# A Qualitative Study on Non-English Majored Learners' Adaptability to Blended Learning in College English: Perceptions From Instructors

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# ABSTRACT

The success of blended learning depends on many factors. Among these, adaptability, though acknowledged as an important issue in blended learning, warrants further study, together with its influencing factors. This study aimed to explore non-English majored learners' adaptability to blended learning in College English from the perspective of English teachers. Semi-structured interviews with 16 English instructors from five universities were conducted, and the interview transcripts were qualitatively analyzed. The results showed that the non-English majored learners were not perceived to have fully adapted themselves to the new mode of College English, and their adaptability was highly affected by agentive factors and contextual factors. The findings emphasize the key role of learners' adaptability in blended learning environments. Additionally, this study further provides a vital insight for administrators and instructors to reconsider the role of learners' responses to the blended learning mode and apply this understanding to improve achievement in English courses.

## **KEYWORDS**

Adaptability, Agentive Factors, Blended Learning, College English, Contextual Factors

## INTRODUCTION

The China Ministry of Education (MOE) highly values the revolutionary impact of IT on education and has rapidly joined the trend of blended learning (BL) with a series of documents issued since 2010 to promote this teaching mode in various courses. The increasing prevalence of BL also spreads to the inherent social field of English learning since it supports deep and meaningful learning in a more authentic and interactive environment (Kofar, 2016). In addition, the traditional format with teachers transmitting information to students in physical classrooms at fixed class hours can't fulfill the task to cultivate non-English majored learners with skills to use English, to engage in crosscultural communication and to acquire high-order abilities (MOE, 2017; Trilling & Fadel, 2009). Accordingly, the programmatic document, *Guideline on College English Teaching* was promulgated in 2017 and explicitly proposed the incorporation of IT into College English teaching to undertake

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This article, originally published under IGI Global's copyright on June 29, 2022 will proceed with publication as an Open Access article starting on March 18, 2024 in the gold Open Access journal, International Journal of Mobile and Blended Learning (IJMBL) (converted to gold Open Access January 1, 2023) and will be distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/ licenses/by/4.0/) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited. the teaching reform. Nevertheless, practices show that BL hasn't significantly improved students' learning experiences as anticipated (He, 2019). Studies, therefore, have investigated the reasons from different aspects, such as institutional adoption and support (Graham et al., 2013), instructors and course designers (Colpaert, 2006; Ocak, 2011) as well as English learners (Johnson & Marsh, 2014).

A growing literature expresses concern over students' adaptability to BL, since this learning mode is student-centered and has high demand for the autonomy of students who are highly dependent on teachers in the traditional face-to-face learning environment (Besser et al., 2020). As a result, students making a transition to BL reflect they are challenged by managing time, using new technology, taking responsibility for their learning outcome (Vaughan, 2007), and being socially isolated (Ja'ashan, 2015). The situation in China is aggravated by the fact that English teaching is teacher-centered, and test oriented, which leads to students' passive learning and mostly memorizing course content before they come to college (Li et al., 2020), and their adaptability may decrease as they progress through grades (Wang, 2016). Numerous studies have examined the predictive role of adaptability to student engagement (Wang, 2021; Zhang et al., 2020), and students' academic achievement (Burns et al., 2017; Xie et al., 2019), but efforts exploring its influencing factors are scarce, especially in domain of BL in College English. To bridge the gap, this study attempts to explore how College English instructors perceive their students' adaptability to BL and corresponding affecting factors. The present study adopts an instructor perspective because they are undertaking the role of decision-maker in their classroom (Porter et al., 2016) and mediator between institutions and students (Ocak, 2011). This research perspective might enable a wider and more thorough understanding about students' adaptability to BL in College English, and triangulate findings from the research with the learners. To achieve the research purpose, the following research questions were addressed:

- 1. How well do the instructors think that non-English majored learners adapt to BL in College English?
- 2. What factors do the instructors perceive are affecting non-English majored learners' adaptability to BL in College English?

## RELATED LITERATURE

Graham et al. (2013) indicated that a clear definition of BL was an effective strategy for successful implementation of this format. Though the existing research finds inconsistency and ambiguity regarding the definition (Porter et al., 2016), a large body of literature accepted BL as the thoughtful integration of classroom face-to-face instruction with online learning (Graham, 2006; Kim, 2007; Kudrik et al., 2009). Based on this definition, this paper views BL as integration of supplementary utilization of technology-mediated communication tools (email, forum, QQ, WeChat, etc.), online resources supporting students' autonomous learning, and learning management systems, bringing students' out-of-classroom learning data into face-to-face teaching practices. This operational definition of BL sets a necessary standard for sampling.

Since proposed, BL was thought to be more effective to improve students' satisfaction and academic success than other approaches (Wingard, 2004) and thus predicted to be the "new normal" in education (Norberg et al., 2011). However, the advantages of BL were undermined in the implementation, and the potentials haven't been fully fulfilled (Güzer & Caner, 2014). Accordingly, continuous efforts have been made to identify the critical factors ensuring the successful implementation of BL. For instance, Mapuva (2009) addressed the challenges from infrastructure, cost, accessibility, management, pedagogical consideration, attitudes, etc. A plethora of studies affirmed the role of instructors and suggested they should change their attitudes (Ocak, 2011), improve teaching ability (Oliver & Stallings, 2014), provide timely feedback and interaction (Adekola et al., 2017), and develop technology skills (Riel et al., 2016). Meanwhile, multiple studies attested the influence of students' personal attributes, such as gender and motivation (Bećirović, 2017), students' williness to accept blended learning (Yeou, 2016), and their digital literacy (Kasraie & Alahmad, 2014).

Among the student-related factors gaining wide interest recently is adaptability. Adaptability is a multi-faceted construct composed of emotion, cognition and behavior (Feng & Li, 2002; Martin et al., 2012), and defined as the ability to regulate oneself to adapt to the changing situation (Martin et al., 2012; Zimmerman, 2002). The critical role of adaptability in university students' life has been demonstrated in numerous studies, since they are likely to fail when encountered with changes and uncertainties in the new tasks or major choices (Holliman et al., 2018). For instance, Holliman et al. (2018) affirmed that adaptability could predict the undergraduate students' achievement scores directly and positively. Burns et al. (2017) indicated that students with higher adaptability were likely to engage more in learning. Besides, adaptability was considered to be a positive predicator of students' psychological wellbeing (Stockinger et al., 2021). In the context of BL, students have to make a transition to a novel instruction mode which forces them to actively construct new knowledge based on their prior knowledge and experience, and through interaction with the social and cultural environment (Bandura, 1986; Li, 2017). But meanwhile, it's noticeable that students had trouble adapting to BL (Ma & Jiang, 2013). Burgess (2008) discovered that part-time finance students had anxiety and confusion in the online learning session. Ja'ashan (2015) indicated that the students felt lost in a BL environment without clearly stated instructions and guidelines. Furthermore, a case study with Peking University students reported that the participants were not adaptable to BL mode because of insufficient exposure to computer technology (Zhao & Yuan, 2010). In contrast, studies on the factors affecting students' adaptability to BL in College English are very rare. Wang and Zhou (2010) indicated that adult learners' learning ability and learning environment affected their adaptability to online learning, whereas, Yang and Tong (2015) showed that University students' adaptability to BL was affected by students' capacity, teachers' teaching ability, course development, school management, learning environment and learning support. Considering that instructors are the primary instructional designers (Porter et al., 2016), facilitators, and scaffolders of students' learning in BL environment (Dzakiria et al., 2006), the present study expects that an instructor perspective may provide richer and deeper information to complement the findings with the university students.

# METHODS

## Design

The present study aimed to gain College English instructors' perceptions on the key factors affecting their students' adaptability to BL in English course. It is qualitative by nature, because the researchers explained phenomena from an individual's perspective as well as the historical and cultural contexts which people inhabit (Creswell, 2009).

## **Study Context**

BL has been greatly promoted by the China Ministry of Education, and various online education platforms and apps are used by Chinese universities to enhance BL environment. In such a context, evidence from universities in Sichuan province have some representativeness and significance, since Sichuan province remains dominant in numbers of institutions and students in the western region of China, which State Council of China considered as key areas of education development since May of 2020.

## **Procedures**

## Sampling Method

Stratified purposeful sampling (Onwuegbuzie & Leech, 2007) was used. There are 53 universities and colleges in Sichuan province, and 33 are administered by the provincial government and require students to take College English Test 4 (national English test for college students), among which, 4 are medical universities, 6 are normal colleges, 8 are independent institutes and 15 are comprehensive universities. Stratified sampling was therefore first employed to select schools with different attributes

based on the operational definition of BL, which helped reduce sampling errors and systematic biases (Alvi, 2016). Eventually, the schools included 1 medical university, 1 normal college, 1 independent institute and 2 comprehensive universities. Purposive sampling method was then applied to select the teachers because this sampling method was considered to be useful in identifying key factors from information-rich resources and was frequently employed in qualitative research when further development would be made on the basis of known information (Alvi, 2016; Creswell, 2009).

# Participants

Given this study was to gain insights from the instructors, instead of generalizing findings (Onwuegbuzie & Leech, 2007), a sample size with not more than 10 participants in phenomenological research was referred to (Creswell, 2009). Finally, the authors approached 16 accessible College English instructors at 5 schools in Sichuan province. Interview respondents' information is given in Table 1.

No.	Name	Position and positional title	School	Attributes of school	Time of officially adopting BL
1	ZJX	FTT/Associate professor	Chengdu University of	Medical	1 year
2	LJ (F)	DTRS/Associate professor	TC (CDUTCM)	university	
3	LJ (M)	FTT/Professor			
4	ZSB	FTT/Associate professor	Xichang University	Comprehensive university	2 years
5	CJM	FTT/Associate professor	(XCU)		
6	HT	DTRS/Associate professor			
7	YYP	Head of Academic Affairs Office/Professor	Panzhihua University (PZHU)	Comprehensive university	3 years
8	YM	DTRS/Lecturer			
9	GZY	Vice dean/Associate professor			
10	LC	FTT/Associate professor	Chengdu Jincheng	Independent institute	7 years
11	YXM	DTRS/Associate Professor	College (JCC)		
12	HXB	FTT/Lecturer			
13	CHT	FTT/Associate Professor	Sichuan Normal	Normal college	2 years
14	НН	DTRS/Associate professor	University (SCNU)		
15	XY	DTRS/Professor			
16	HGY	FTT/Lecturer			

#### Table 1. Interview respondents' information (FTT: full time teacher; DTRS: director of Teaching and Research Section)

## Data Collection

From January to March 2021, semi-structured interviews were conducted in Chinese using an interview protocol. The average length of the interview was 38 minutes. Two were conducted online due to the pandemic situation, while the rest were conducted face to face. Semi-structured interviews were used for their versatility and flexibility (Kallio et al., 2016), and because they allow for reciprocity between the interviewer and respondents, which can result in new ideas and follow up questions based on the respondents' answers (Galletta, 2012). Before the interviews, a pilot study was carried out with two English instructors to ensure the collected data could answer the research questions. These instructors

did not participate in the follow-up interviews. Additionally, after completing the analysis, two teachers from other schools were interviewed to ensure the data from the 16 participants could be representative. The interviews were recorded and then transcribed verbatim. The interview data were imported into NVivo 11 Plus and each source was named with an abbreviation of the school and the respondent.

# Data Analysis

The data analysis was based on the coding approach recommended by Strauss and Corbin (1997), which involved generating initial open codes and eventually organizing them into categories. NVivo 11 Plus was used to facilitate data analysis. This tool was the best fit for its ease of use and rich functions of coding, searching, or developing graphic models. To create nodes at different levels, the authors read through the transcribed texts carefully to form a preliminary and overall concept of the collected information before the data was imported into NVivo. Then, the imported data were analyzed line by line and broken into discrete parts. Free nodes were created to label them. The free nodes were named with the words or phrases consistent with the text to preserve the original discourse meaning of the source material. The free nodes were grouped into different categories according to their connections. The last step was to create parent nodes, with which all the categories around could be unified into a core category representing the central phenomenon of the present research. Furthermore, a project map and hierarchy charts were created in this study to display the aggregation and volume of the nodes. A concrete example of the coding procedure is outlined below.

When asked about "what factors do you think are affecting your students' adaptability to BL in English", the informant #9 said, "Our students showed interest in English, but their motivation was not sufficient. Most of them were driven by passing the standardized English test (CET4)..." In this speech, "motivation" preserving the original discourse meaning of the source material was coded as a free node to label the reference (concepts and ideas). Similarly, free nodes like "self-efficacy", "character", and others were created from other references. These free nodes all described the attributes regulating and affecting one's thinking process, and "metacognitive ability" was therefore created as a child node to contain them. In a similar way, all the child nodes concerning the learners were organized into the parent node "agentive factors".

## RESULTS

## Situation of Students' Adaptability to BL Format in College English

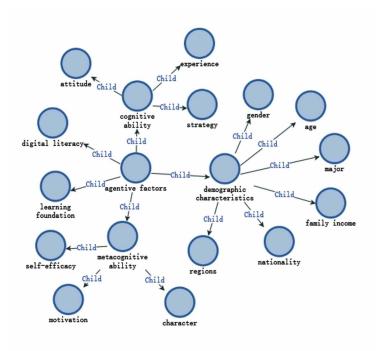
To answer the research question of how well the instructors think that non-English majored learners adapt to BL in College English, the authors compared the participants' descriptions and found that among 16 participants, 14 considered that their students had difficulty adapting to BL in English courses, while two indicated that students showed a high level of adaptability and adapted well to the novel mode. For instance, participant #10 stated, "*I think 90% of our students have strong adaptability, because all courses, including P.E., Politics, etc. have adopted BL mode...*". In contrast, participant #6 answered, "*I am quite sure half of my students have great difficulty adapting to the reform (BL), because they have been in fact-to-face learning environment for more than ten years*".

## Key Factors Affecting Students' Learning Adaptability to BL format in College English

With respect to research question 2, references relevant to students' individual attributes and those related to learning context were coded separately.

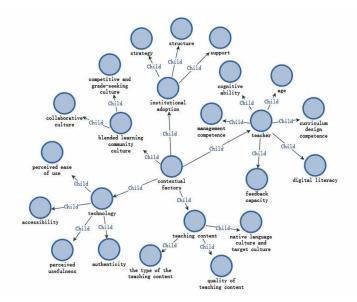
As shown in the project map (Figure 1) created in NVivo, 14 free nodes were personal factors, which were further united in three child nodes, namely, "demographic characteristics" (n=6), "metacognitive ability" (n=3) and "cognitive ability" (n=3). In addition, the core category or parent node of "agentive factor" was consequently developed to incorporate all of the nodes related to the personal factors of students, which highlighted the role of learners as active participants. Table 2 lists the details of the nodes and supporting quotes.

Figure 1. Agentive factors affecting students' learning adaptability



The project map (Figure 2) displays 23 free nodes containing the references related to learning environment. They comprise 18 secondary subnodes, and 5 child nodes. The child nodes "institutional adoption", "teacher, technology", "teaching content" and "BL community culture" pertained to the learning environment and executed their influence on students' learning adaptability, and therefore

#### Figure 2. Contextual factors affecting students' learning adaptability



Parent node	Child node	Free node	Supporting quotes
Agentive factors	Demographic characteristics	Region	<ul> <li>#5: Because some students are ethnic minorities and don't have good family economic condition. However, it's a must for them to have a mobile or a computer for blended learning. They have to overcome such difficulties and equip themselves.</li> <li>#8: Students from remote areas or mountainous areas know little about education technology. Meanwhile, we once asked students from big cities, for example, they know about apps such as Pigai, American TV series, and LAIX. As a result, they are different in the adaptation to blended learning model.</li> </ul>
		Nationality	#6: For students of Yi nationality or other ethnic minorities, Chinese is the second foreign language and English is the third, which would certainly make it more difficult for them to learn English with fewer F2F interactions in the new teaching format.
		Family income	#5: Some students' families are poor and can't afford the equipment #13: If their parents can't buy them the equipment needed for BL, they are likely to be left behind and feel difficulty to adapt to the mode.
		Major	<ul> <li>#10: Because English is a special course, flipped classes are doing very well among the students from liberal arts, like Cultural Communication, Accounting, and Finance. They can finish all the tasks as assigned, but those from technical majors may feel more difficult.</li> <li>#11: The students in the major of Arts or those from class C are facing the biggest challenge.</li> </ul>
		Age	<ul><li>#7: They are generation Z, and better at using technology than the older generation.</li><li>#3: Our students were born after 2000. It is easy for them to use electronic tools, and adapt to new things.</li></ul>
		Gender	<ul> <li>#4: The students who can't finish the assigned tasks are mostly boys.</li> <li>#15: There is a complex relationship between students' adaptability and other factors, including teaching conditions provided by the school, learning atmosphere, teaching methods of teachers and the factors of students themselves, like their nationality, gender, major and English foundation.</li> </ul>
	Metacognitive ability	Self- efficacy	<ul> <li>#9: Our Chinese students generally have low initiative and self-efficacy.</li> <li>#2: Our students seem to lack awareness of independent learning and habit of self- management, so they can't adjust themselves well in the transition from F2F learning in high school to BL in university.</li> </ul>
		Motivation	<ul> <li>#9:the students are most concerned about whether they can pass CET-4 (College English Test-4).</li> <li>#5: They do many exercises and completed the tasks assigned by the teachers so as to get high grades in the tests.</li> </ul>
		Character	#13: Some students are shy and may be worried about their oral English, pronunciation they were more active when learning online.
	Cognitive ability	Attitude	<ul> <li>#14: Online learning in BL can be conducted by students at their own terminals at any time and any place, so the flexibility of learning won popularity with the students. Besides, BL is novel for the students who are always showing interest in new things and currently they are willing to try this method.</li> <li>#13: The students used to sit in the classroom and listen to teachers thought the use of BL was increasing additional work and they had to do more tasks before class, in class and after school. The teachers were not only assigning tasks but monitoring them</li> </ul>
		Experience	#8: The students were better adapted to BL after the coronavirus epidemic because they had a better understanding of online learning and were more experienced at using the platforms and Apps.
		Strategy	<ul> <li>#2: Students couldn't finish the learning tasks on time. They were supposed to finish them gradually rather than start the work ahead of the deadline, which would negate the learning effect.</li> <li>#12: Students still wished that their teachers would impart them the knowledge and skill in the same way as their senior high school teachers did.</li> </ul>
		Learning foundation	<ul><li>#9: Because of poor foundation, they are not able to well adapt to BL.</li><li>#3: The students in our school were enrolled at a high score and they had good learning foundation</li></ul>
		Digital literacy	<ul> <li>#9: 90% of the students have no difficulty with the learning platforms and learning Apps.</li> <li>#7:they are the inhabitants of Internet and it's easy for them to use any electronic equipment.</li> </ul>

the parent node "contextual factors" was created as the core category. Additionally, the details of the nodes and supporting quotes are listed in Table 3.

This section elaborates the coding information of the ideas that emerged from the respondents and provides macroscopic structures of the nodes, which helps better understand the perceived affecting factors in different categories.

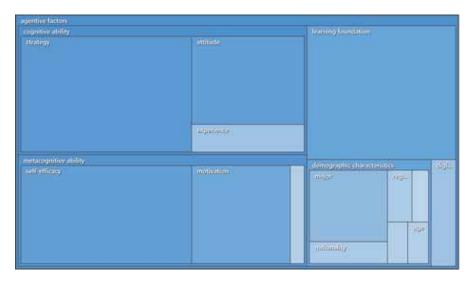
Parent node	Child node	Free node	Supporting quotes	
Contextual factors	Institutional adoption	Strategy	#1: Against the background of cutting class hours, our school adopted BL to integrate benefits of online sources to traditional teaching model, which helped to expand the h of students. Furthermore, it increased interaction between teachers and students.	
		Structure	#12: We have a systematic governing structure involving administrators, supervisors, teachers, and counselors, who participate in the implementing process and guarantee its effectiveness.	
		Support	#11: In order to facilitate blended learning for students, the school also provides campus WiFi in many places, which is very beneficial for students and teachers. The internet speed is good, and in a practical sense, students can save a lot of money.	
	Teacher	Feedback capacity	#3: When a student asks a question, he must want to get the answer from the teacher immediately.	
		Digital literacy	#1: Some teachers may struggle with the new techniques.	
		Age	#2: For example, in the class of young teachers, they are generally familiar with the multimedia technology, so their students will be more interested in blended learning. But for the older teachers who are more accustomed to traditional teaching, the blended learning is not implemented so well. The mixed teaching of the students in their class is relatively poor.	
		Curriculum design competence	#12: If we can design the online and F2F teaching more cohesively, the students are surely more attracted to the class. But, it poses a very big challenge to our design ability.	
		Management competence	#3: The most important is that we should use the data to learn about the students' online learning time, the frequency or even their learning habits to manage them better. For example, the platform of Pigai provides us with not only the students' translations and compositions but also the times they have made the correction.	
		Cognitive ability	#2: Some teachers may not be supportive of BL, because it involves the breaking of their own original teaching mode. They have to update their concept and reconsider the design of the course as far as I'm concerned, I haven't adopted BL until this semester, and I didn't think I was well prepared for that.	
	Technology	Perceived usefulness	#9: The platform of Pigai was useful for students to take basic training of writing and translation, but it's weak in helping students with the layout and logical structure.	
		Perceived ease of use	#14: If the platform is complicated and difficult to use, students might be low in the learning efficiency.	
		Authenticity	#10: On account of the lack of English environment in China, the application of multimedia in BL made up it with providing an authentic environment, and enabled our students to communicate in English and improve their language skills.	
		Accessibility	#12: With the technology and platform, the students can access the school-based courses, and the open courses of famous universities. The rich and colorful online MOOCs give students more diverse choices.	
	Teaching content	Quality of teaching content	#9: For College English learning, students have some personalized needs, such as English linked to their major. That is to say, we still have some problems in meeting the needs of students in different majors in terms of the personalized curriculum and the integration of professional elements into English.	
		The type of the teaching content	#14: It's important to break down the teaching materials and consider what is for online teaching and what is appropriate for classroom teaching.	

#### Table 3. Nodes and supporting quotes concerning contextual factors

Parent node	Child node	Free node	Supporting quotes
		Native language culture and target culture	#11: This year, we gave the assignment to spread Chinese culture and tell Chinese stories in English. All the students enjoyed sharing the stories with different media.
	BL community Culture	Collaborative culture	<b>#9:</b> In BL, we are attempting to build learning communities to promote the cooperation among the studentswe assign tasks in the form of dialogue, performance, debate to encourage them to work together, which were different from the activities in our traditional classroom teaching.
		Competitive and grade- seeking culture	#8: As to their online learning progress and completion of assignments, we usually report them over $QQ$ or WeChat, which is adding competitive pressure to the students and helping them find their ways to achieve higher grades in BL.

## The Volume of Affecting Factors

Given that the coded factors were not evenly distributed, hierarchy charts comparing nodes by the number of coding references were produced for agentive factors and contextual factors. A larger size of area and a darker color indicate more issues are related to the node. The hierarchy chart of agentive factors (Figure 3) indicated that issues linked to cognitive ability (73 aggregated references) were almost the same in number as issues of metacognitive ability (63), followed by learning foundation (39), demographic characteristics (26) and digital literacy (5). For the node of demographic characteristics, major (13) vastly outnumbered nationality (4) and regions (3).



#### Figure 3. Hierarchy chart showing the relative volumes of information of agentive factors emerged from the interviews

With respect to contextual factors (Figure 4), most concerns were linked to institutional adoption (360 aggregated resources) in which strategy (145) was visually equal to size of support (139). As to teacher, the node of curriculum design competence (71) was not only larger in size but darker in color than cognitive ability (47) and management competence (35). Age (13) and feedback capacity (12) had the least frequency. Among all of the child nodes, blended learning community culture occupied the smallest size with 34 coded references and most of them were linked to collaborative culture.

Figure 4. Hierarchy chart showing the relative volumes of information of contextual factors emerged from the interviews

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trategy	support	curriculum design competence	munagement	quality of te.
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## DISCUSSION

# Adaptability as a Critical Factor in College English With BL Mode

The present study intended to explore non-English majored learners' adaptability to BL in College English course from the perspective of instructors. But, the results showed that an overwhelming number of the participants didn't perceive that their students had been fully adapted to BL format, which affirmed the authors' opinion that adaptability would be critical to promote or impede the successful implementation of BL, especially when previous studies indicated that adaptability was significant for students to regulate their functions to deal with the changes and transitions (Martin et al., 2012), and predicative to academic achievement (Alahdadi & Ghanizadeh, 2017; Collie et al., 2017). Moreover, researchers enunciated that students who were at a low level of adaptability in web-based learning environment would be subjected to negative emotions (Besser et al., 2020; Stockinger et al., 2021).

# Students as the Subject Adapting to BL Format in College English

BL was designed under the philosophy of self-regulated learning, which insisted that students as active constructors should be able to constantly modify their cognition, motivation and emotion to attain learning goals (Martin et al., 2012). Such statement was strongly validated in the present research, for 206 references related to the learners themselves were coded, and they were perceived to be the subject taking the initiative to adapt to the changing mode with the interaction of their cognitive ability, metacognitive ability, learning foundation, demographic characteristics and digital literacy.

Cognitive ability stressed the abilities to understand concepts and consciously manipulate learning strategies of reasoning, planning, solving problems etc. to achieve learning goals (Greeno et al., 1996), and an adaptive learner was more inclined to discard or modify inefficient learning strategies to increase learning efficiency (Zimmerman, 2002). However, the findings indicated that though most students were positive to the adoption of BL in College English, they were not perceived to have adjusted their learning strategies accordingly. They still wished their teachers would impart to them the knowledge and skills as their senior high school teachers did. As a result, the students' inappropriate use of learning strategies could explain their learning adaptability in a BL context,

since learners responding negatively to changes tended to learn with low desire and such superficial strategies as learning by rote (Evans et al., 2003).

In addition, the present study confirmed the role of learners' metacognitive ability, namely, selfefficacy, motivation and character in their adaptability to BL. According to Veenman et al. (2006), metacognitive ability was responsible for monitoring cognitive activities and enabling learners to be active participants in a less controlled environment of online learning and BL (Chemers et al., 2001). Specifically, self-efficacy affected individual's judgment, willingness and actions to adjust to the environment (Wang, 2021), and motivation was an impetus to make responses to the changes (Rafiola et al., 2020). Likewise, phrases like "self-management", "initiative", "self-consciousness", and "motivation" were frequently used by the participants to suggest the influence of self-efficacy and motivation on adaptability to the novel learning environment. However, the results showed that the non-English major learners were at a low level of self-efficacy and mostly driven by grades.

Furthermore, the participants confirmed the influence of learning foundation, demographic characteristics and digital literacy on students' adaptability to BL in College English. Demographic characteristics in the research covered gender, nationality, major, family income, age and regions. Major was the most frequently discussed issue partly because the English proficiency of liberal arts students was better than that of science students. Three participants affirmed their students had trouble adapting to the English course with BL due to nationality. These findings highly aligned with the adaptability model proposed by Martin et al. (2012), who suggested that prior achievement, gender, age, and language background were closely related to adaptability. Besides, according to Xu and Jaggars (2013), learners' ethnicity, major, as well as exposure time to technology also contributed to their wide variation in learning adaptability.

Overall, notwithstanding learners' positive attitude towards the adoption of BL in College English, but in a self-regulated learning mode, they were perceived to have low level of self-efficacy and motivation, and were not able to use effective and efficient learning strategies. To better adapt to BL, it's suggested that the learners as the major participants in learning should seek for solutions initiatively and accept responsibilities for their learning.

## Contextual Factors Facilitating or Impeding Students' Learning Adaptability

Bandura (1986) argued learners should be encouraged to construct knowledge through interacting with the social and cultural environment. In the BL context, the external factors constituted the learning environment which exerted influence over the students' learning adaptability to the new instruction mode. As displayed in Figure 3, the nodes of "institutional adoption", "teacher", "technology", "teaching content" and "blended learning community culture" were discussed by the participants.

Institutional adoption (shown in Figure 4) took up the largest area and was coded with the most references which related to strategy, support and structure. With respect to strategies, the participants agreed that whether the schools could identify the benefits of BL and have policy in place to promote students' acceptance of BL would affect students' adaptability in a BL environment. Such a perception accorded with the indication of Ja'ashan (2015) that clear instructions and guidelines related to BL should be offered to students to reduce their anxiety and confusion. Besides, references under the node of support revealed that the institutions had been providing an array of technical support to enhance students' enjoyable experience of learning in BL environment. They introduced and developed network learning platforms, with Xuexitong developed by Chaoxing Group R&D Center being widely used, updated classrooms and labs for blending courses, and offered free WiFi on campus, which were all necessary to address the online needs and extend the students' learning experience in context of BL. However, previous studies attested that students' inability to adapt to BL mode partly resulted from their technical incompetence (Zhao & Yuan, 2010), but no institutions in the present study were offering students technical training. As a result, showing the students how to use technology would increase the instructors' workload and imposed great challenges for them (Ocak, 2011). Scholars also suggested that robust structures composed of technological, pedagogical and administrative departments are needed to facilitate the transformation of classroom teaching to BL mode (Graham et al., 2013; Porter et al., 2014), and 14 participants talked about these relevant issues. The results showed that the institutions had structures in place, but few were directed at the students. For instance, despite the recommendation that the scheduling structure should make the BL course information available for the students to select the optimal mode based on their practical situation (Graham et al., 2013; Toth et al., 2008), no institution was reported to have offered the non-English majored learners such information in the registration system or catalogue. Therefore, it's justified that non-English majored learners' adaptability to BL in College English might be improved by institutional adoption with the strategy, support, and structure. Of note in the interviews was that the scheduling structure should inform students of the blended courses, because in that case, they could prepare better for the BL course by planning their schedules (Porter et al., 2014) and adjusting their learning goals (Toth et al., 2008).

Figure 4 showed that the teacher was the second important contextual factor affecting adaptability, which was mostly related to curriculum design competence, cognitive ability, management competence, digital literacy, age, and feedback capacity. Curriculum design competence was coded with most references, which consisted of the ability to apply teaching strategy, ability to design curriculum, and ability to evaluate the outcomes. This finding was consistent with the statement of Dzakiria et al. (2006), who indicated that teachers were playing an essential part in designing BL systems and supporting mechanisms that assisted students to adapt successfully into this new instruction model. However, the researchers were told that some teachers just uploaded extra learning materials onto the platforms or required the students to practice with the Apps, which neglected the pertinence of their guidance and the connection between online and classroom teaching. Besides, adaptability was perceived to be as affected by teachers' evaluation ability of learning outcomes in BL as their design ability. The coded references revealed that it is a usual practice for them to increase the percentage of formative assessment in students' final grades, especially when most platforms and Apps made it possible for the teachers to collect data on students' learning (Graham et al., 2013). In the present study, 15 participants indicated that the instructors' attitudes would affect students' adaptability, which was consistent with the studies that underscored how the teacher's attitude mattered for the successful implementation of any education paradigm. For instance, Malik (2010) contended that the teacher's attitude towards E-learning was the foundation of student satisfaction and acceptance of E-learning, whereas Zhao and Yuan (2010) discussed the effect of the teacher's attitude towards BL on the students. 14 participants agreed on the importance of teachers' management competence, which implied teachers should create a conductive environment to enhance students' adaptability to BL, especially online sessions. This finding was entirely consistent with the description of Riel et al. (2016), who affirmed that teacher's ability to manage students online and offline was critical for students to take autonomous study in BL mode, but it is very challenging to promote students' self-initiation and make them stay focused on the online activities. Moreover, teacher's digital literacy enabling them to select online learning materials, to manage databases, to record videos for developing BL courses, and to deliver instruction in the multimedia classroom was another factor perceived to affect students' adaptability to BL. According to Malik (2010) and Riel et al. (2016), a higher standard was set for teachers' ability to deliver classes in digital information environment. However, the findings show that "most teachers only used the platform for students' signing in, uploading learning resources, and assigning tasks. We neither used it to manage the learning process, nor made classroom teaching more interesting ... " (participant #15). This finding is consistent with the report in the study of Ocak (2011), in which the code percentage of difficulty in teachers' adopting new technology to blend courses was 10.68%. In addition, teachers' age and feedback capacity were also referred to in the interview. Seven participants considered age as an affecting factor, but no study has yet shown the influence of teachers' age. To the authors' best knowledge, age was not affecting students' adaptability to BL directly. Instead, it is interrelated to teachers' cognitive ability, digital literacy as well as other elements, which could be further explored. Regarding feedback capacity, twelve coded references consistently showed that immediate reply and feedback played a vital role in students' learning adaptability, which was compatible with previous studies with Chinese students (Xiao-shan, 2012; Zhao & Yuan, 2010). Therefore, teachers should be encouraged to use the platforms strategically for providing timely feedback without piling on too much workload.

The study results suggested that students' adaptability to BL in College English was related to technology quality. IT was indispensable to support the implementation of BL. According to Davis' TAM model (1989), perceived usefulness and perceived ease of use had great impact on individual's willingness to use technological systems. Like most of the previous studies (Xiao-shan, 2012; Zhao & Yuan, 2010), these two attributes were perceived to be important in our research. 37 references related to the usefulness of learning platforms and Apps for students' English learning were coded. The participants exemplified several widely used learning platforms, such as Pigai, Xuexitong, Unipus, and Utalk, which were perceived to be useful for the students to access more learning resources and practice English skills online. As to perceived ease of use, nine participants' views were generally consistent. According to Malik (2010) the internet for technology-based education should be high speed and easy to use. In this study, most participants reported the available platforms and Apps were easy for students to use because of their friendly interface and easy operation, except that iTest was criticized for its inefficient functions. Furthermore, accessibility to online sources and functions to create authentic learning environments were also perceived to be important attributes of technology affecting students' adaptability. For instance, one participant disclosed that her school disconnected the users from the internet in the teaching buildings because of their concern about its interference in students' learning. But this participant also reported her students' negative attitudes towards BL resulted from inaccessibility of the internet. Additionally, the learning platforms allowing students to raise hands to answer questions, vying to answer first and snatching a red envelope were reported to be satisfactory and inspiring for the students.

Previous studies attested the direct effect of course quality on user satisfaction and indirect influence on their intention to adapt to the new learning format (Hassanzadeh et al., 2012). According to the studies conducted in China (Xiao-shan, 2012; Zhao & Yuan, 2010), course quality laid more in the richness of learning content. In the present research, 14 participants agreed on the impact of course quality on students' adaptability. However, their discussion focused more on the usefulness, novelty and interestingness of learning materials. For example, the results showed that despite the teaching reform, CET-4 was still most recognized by most students, and therefore, CET-4 was perceived to be a useful tool to motivate students' English learning and facilitate their adaptability to BL.

Moreover, BL was designed in the framework of social cognitive theory which claimed that individual's self-efficacy and motivation were affected by the culture they were in (Bandura, 2001). Squire et al. (2003) further elaborated on different learning community cultures, including collaborative culture of inquiry, and grade-seeking competitive culture. Similarly, the results showed eleven participants were more inclined to help students adapt to BL mode with collaborative culture, and three participants thought competitive and grades-seeking culture in the community was more useful for the students who just took the college entrance exam. Regardless of the type of the learning community culture, a safe, reliable and respectful learning community culture, was believed to facilitate students' adaptation in BL mode (Tsai, 2010; Tsai et al., 2011).

## CONCLUSION

Adaptability is viewed as a key capacity to cope with changing situations (Martin et al., 2012), and previous studies have indicated such capacity is closely related to students' emotion (Stockinger et al., 2021; Wang, 2021), engagement (Wang, 2021), and academic achievement (Martin et al., 2021; Stockinger et al., 2021) in the shift from face-to-face instruction to web-based learning mode. However, little is known about Chinese non-English majored learners' adaptability in blended learning environments when this mode is extensively adopted to facilitate students' English learning in Chinese higher education. This study therefore addressed the urgent issue by gaining interpretations of the College English instructor. The findings suggest that the non-English major students are not

perceived to have positively responded to the altered mode, which can be attributed to the influence of contextual factors (institutional adoption, teachers, technology quality, course content and blended learning community culture) and learners' individual factors (cognitive ability, metacognitive ability and demographic characteristics). Theoretically, this study explores the affecting factors of students' adaptability to BL, which complements previous studies on adaptability as a predictor. Adopting the perspective of instructors, this study also triangulates the data from other groups. In addition to the theoretical contribution, the present study contributes practically to the successful implementation of BL in College English. The administrators and instructors are suggested to reconsider the role of students' adaptability to BL, and create a more supportive and interactive learning environment to provoke more adaptive responses among the students. In the meanwhile, they should be aware of the low level of students' self-efficacy and motivation, and the inappropriate use of learning strategies in the changing learning environment.

# Limitations

This study presented some limitations. First, the participants are the English teachers from the provincial administered universities in Sichuan province, but the perceptions on students' adaptability to BL might vary among the teachers. It's suggested that the affecting factors identified in the present research should be tested with other samples. Secondly, the present research is qualitative in nature, and the findings are limited by the generalizability. Quantitative research is suggested for future researchers to examine the effect of the affecting factors on students' adaptability to BL. Additionally, given that the teachers are the practitioners of BL and go-betweens of schools and students, the present research is conducted from their perspective. However, little research concerning Chinese university students' perceptions has been documented, and thus more research therefore is suggested to explore the factors from the students' perspective.

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