learners' approval was validated by their responses to another four questions. In items 15 and 16, they reported that f2f and online learning of the blended course were related (82.4%) and were complementary to each other (87.1%). Such attitudes were further proved by the two reverse items (10 and 11), to which most of students disagreed. In short, f2f and online learning, in learners' views, were integrated well to benefit each other within a blended learning environment. The majority of students also regarded the two learning modes as helpful and complementary to each other since they made each other more interesting and more effective.

TABLE 1
Learners' Perceptions of the interdependencies between f2f and Online Learning

Items	strongly agree (%)	agree (%)	somewhat agree (%)	somewhat disagree (%)	disagree (%)	strongly disagree (%)	no opinion (%)
 F2f learning helps me with online learning 	9.8	40.2	31.1	5.7	6.8	2.0	4.4
 F2f learning makes online learning more interesting 	7.1	23.3	33.8	11.5	16.6	2.4	5.4
F2f learning makes online learning more effective	12.2	37.2	29.1	10.5	7.4	1.7	2.0
 The two parts of learning are independent of each other. 	4.4	9.5	12.8	15.5	44.3	12.2	1.4
11. The two parts of learning make each other worse.	4.4	2.7	5.7	6.8	57.8	22.6	0
12. Online learning helps me with f2f learning.	9.5	39.5	33.8	8.8	4.4	2.4	1.7
 Online learning makes f2f learning more interesting. Online learning makes f2f 	4.4	19.6	34.5	17.6	17.2	2.0	4.7
learning more effective.	9.5	36.5	33.1	10.5	7.4	0.3	2.7
15. The two parts of learning are related to each other	11.8	47.0	23.6	8.1	6.8	2.0	0.7
The two parts of learning are complementary to each other.	9.1	43.2	34.8	6.1	3.4	1.4	2.0
Total:							100%

The respective roles of f2f and online learning in the blended English course In order to survey more clearly how f2f and online modes facilitate learning within the course, the study probed into students' understanding of the respective roles of the two learning modes. In this section, there were two questions to

which participants were allowed to choose more than one item. Table 2 lists multiple responses of students to the roles of online learning and Table 3 lists relevant data on the roles of f2f learning. As indicated in Table 2, 93.2% of students thought that online learning helped to improve listening, making

TABLE 2
The Roles of Online Learning in the Blended English Course

Items	Number of the item responses	Percentages against the total responses	Percentages against the total sample subjects
Improve listening	276	25.2%	93.2%
Improve vocabulary	187	17.0%	63.2%
Learn world knowledge	151	13.8%	51.0%
Improve reading	119	10.8%	40.2%
Improve speaking	108	9.8%	36.5%
Practise methods and skills	107	9.8%	36.1%
Learn methods and skills	63	5.7%	21.3%
Improving interests in learning English	61	5.6%	20.6%
improve writing	25	2.3%	8.4%
Total:	1097	100.0%	370.0%

TABLE 3
The Roles of f2f Learning in the Blended English Course

Items No	umber of the Per	e Percentages against Percentages against					
	item r	esponses the to	tal responses	the total sample subjects			
Improve vocabulary	242	16	.9%	82.0%			
Learn world knowledg	e 193	13	.5%	65.4%			
Improve listening	185	12	.9%	62.7%			
Learn methods and ski	lls 178	12	.4%	60.3%			
Improve reading	175	12	.2%	59.3%			
Improve speaking	174	12	.2%	59.0%			
Improving interests in Lear	ning English 137	9.6	5%	46.4%			
Practise methods and s	kills 119	8.3	3%	40.3%			
Improve writing	29	2.0	0%	9.8%			
Total:	143	2 10	0.0%	485.4%			

listening, in their eyes, the most beneficial aspect of online learning. Then over half of students considered that online learning had helped to enlarge their vocabulary (63.2%) and enrich their world knowledge (51%). More than one third of learners agreed that online learning had helped them improve their reading (40.2%) and speaking (36.5%) while 36.1% said it helped them to practice various learning methods and skills (36.1%). However, less than one quarter of the respondents reported that online lessons had helped them to learn methods and skills (21.3%) or had improved their interest in learning English (20.6%). Finally, only a tiny proportion of participants (8.4%) thought that online learning had benefitted their writing, which ranked the lowest in the list.

Therefore, Table 2 suggests that listening, in students' views, had benefited the most from online learning, followed by vocabulary, world knowledge, reading, speaking, practicing and learning methods and skills, improving learners' interests in learning English, and finally writing.

Table 3 shows data on the roles of f2f learning. Similar to online learning, f2f learning was also believed to play the greatest role on the same three aspects of learning: learning vocabulary (82%), world knowledge (65.4%), and listening (62.7%); however f2f vocabulary instruction, not listening, was the area

seen as most beneficial. Between 40% and 60% of learners said that f2f learning benefitted most other skills, while the its impact on writing turned out to be the lowest (9.8%) in the group.

To investigate more clearly the different roles that f2f and online learning have taken up in the blended course, Figure 1 compares the relevant data of the two learning modes. As indicated in the figure, 93.2% of the participants reported that online learning helped to improve listening whereas only 63.7% of the respondents agreed that f2f learning had benefited listening - a difference of over 30 percentage points. Conversely, f2f learning had a greater impact on the rest of the eight areas of English learning. To be more exact, students who preferred f2f learning outnumbered those favoring online learning by 18.8 percentage points in learning vocabulary, 14.4 in learning world knowledge, 19.1 in reading, 22.5 in speaking, 4.2 in practicing methods and skills, 39 in learning methods and skills, 25.8 in improving students' interests in learning English and 1.4 in writing. Consequently, it can be concluded that f2f learning, in students' views, seemed to have a much greater advantage over online learning in almost all fields of English learning. and the only exception lies in listening, where online learning is much more advantageous than f2f learning.

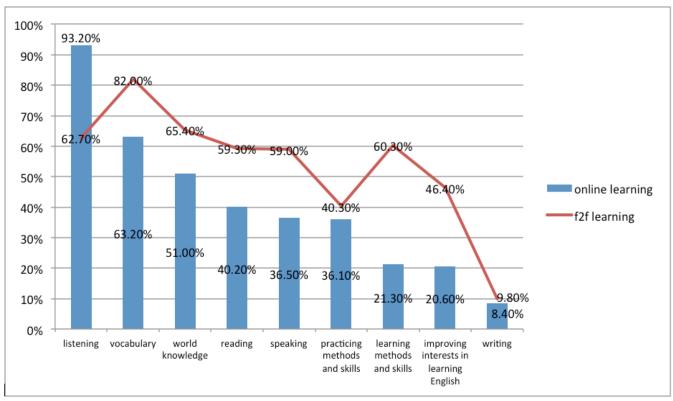


Fig. 1 Comparing the Roles of f2f and online Learning in the Blended English Course

To find out whether the above differences of learners' opinions on f2f and online sessions were statistically significant, further Chi-square testing was conducted. According to the results shown in Table 4 below, only three *p*-values were lower than .05, indicating that statistically significant differences could be found in the three corresponding sub-areas. These three sub-areas are listening (.031), improving students' interests in learning English

(.002) as well as learning world knowledge (.002). In other words, learners' perceptions of the roles of f2f and online learning are significantly different in only these three areas. As to the other six aspects, their *p*-values all went above .05, indicating there was no significant difference in learners' perceptions of f2f and online learning in the corresponding aspects.

On the whole, data from table 2, 3, 4 and figure 1 revealed that f2f and online

TABLE 4

	Listening	Reading	Speaking	Writing	Vocabulary	Learning methods and skills	Practicing methods and skills	Improving interests in learning English	Learning world knowledge
Pearson Sig. (two- tailed)	4.633 p=.031	3.399 p =.065	.731 p =.392	<u>.100</u> <u>p =.752</u>	<u>p=.368</u>	<u>.816</u> <u>p =.366</u>	2.180 p = .140	9.628 p =.002	9.376 p=.002

Chi-square Test of the Percentages of Different Roles of f2f and online Learning

Note: p < .05, df = 1

learning were both regarded as more impactful on listening, learning vocabulary and world knowledge while the least advantageous to writing. Further chi-square test found that significant differences existed only in three aspects of English learning. To be more exact, learners believed that online learning was more advantageous to listening while f2f learning played more impactful role in helping students to learn world knowledge and to improve their interests in learning English.

Discussion

In this study, the researcher examined learners' perceptions not only of the blended learning environment as a whole but more importantly of the interdependencies between f2f and online learning as well as their respective roles. As to the first research question of how learners perceive blended learning, results of the survey indicated that learners preferred the blended English course to f2f instruction or online learning alone, which is in alignment with the findings of previous research (Drysdale, et.al, 2013; Guzer & Caner, 2014). Meanwhile, more than one third of students favored the f2f aspect of instruction over online learning. It seems that even though students prefer the blended format, f2f instruction still plays greater role in the learning context. which is consistent with the findings of the previous studies (Stracke, 2007; Chandra & Fisher, 2009).

The second research question in the present study focuses on the interaction of f2f and online learning in the blended English course, which is one of the subareas that has not been sufficiently investigated in the field of blended

learning (Neumeier, 2005). Results of the study revealed that the two learning modes, in learners' views, had mixed well within the blended course as they were regarded as helpful and complementary to each other by making each other more interesting and more effective.

Research shows that learners favor blended learning for many reasons (Collopy & Arnold, 2009; Castle & McQuire, 2010; Lin & Wang, 2012). Previous studies reveal that blended learning improves students' performance or learning outcomes in various areas in the EFL context (Yang et al, 2013; Jia et al, 2012). The present study adds that learners prefer blended learning because f2f and online learning within the blended mode are able to interact with each other and complement each other. In particular, traditional f2f instruction allows learners to have access to peers and experts. Instructors in f2f learning play significant roles in presenting the learning content, designing learning activities, providing instruction, and supplementing learning materials. Classroom activities like presentations, group discussions, role plays, and language games can be engaging and add additional interest to a topic. F2f learning, thus, serves to cater to learners with certain learning preferences, and to satisfy learners' affective needs of faceto-face communication in a different way from online learning (Kaur, 2013). As a complement, online instruction also assists language learning in its own way. For instance, students appreciate webbased online exercises due to its greater variety in learning content and its unlimited resources. Moreover, online learning can provide a higher degree of learning autonomy (Snodin, 2013).

Unlike the passive roles in classroom instruction, learners have much greater control over learning online. In online exercises, they are able to adjust the pace of learning, the learning style, and the lesson content to meet their own needs and personal tastes (Drysdale, et.al, 2013; Snodin, 2013). Researchers (Holley & Oliver, 2010; Raby, 2007) also hold that online learning succeeds in creating a learning environment that is more personal and private, away from the disturbance, distraction and pressure of peers and formal assessment in f2f instruction. This is where learners tend to feel more relaxed, more focused, and thus more engaged. As a result, blended learning is considered to be more preferable since blended learning enables f2f instruction and online learning to complement each other and combines their advantages to bring out better learning.

According to Neumeier (2005), analysis of the interaction between f2f and online learning helps to create a clear layout of the blended course and construct a focused and structured learning environment. Results of this study indicate that learners' perceptions of the interaction of f2f and online learning mirrors to some extent whether the blended course has been clearly organized and systematically structured. In order to organize a more systematic structure of a blended learning context, Neumeier (2005) proposed that blended learning should not aim at creating "the right" or "the best" way to present learning content. Instead, it should attempt to build a learning environment that takes into account the dispositions, aptitudes and attitudes of both teachers and students. The fact that blended delivery allows students to learn and

access material in a variety of modes gives it an advantage in meeting the needs of students with a variety of learning styles. In other words, blended learning enhances individualization, personalization and relevance without sacrificing face-to-face contact, and thus offers learners better learning because both instructors and learners have greater flexibility and accessibility (Kaur, 2013).

The third focus of the present study investigated the respective roles of f2f and online learning. It has found that online learning, in learners' views, facilitated listening more effectively. Although this investigation fails to examine learners' perceptions in relation to their learning outcomes, there are empirical studies which show that online learning promotes listening skills in addition to critical thinking skills, grammar, vocabulary, speaking, and writing (Cobb, 2007; Miyazoe & Anderson, 2010; Sagarra & Zapata, 2008; Yang et al, 2013). A case in point is the study by Yang et al (2013), which examined a blended learning environment for individualized English listening and speaking while integrating critical thinking. The survey found that virtual learning environments facilitate individualized learning by addressing the difficulties faced by learners with mixed ability levels. This is where standard, lecture-based instructional approaches fail to support individualized learning. By creating learner-centered contexts. online learning is more likely to offer learners an individualized and adaptive learning experience, which tends to promote learning more effectively.

This is especially true of listening in EFL contexts. Some researchers (Blake, 2011; Kern, 2006) found that online

learning offered a modest advantage over traditional classroom instruction, although that advantage might be highly sensitive to the amount of time on task. It is not surprising that learners taking online courses spend more time doing online exercises such as listening on their own and do better than those in face-to-face situations (Grgurovic, 2007). Students are able to enjoy having multiple attempts and practicing at their own pace (Sagarra & Zapata, 2008). According to a US Department of Education report (2009, p. xvii), online learning stimulates students to spend more time engaged with the learning materials, which ultimately promotes greater learning. These factors add a very important value to online learning and also play a pivotal role in effective listening practice (Blake, 2011; Yang et al, 2013). This constitutes an irreplaceable advantage in online learning and serves to explain in a way why online mode has a notable advantage over f2f mode in the field of listening.

With regard to the roles of f2f learning, participants in this study thought that f2f learning promoted learners' interests in learning English and facilitated the learning of world knowledge, which seem to be two variables less explored in the field of BL (Guzer & Caner, 2014; Woltering, Herrier & Spreckelsson, 2009).

Several factors may contribute to students' perception that f2f learning is more effective in promoting learner interest. According to Raby (2007), interest in learning English can be motivated by both internal factors, such as learners' characteristics and aptitudes, as well as external factors such as pedagogy, instructors, learning content

in the learning environment. Maintaining students' interest and motivating them to learn may include generating learners' desire to take initiative for work, maintain their effort until the work is completed, and regulate their work by interacting with e-tools, peers, and teachers. To fulfil these goals requires cognitive, affective and social factors to come into play all together. It is easier to bring these factors into full play in traditional instructional contexts with face-to-face communication between learners and their peers as well as instructors. What is more, f2f instruction is able to offer students a relatively high level of interactivity and more chances to construct meaning independently (Chapelle, 2009). Smyth et al. (2012) suggest that interactive activities in f2f learning help students to engage more with their peers in class and develop close associations with each other that may develop a strong learning community.Language teachers in f2f instruction contribute to this sense of community by establishing rapport. maintaining high levels of involvement and engagement, encouraging cooperation, and fostering collegiality in class (Senior, 2010). All these variables in f2f mode, in fact, help to maintain and promote learners' interest in learning language, and perhaps world knowledge as well.

In contrast to f2f instruction, online learning is likely to become a drill center where more mechanical language exercises rather than interactive learning activities are provided for learners. In spite of wider and easier access to abundant learning resources in online learning, lack of face-to-face communication with peers or instructors and insufficient supervision from

instructors in online delivery may frustrate learners and decrease their motivation (Fryer et al, 2014). If online learning was reduced to a simple expansion of learning time or acted as a center of learning resources and mechanical practices, it would not be surprising that students might value f2f instruction over online learning. Online learners have complained about lack of regulation, immediate feedback and technical support in online learning, which tend to reduce learners' interests in learning. While students with positive motivational profiles may succeed in learning even though they are isolated in their studies online, students with less interest in learning will have more difficulty sustaining the effort necessary to meaningfully engage with their studies (Fryer et al, 2014). Consequently, similar to f2f instruction, materials and tasks in online learning also need to be organized and developed more systematically according to SLA theoretical approaches so as to play a more impactful role in the blended learning mode (Chapelle, 2009).

Conclusion

Unlike the previous research focusing on the strengths and weaknesses of blended learning, the present study aims at the respective roles of its two modalities, as well as their interdependencies. The investigation has found that most learners preferred blended learning to either f2f or online learning alone, with f2f learning more preferable than online learning. As to the respective roles of f2f and online learning, students considered f2f learning to be more advantageous to learning world knowledge and to

facilitating learners' interests in learning English whereas they regarded online learning as more beneficial to listening skills.

While this study yielded a number of statistically significant results, some caution must be observed in the interpretation and generalizability of the results. In fact, f2f instruction can vary widely with respect to techniques, class sizes, individual student attention, and teacher talents in ways that can tarnish the privileged status normally accorded to the f2f classroom experience. Similarly, online learning also differs wildly not only in terms of its format, but also in terms of particular technological tools and pedagogies. As a result, comparisons with other online or f2f learning environments could be rather difficult (Blake, 2011).

Another limit is that the results only reflected how students perceived the impact rather than the real learning effects of the blended course. The significant differences of learners' perceptions of different impact of f2f mode and online mode on English learning do not necessarily indicate similar differences in student performance in the corresponding areas. In other words, the study demonstrated what learners believed instead of what they achieved in the blended learning environment. The findings of learners' perceptions would be more revealing if learners' performances had been taken into account.

In addition to assisting practitioners to understand how f2f and online learning work together in blended English course, the current investigation also sheds light on future study. The researcher holds that, instead of focusing on the

advantages and disadvantages of blended learning, further research should be conducted to look into the sub-variables existing in the two learning modes which actually lead to the strengths and weaknesses of blended learning.

Among the numerous factors affecting f2f and online learning, some have been well scrutinized in the previous research, such as learner autonomy and interaction, whereas other issues remained somewhat unexplored, especially in relation to instructors' roles, learning resources and activities, and learning styles (Drysdale, et al, 2013). Because of their significant impact (Halverson, et.al, 2014), instructors' roles in the two modalities must be considered (Senior, 2011). Furthermore, to satisfy learners' cognitive and affective needs, it is

necessary to develop a wider range of learning resources, activities, and exercises in both modalities. The integration of these factors in blended learning decides to a large extent how learning is blended, which constitutes a noteworthy territory for further research in the realm of blended learning.

As a rapidly emerging domain of both research and practice, blended learning will continue to play a vital role in the EFL context. Researchers need to investigate its implementation more to satisfy the diverse needs of learners on both cognitive and affective levels. The ultimate purpose for this is to create a learning environment where different modes can be best integrated so that language learners can learn more efficiently and effectively.

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Appendix

This questionnaire aims to investigate students' views on blended learning and its two sessions -- face-to-face learning and online learning. Please follow the instructions below and finish all the questions. Thanks for your cooperation.

Part I. Learners' preferences to different learning modes in the blended course

- 1. What do you prefer in the blended course?
 - a. only face-to-face learning
 - b. only online learning
 - c. blending face-to-face learning with online learning
 - d. neither face-to-face learning nor online learning

Part II. The accessibility to online learning system

Here 1 = very easy, 2 = easy, 3 = somewhat easy, 4 = not easy nor difficult, 5 = somewhat difficult, 6 = difficult, 7 = very difficult. Please mark the most suitable choice for you.

	1 2 3 4 5 6 7
 3. 4. 	Login of the online learning system is Understanding the instructions of online exercises is Completing exercises online is Checking grades of the exercises online is Getting technical support is
He	t III. The relationship between face-to-face and online learning e 1= strongly agree, 2 = agree, 3= somewhat agree, 4 = somewhat disagree, 5 = disagree, 6 rongly disagree, 7 = no opinion. Please mark the most suitable choice for you.
	1 2 3 4 5 6 7

- 1. Face-to-face learning helps me with online learning.
- 2. Face-to-face learning makes online learning more interesting.
- 3. Face-to-face learning makes online learning more effective.
- 4. The two parts of learning are related to each other.
- 5. The two parts of learning are complementary to each other.
- 6. Online learning helps me with face-to-face learning.
- 7. Online learning makes face-to-face learning more interesting.
- 8. Online learning makes face-to-face learning more effective.
- 9. The two parts of learning are independent of each other.
- 10. The two parts of learning make each other worse.

Part IV. The roles of face-to-face and online learning

Choose from the following answers a to i to complete the two questions. You may choose ONE or MORE answers to each question.

1.	How has online learning helped you with your English learning?					
	It has helped me to	·				
2.	. How has face-to-face learning helped you with your English learning?					
	It has helped me to	·				
a.	improve listening.	b. improve reading.	c. improve speaking.			
d.	improve writing	e. improve vocabulary	f. learn methods and skills			
g.	practise methods and skills	h. improve my interests in learning English				
_	learn the world knowledge		5 5			