A multiliteracies pedagogy has been gaining momentum in EFL (English as a Foreign Language) teaching and learning. Modern educational technologies integrated in EFL course design hold promising potential to foster students’ multiliteracies. The present study aims to examine the effectiveness of a blended EFL course design and investigate to what extent blended learning enhances students’ multiliteracies. To this end, a questionnaire was administered to 94 first-year Chinese college students in their English class. Online posts by students were collected and interviews with the teacher and the students were conducted with the aim of triangulating the questionnaire results. The study shows that a blended EFL course designed in accordance with the framework of Community of Inquiry is well received by students and has improved students’ multiliteracies significantly. The cognitive and teacher-related aspects of the framework are particularly facilitative towards the development of multiliteracies. The significance and implications of the findings are also discussed.

KEYWORDS

English teaching and learning, multiliteracies, blended learning, Community of Inquiry

Introduction

In the past two decades, the concept of Multiliteracies, discussed and advocated in the seminal work of the New London Group (1996), has emerged as a critical term in EFL (English as a foreign language) education. The proposed pedagogy of multiliteracies is argued to serve as a general guideline to broaden the traditional literacy education. According to the New London Group, a multiliteracies pedagogy rests on two arguments: literacy education should reflect the increasing cultural and linguistic diversity in a globalized world, and literacy education should account for the multiplicity of modes used as semiotic resources to represent and construct meaning in modern age. In today’s digital landscape of EFL education, the two footholds still remain valid and relevant, perhaps even more so.

For EFL students, a pedagogy designed in line with this broader view of literacy has clear and considerable benefits. First, the recognition and inclusion of various semiotic modes lead to ample learning opportunities and active learner engagement (Chen, 2010), thus enabling EFL learners to eventually better cope with challenges in a digital age of multimedia and hypermedia. Second, an emphasis on criticality and reflection in a pedagogy of multiliteracies raises learners’ awareness of the intricate interplay between language and society and equips them with necessary metalanguage to critically interpret and transform existing semiotic representations. Kern (2000) argued that literacy is not confined to the meaning of texts “in an absolute sense, but also includes what people mean by texts, and what texts mean to people who belong to different discourse communities” (p. 2). Therefore, an expanded and inclusive conceptualization of literacy is helpful to develop learners’ effective communicative ability in the changing realities.

A large body of research has investigated the multiliteracies framework in foreign language classrooms, and the concept of multiliteracies has been continually broadened and renewed. For example, Lotherington, Neville-Verardi and Ronda (2009) proposed that digital communication should be taken into consideration in literacy education.
Warner and Dupuy (2018) argued that digital literacy practices should be further explored in future studies. However, to the best of our knowledge, few studies have examined the affordances of blended EFL teaching and learning, in which digital media and digital communication are inherent, with regard to fostering students’ multiliteracies. Blended learning is defined as a combination of face-to-face and online instruction to produce effective, efficient, and flexible learning (Stein & Graham, 2014). In recent years, with the accessibility of online learning technologies, e-learning and m-learning have been increasingly incorporated in EFL education. The application of educational videos, pictures, hypertexts, and online forums is essential to create a facilitative online learning environment for students. Therefore, the online part of blended learning is inherently rich in multimodality and holds great potential to enhance students’ multiliteracies. However, little is known as to whether and to what degree a blended EFL course develops multiliteracies. Therefore, the present study aims to investigate the effectiveness of a blended EFL course design in developing students’ multiliteracies. To be more specific, this study aims to answer the following research questions:

1. What constitutes an effective blended EFL course design?
2. How does a blended EFL course affect students’ multiliteracies?

**Literature Review**

This section consists of two parts. First, literature on the conceptualization and implementation of multiliteracies in foreign language education is reviewed. The second part briefly reviews blended learning in EFL education.

**Multiliteracies in EFL Education**

There is a growing body of literature in EFL education on the aims, “what” and “how” aspects of a pedagogy of multiliteracies. The overarching aim of the pedagogy is to equip students with necessary skills to cope with the changing realities of working, public and personal lives and enable student to actively participate in the design of their social futures (New London Group, 1996). In line with this argument, Jewitt (2008) argued that “the pedagogical aim of multiliteracies is to attend to the multiple and multimodal texts and wide range of literacy practices that students are engaged with” (p. 245). However, the concept of multiliteracies has gone beyond the educational setting. For example, Warner and Dupuy (2018) suggested that multiliteracies in foreign language classrooms had a significant role to play in social justice. Overall, an extended understanding of literacy education has been well accepted in EFL education.

The “what” of the multiliteracies comprises six distinct yet closely connected types of design elements, namely linguistic, visual, audio, gestural, spatial and multimodal patterns, as outlined by the New London Group (1996). Many studies have focused on supplementing traditional text-based instruction materials with multiple modes of representation, especially video clips from films and televisions. For example, Kaiser (2011) integrated films in foreign language classrooms and believed that “film provides instructors with a means of exploring how a foreign culture uses a particular medium to create meaning and represent its values” (p. 284). Other than critically interpreting videos, video making is also considered as a meaning-making process where students’ awareness and abilities of multiliteracies can develop. For example, Yeh (2018) included digital video making in language learning and the results showed that video making nurtured students’ multiliteracies and raised their awareness of the interplay between different modes of semiotic resources. Apart from videos, other types of visual genres are also promoted by teachers and researchers. For example, Bourne et al. (2001) expounded on a multimodal perspective on teaching and learning language. They argued that visual genres such as posters and paintings are helpful to enable students to realize the prevalence of representational metaphors and symbols in texts. PowerPoints slide presentations are also included in EFL teaching to enhance students’ multiliteracies (Zhang, 2013). Other relevant studies include design of genre-based curricula (Yang, 2016), compilation of digital instructional materials (Zapata, 2017), and critical interpretation and production of different visual genres in EFL classrooms (Wu, 2016).
Another strand of studies has investigated the “how” of multiliteracies, in other words, the implementation of the framework. The original framework consists of four interrelated and interactive components: situated practice, overt instruction, critical framing and transformed practice. In a “Learning by Design” project, Cope and Kalantzis (2015) restated the four components in a more concise manner, namely a knowledge process of experiencing, conceptualizing, analyzing and applying. Though this project is not specifically conceived in the setting of foreign langue teaching, its epistemological basis is also solid for EFL course design and therefore fits well with EFL teaching and learning. Studies addressing the challenges in implementing the framework are particularly useful to language researchers and instructors, including professional development related to multiliteracies pedagogies (Allen, 2011), compilation and adaptation of multimodal learning materials (Paesani, Allen, & Dupuy, 2015), and assessment of multiliteracies (Kalantzis, Cope, & Harvey, 2003).

**Blended EFL Course and Community of Inquiry Framework**

In an educational landscape informed and transformed by modern technology, blended learning has become a more or less buzzword in EFL education. In essence, blended learning is the effective integration of information technology in the process of education. Tomlinson and Whittaker’s edited book (2013) comprises 20 studies of blended learning of language, investigating different major themes relevant to blended learning conducted in a vast range of developing and developed countries. There is a rich body of comparative/non-comparative, quantitative/qualitative blended English language learning studies. However, the overall results are mixed. Mendieta Aguilar (2012) commented that some research results showed that blended learning model enhanced language learning, whereas others indicated no significant improvement in comparison with traditional model of language instruction, i.e. face-to-face instruction. Despite the increasing number of blended EFL programs and research, the urgent need for support in how to carry out effective and satisfying blended learning in EFL education still remains (Hockly, 2018).

How to design an effective blended learning EFL course is, therefore, a question of paramount importance. The online part of a blended modal is particularly challenging to instructors as well as students. In the present study, a generic conceptual framework, Community of Inquiry (CoI) (Garrison & Anderson, 2003), is used as a general guideline to validate the effectiveness of a blended EFL course design. The framework was originally conceived of as a conceptual order and a tool for the use of computer mediated communication and computer conferencing to support an effective educational experience at the collegiate level (Garrison, Anderson, & Archer, 2000). It is based on Dewey (1933)’s work on community and inquiry. Over twenty years of research, the CoI framework has been continually refined and proven to be a robust model to guide online course design. It provides a collaborative-constructivist perspective to understanding the dynamics of an online learning experience. It is particularly valuable to English education at college level because the framework is consistent with the traditional value of higher education in supporting discourse and reflection. CoI consists of three mutually reinforcing elements or presences, namely Cognitive, Social and Teaching.

Cognitive Presence (CP) is defined “as the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse in a critical community of inquiry” (Garrison & Anderson, 2003, p. 28). It is the necessary condition of higher-order thinking and learning. Social Presence (SP) refers to learners’ ability to participate in an online learning community and project themselves as social and emotional human beings. This is particularly important for online learning since it typically lacks the naturalness and connectedness of face-to-face instruction. Teaching Presence (TP) refers to the design, facilitation and direction of cognitive and social presence with the aim of producing valuable educational outcomes. A teacher is considered as the architect as well as the facilitator of the online learning process. Therefore, it could be said that it is the teaching presence which brings the other two presences together. In this sense, the planning and designing of online learning are extremely important to ensure an effective and successful learning experience for students.
The present study aims to investigate the correlation between an effective blended EFL course and students’ perceived benefits in terms of multiliteracies. The design of the EFL course in the study was inspired by the two powerful frameworks mentioned above. A pedagogy of multiliteracies is helpful to envision and structure a multifaceted literacy education for EFL learners. The CoI framework guides and measures the effectiveness of online learning in this blended EFL course design.

Methodology

Participants and the Blended EFL Course
A total of 94 first-year college students (Male=67, Female=27; Average of age=19 years old) majoring in sciences (material sciences and mechanical engineering) at University of Science and Technology Beijing participated in the study. These students were roughly evenly distributed in four parallel English classes. All four classes were taught by the same teacher who had over 15 years of English teaching experience and had been actively engaged in educational technology in English teaching. Required by their undergraduate program, the students took College English as a compulsory course for the length of one academic year. The academic year consisted of two semesters. For each semester, there were 16 academic weeks. In each week, students attended a face-to-face class session which lasted for 90 minutes and were also required to learn online for a similar amount of time, i.e. 90 minutes. The online part of the course could be accessed via logging onto an online learning website (https://www.icourse163.org/) using a computer or a corresponding application using mobile phones.

The blended EFL course was structured based on the CoI framework, with an effort to optimize all of the three presences, namely Cognitive, Teaching and Social. Online learning materials were designed to include various semiotic modes, including videos produced by the teacher, video from films and televisions, images, music, hyperlinks, and animations. The videos made by the teachers were either to show the teacher giving a short lecture, or were based on PowerPoint slides presentation accompanied by the teacher’s voice over. The face-to-face sessions are closely connected with the online part. Other than reading and watching during online learning, students were required to post homework online and provide feedback to their peers.

Instruments and Data Collection
To collect necessary data to measure the effectiveness of the blended design of the course and students’ perceived benefits of multiliteracies, the authors administered a questionnaire in the four classes at the end of the academic year and interviewed a group of five students, both male and female, as well as the teacher. In addition, the authors also collected students’ online posting to better understand students’ participation in online learning.

The questionnaire used in this study consists of two parts. The first part is adapted from Arbaugh et al. (2008). First, the authors translated the original questionnaire from English to Chinese. Then, the translated version was improved based on valuable suggestions and feedback from another two researchers and several students who were not part of the study. There are 33 items in total in the first part of the questionnaire. Among them, the first 12 items are about TP (Cronbach’s α=.825); the second 9 items are about SP (Cronbach’s α=.879) and the last 12 items are about CP (Cronbach’s α=.906). The second part of the questionnaire is specifically designed by the authors in order to survey the students’ opinions with regard to their multiliteracies awareness and abilities. There are 14 items in this part (Cronbach’s α=.873). All the items on the questionnaire are designed using 5-point Likert Scale (1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree). The questionnaire as a whole has excellent internal consistency, with a Cronbach alpha coefficient reported of .949. Based on the results of a reliability analysis using SPSS v26, the questionnaire has satisfying validity and reliability. Multi linear regression was conducted to investigate whether and to what extent the blended EFL course contribute to improved multiliteracies.

Other than the questionnaire responses and online posts, the authors also interviewed the teacher to investigate how students were engaged with multimodal learning activities during face-to-face sessions of the course. The
interview mainly focused on learning activities using PowerPoint slides, videos, digital cameras, pictures and maps. A group of five students were also interviewed. The focus was on how they viewed the blended design of the English course, their online learning experience and their understanding of multiliteracies.

**Data Analysis and Discussion**

The analysis is divided into two major parts. The first part answers the first research question about the effectiveness of the blended EFL course design. The second part discusses to what extent the three interconnected elements of the blended course contribute to multiliteracies.

**Effectiveness of a Blended EFL Course**

In general, the questionnaire responses, online posts, as well as student interviews demonstrate that the blended design of the EFL course in the study is well received by students. See Table 1 for a descriptive analysis of the questionnaire responses. Student responded quite positively to the overall design of the course. The mean score is as high as 4.63 in terms of overall satisfaction of the course. They also voiced positive opinions about their improvements in multiliteracies awareness and abilities (Mean=4.28). Most students embraced a combination of different modes in English learning and believed that this multiliteracies pedagogy creates a favorable learning environment to develop their English communication abilities.

With regard to the three elements essential in a blended course design, the measure of TP is particularly high, indicating effective design, organization, management and direction of the learning process on the part of the teacher. This could be partly explained by the structure of the online instruction as well. Online educational videos produced by the teacher constitute the major proportion of the online learning materials. There are mainly two types of videos, either with the teacher on or off camera. The teacher makes use of available semiotic modes in her instruction, such as fonts, sizes, colors, music, sound effects, tones, pitch, films, pictures, and animations. This somewhat “teacher-centered” design of online learning would also meet Chinese students’ expectation, because in China teachers are traditionally viewed as the authority in terms of imparting knowledge. Another reason for the positive results of TP is the teacher’s management and active participation in the online forum with students. In a longitudinal study, Allen (2011) pointed out that foreign language teachers are quite open-minded in trying out new technologies and new language learning theories to improve classroom teaching. The teacher interviewed in the study also expressed her positive attitudes towards the potential of educational technology in EFL teaching and learning. She believed active engagement with students online was indispensable to ensure a successful blended learning experience for students.

The measures of CP and SP are similarly high, indicating that students were intellectually triggered to enhance higher-order skills such as critical thinking, synthesizing ideas and problem-solving skills. In addition, students found a blended learning environment, either online or face-to-face, supportive to their English learning. Almost all students strongly agree that online communication is a great way of interpersonal communication. When students have been provided with sufficient high-quality and suitable learning materials, the flexibility of online learning encourages and supports students to develop learner autonomy and explore the topics in more individualistic ways. This is especially useful in the Chinese educational setting since students can gradually develop independent thinking in this process and reduce heavy reliance on teachers and other authorities. In this sense, a blended EFL course design well scaffolds students’ learning.

**Table 1. Descriptive analysis of questionnaire responses (n=94)**

<table>
<thead>
<tr>
<th>Blended EFL Course Design</th>
<th>MLit</th>
<th>OS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP</td>
<td>4.11</td>
<td>4.53</td>
</tr>
<tr>
<td>SP</td>
<td>4.12</td>
<td>4.28</td>
</tr>
<tr>
<td>TP</td>
<td>4.63</td>
<td>4.63</td>
</tr>
</tbody>
</table>
Improving Multiliteracies Through a Blended EFL Course Design

In order to understand to what extent a blended EFL course design contributes to the development of students’ multiliteracies, a multiple linear regression was calculated to predict multiliteracies based on CP, SP and TP. Statistic assumptions such as the normal distribution of residual and the non-linear correlation between predicted variables and residuals were all met in this analysis (See Figure 1).

The results of the multiple linear regression show that the combination of the three variables (CP, SP and TP) significantly predict students’ perceived improvement of multiliteracies, $F(3, 90)=22.516, p<0.01$. Among the three variables, CP and TP contribute to the prediction significantly ($p<0.05$), while the contribution of SP is not significant ($P>0.05$) (Table 2). The beta weighs suggest that CP contributes the most to predict students’ multiliteracies. The $R^2$ value is 0.410, which indicated that 41% of the variance in multiliteracies is explained by the model. The standardized regression equation is:

\[
\text{MLit} = 0.348 \times \text{CP} + 0.061 \times \text{SP} + 0.316 \times \text{TP}
\]

Table 2. Contribution of CP, SP and TP to multiliteracies

<table>
<thead>
<tr>
<th>Variables</th>
<th>$R$</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>$F$ (3, 90)</th>
<th>Beta</th>
<th>$t$ (94)</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLit</td>
<td>.655</td>
<td>.429</td>
<td>.410</td>
<td>22.516**</td>
<td>.348</td>
<td>2.766*</td>
<td>.400</td>
<td>2.500</td>
</tr>
<tr>
<td>CP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.061</td>
<td>.561</td>
<td>.534</td>
<td>1.871</td>
</tr>
<tr>
<td>SP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.316</td>
<td>2.784*</td>
<td>.494</td>
<td>2.024</td>
</tr>
</tbody>
</table>

Notes: CP=Cognitive presence, SP=Social presence, TP=Teaching presence, MLit= Multiliteracies.

Figure 1. Regression standardized residue

The result concerning the cognitive aspect of the blended course design is consistent with Guth and Helm (2012). Their study found that students’ critical literacies have been developed in an English course which integrated telecollaboration. As defined earlier in the paper, CP is reflected in the learning activities where students are intellectually engaged and challenged. The contribution of CP to prediction of multiliteracies is the strongest among
Fostering Multiliteracies Through Blended EFL learning

The three presences. This result shows that a pedagogy of multiliteracies implemented in a blended EFL course is effective to foster and enhance students’ awareness and abilities of multiliteracies. According to Garrison et al. (2000), CP is operationalized through the Practical Inquiry (PI) model. This model consists of four categories, including Triggering Event, Exploration, Integration, and Resolution. As a vital element in the CoI framework, strong CP is the most basic to success in education. A strong measure of CP also indicates that students are indeed intellectually motivated and engaged in explorative, reflective and critical thinking and learning. The emphasis on meaning-making in CP is in line with the fundamental concept of design in a pedagogy of multiliteracies. Students are encouraged to become designers of their social futures through a meaning-making process. From the results, it can be seen that a blended EFL course design indeed provides opportunities and an environment for them to gradually master the necessary skillset.

The consistency between multiliteracies pedagogy and CP in the CoI framework in terms of emphasis on human agency and transformed experience is particularly important to EFL teaching and learning at the collegiate level. This is also validated by the interviews with the teacher and students. The teacher was not satisfied with simplified learning materials and projects in her English class. She believed that this was to infantilize her students. By upgrading difficulty level of the learning activities, students are more likely to be motivated to exert efforts. However, challenging activities can only be successful if sufficient support is provided to students. Multimodal materials are particularly useful in this respect. For any topic, project or problem, learning materials represented in various semiotic modes are structured in a certain fashion as to lead and help students in their learning process. One student said in the interview: “I really like the animations in the videos. They can show the process of how my teacher is dealing with a problem. I learned a lot from those.”

Teaching Presence and Multiliteracies

Similar to CP, TP also significantly predicts students’ multiliteracies. In the CoI framework, a teacher could be anyone in the learning community, but primarily it is the teacher in a real classroom. This is certainly the case in a blended EFL learning setting, where face-to-face instruction will establish a teacher’s expert role in front of the students. There are two major responsibilities of a teacher. The first is to design and construct a blended EFL course. The second is to facilitate the learning process. Putting a pedagogy of multiliteracies with TP in the CoI framework together, it can be noted that the teacher’s roles as a designer as well as a facilitator are highlighted.

A teacher has particularly weighty responsibility to bear in two out the four components in a multiliteracies pedagogy, namely overt instruction and critical framing. A teacher’s expertise plays a crucial role in equipping students with the mindset and skillset to reflectively and critically interpret a semiotic artefact. Heavy reliance on the teacher to provide the necessary metalanguage means strong TP will contribute to development of multiliteracies. A teacher’s designer role is the condition for a blended EFL course to function towards the desirable learning outcome.

Another role, that is, teacher as facilitator, manages and directs the learning process. This role has long been recognized in traditional classroom setting. However, facilitation function is perhaps more important to students’ online learning experience. In the blended EFL course in the study, the teacher responded to students’ questions, posted notices of important tasks and dates, and directed students’ attention to important materials in the online part of the blended course. Student participation in the online forum also helps creating a cohesive learning community. Students reported that they felt supported by the teacher and other students even when they were studying online individually.

Social Presence and Multiliteracies

The results show that SP does not play a significant role in predicting multiliteracies. In contrast to CP, SP aims to realize the affective goals in education. Strong SP indicates students’ projection of personal characteristics in the learning process. In the present study, even if there is a strong measure of SP, it does not contribute to
multiliteracies significantly. The result might be explained from two aspects. First, affective goals are incorporated in the CoI framework, as reflected in SP, but are not explicitly emphasized in the multiliteracies pedagogy. As a generic model to conceptualize and frame online learning in higher education, CoI is not restricted to particular disciplines. Literacy education, however, is most relevant to the teaching and learning of language. Literacy is originally defined as the ability to read and write (Barton & Hamilton, 2005). The social aspect of language learning is assumed and implicit in literacy education, since communication is primarily a social activity. SP as a construct in the CoI model is understandably strong in a multiliteracies EFL course, but might not be perceived by students as unique, but rather granted, in the course.

The second aspect is perhaps related to how students actually understand interpersonal communication in real life as well as online and the concept of multiliteracies. Even if real life communication and online communication are in essence multimodal, students might not be aware of the multiplicity of modes and contexts. For example, in students’ posts online, images were frequently used to express their feelings and ideas. The perceived improvement in multiliteracies is more likely to be attributed to the cognitive aspects of the learning experience by students, as has been shown in the results. A strong SP is more directly related to students’ sense of belonging in a learning community. In the interview with students, many stated that the English class was a rather open and friendly learning environment. However, it should be noted that a facilitating environment does encourage more opportunities for communication, thus fostering multiliteracies. In other words, teachers should not dismiss the element of SP in a blended course. On the contrary, SP has an implicit but enabling role to keep the blended course active and dynamic.

Conclusions

Multiliteracies, as valuable assets for students to navigate and function successfully in their working, public and private lives in a digital era, have been incorporated in EFL teaching and learning. The aim of a multiliteracies pedagogy is to enrich students’ repertoire in various modes of expression appropriate to various contexts of situations. In the present study, the authors investigated the effectiveness of a blended EFL course design using the CoI framework, and further analyzed to what extent this design contributes to the development of multiliteracies. This study has shown that CoI is a valid conceptual framework to construct a blended EFL course. In addition, Cognitive Presence and Teaching Presence are significantly predictive of students’ development of multiliteracies. Social Presence has a positive contribution, yet in the current study, it is not significant.

The present study makes two useful contributions to EFL teaching and learning. First, it tested and validated a conceptual framework, CoI, which serves as a guideline to design a blended EFL course. Based on this framework, blended learning, supported with adaptive learning tools, learning materials and tasks which reflect the complexity of EFL learning and the cognitive level of college students, proves to be an effective course design. Therefore, EFL teachers should be encouraged to incorporate educational technology to provide more learning opportunities to students. Second, the study enhanced our understanding as to how multiliteracies have been fostered in a blended EFL course. The research findings emphasize the importance of cognitively suitable learning activities for students and the teacher’s roles as expert, designer, and facilitator. In future studies, new dimensions of multiliteracies need to be further investigated, such as digital literacies. The e-learning theoretical frameworks summarized by Aparicio, Bacao & Oliveira (2016) hold great potential to better refine the current EFL course designs. Technological innovations, judiciously and creatively integrated in EFL classrooms, will better enable students to develop multiliteracies, and, therefore, communication abilities in the fast-changing realities.

References


Fostering Multiliteracies Through Blended EFL learning


