EFFECTS OF BLENDED LEARNING ON THAI EFL UNIVERSITY STUDENTS' SPEAKING ABILITY AND LEARNING MOTIVATION

BY

PIYAPAN KANTISA

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY PROGRAM IN
ENGLISH LANGUAGE TEACHING
LANGUAGE INSTITUTE
THAMMASAT UNIVERSITY
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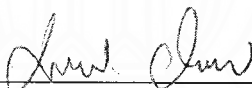
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DISSERTATION

BY

PIYAPAN KANTISA

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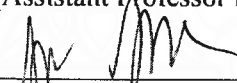SPEAKING ABILITY AND LEARNING MOTIVATION

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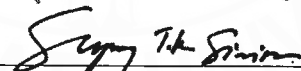
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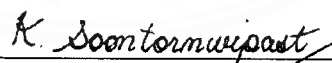(Assistant Professor Malinee Prapinwong, Ph.D.)

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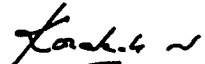(Associate Professor Pragasit Sitthitikul, Ph.D.)

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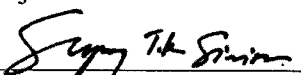(Associate Professor Supong Tangkiengsirisin, Ph.D.)

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ABSTRACT

This study aims to investigate the effects of blended learning on Thai university students' speaking ability, students' learning motivation, as well as to explore students' and teachers' perceptions towards blended learning. Utilizing a mixed-methods embedded experimental research design, 56 students in the treatment group received blended learning instruction. Meanwhile, the other 46 students in the control group received traditional teaching instruction. In this study, the pre- and post-speaking tests and students' learning motivation questionnaires were used to collect the quantitative data. Both descriptive and inferential statistical methods were then used to analyze these quantitative data. The qualitative data were retrieved from students' online reflection blogs and students' and teachers' semi-structured group interviews. These data were then analyzed by coding and grouping into themes. After the intervention, the treatment group outperformed the control group, since the post-test mean score of the control group was 3.11 and the post-test mean score of the treatment group was 3.98. The research results showed that blended learning instruction implemented in the treatment group, helped improve students' speaking ability with a statistical difference at $p < .001$ level. Furthermore, the results indicated that students' learning motivation was at a high level. Additionally, a great majority of both student

and teacher participants had positive perceptions towards blended learning. The research results, therefore, conclusively prove that blended learning implementation is effective in improving students' speaking ability and in attaining a high level of students' learning motivation.

ACKNOWLEDGEMENTS

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Symbols/Abbreviations	Terms
AMTB	Attitude-motivation test battery
BL	Blended learning
CEFR	Common European framework of reference for languages
CSR	Corporate social responsibility
DSL	Digital subscriber line
EFL	English as a foreign language
ELT	English language teaching
ESP	English for specific purposes
ILS	Information literacy skill
IOC	Item objective congruence
LMS	Learning management system
PC	Personal computer
WBI	Web-based instruction

CHAPTER 1
INTRODUCTION AND PROBLEM STATEMENT

This chapter outlines the background that creates the demand for fluent English-speaking professionals in Thailand. It highlights challenges in teaching English- speaking ability to Thai students, while also discussing obstacles to their learning motivation. It then introduces the blended learning concept and states the justification for the adaptation of the selected rotation models. Further into this chapter, the latter sections describe research gaps, research objectives, research questions, the scope of the study and definition of terms. Last but not least, the significance of the study on the blended learning implementation and its related impacts are elaborated to mark the conclusion of this chapter.

1.1 The Changing World Influenced by Globalization

The effects of globalization result in changes in almost all aspects of human life. Fairclough (2006) points out that economy and language seem to be two of the most outstanding and correlating aftereffects of globalization. In terms of economy, the globalized world creates a global marketplace that enables people to do business without or little boundaries, as people can travel and trade worldwide. The global market results in, not only the emergence of international companies, but also the connection between local and international companies. Obvious examples that exhibit the connection between international companies and a large number of worldwide local businesses are online travel booking companies. These companies have offices, located in many countries and employ a large number of personnel to serve travelers through their network of millions of accommodation properties. As a consequence, this globalization phenomenon relates to the language study as it leads to the increased needs of foreign languages study, for economic reason, especially English language. In addition, it also affects the degree of learning motivation amongst all workers-to-be as English is considered as the most popular language, used in global communication (Block & Cameron, 2002).

In the realm of language, globalization leads to a wider spread use of English. Kirkpatrik (2015) states that nowadays, people whose first language is not English choose to take the advantage of English to facilitate their communications worldwide. Additionally, Jenkins (2015) points out that people around the world who live and work in various cities in different continents, regardless of their native tongues, use English as the mediating language. As a result, English is deemed important in global communications, as it penetrates different cultures and countries with no regards to native languages that are used in those nations. Take, for example, online travel booking companies, these companies can be used to illustrate the increased needs in English communication. Due to the fact that their staff and employees of the accommodation properties are required to use English as the arbitrary language when speaking to clients, it strongly emphasizes the crucial and prominent role of English as the mediating language, occupying the role as a by-product of globalization (Coupland, 2010).

As the development of economy involves the incorporation of technological implementation nowadays, evidence suggest that technology becomes an important element of people's daily routines, both professionally and personally. According to Block and Cameron (2002), education, too, is affected by the new form of technology and social media platforms as they change the way teachers teach as well as how students learn. The advancement of the internet technology, leaping from Web 1.0 to Web 2.0, working in concert with the emergence of global top social media platforms has created unconventional teaching and learning approaches. At the present time, as soon as teachers and students have access to the internet, they can connect to each other in the virtual world to make the teaching and learning more interactive, authentic and flexible (Dupuis, 2003). For international communication, English is still the leading language of choice; therefore, those who can master English have greater opportunities in making use of these technological tools, in terms of learning enhancement, which results in higher chances of learning success (Kumaravadivelu, 2012). Online education providers can be good examples of how people with sufficient English skills that have greater opportunities to learn from thousands of courses available online than those who lack them. This phenomenon illustrates the correlation

between new technologies and their influence that can bring about change in the realm of education.

1.2 The Fourth Industrial Revolution

Blumer (1990) states that the influence of the internet technology and social media platforms, as mentioned previously, has also created a significant impact on the emergence of industry 4.0 or formally known as the fourth industrial revolution. Although modern internet and computer technologies, including both hardware and software have directly advanced the rise of the industry 4.0, it is undeniable that social media platforms, through their abilities to connect people around the world, has a great influence on the rapid expansion of the fourth industrial revolution. While technologies behind the birth of the industry 4.0 offer the ability for machines to talk to machines, machines to talk to products and machines to talk to humans through their personal computers, smart phones and other smart devices, social media platforms offer the ability for these machines to connect to more users exponentially.

This new economic eco system has created a very strong demand in English language communication both in writing and speaking (Block & Cameron, 2002). Most programs that are used to operate machines, computers, smart phones, smart devices and sensors allow them to connect and talk to each other within the web that is written in English. In addition, software engineers who write these programs that live in different parts of the world, more often than ever, must collaborate with their partners using English as the common language. At the same time, a great majority of consumers in the global marketplace use English as the means of communication to purchase, exchange and even return goods and services. It has become necessary for both merchants and customers who want to have greater advantages in the competitive market to master English language, especially the speaking ability. People with solid English-speaking ability are in better positions to engage in a more meaningful discussion and negotiation to achieve their economic goals, to earn more incomes and to receive goods and services than those that are not (Blommaert, 2010).

The emergence of the industry 4.0 also has a considerable implication for business and industrial sectors. Woods (1993) points out that, at the global scale, a number of business and industrial sectors express the need of recruiting qualified workers who graduate from educational institutions worldwide. The reason is that these corporations can eliminate enormous training costs by recruiting well-trained staff. In addition, by having skillful staff, the companies will become more competitive. Consequently, these companies recruit workers only from institutes that equip their graduates with all industrial-demand skills. On the part of universities, these facts have profound implications in dictating the direction of the curriculum development (Woods, 1993). It can be stated that, by holding employers' needs in consideration, it implicitly emphasizes the utmost importance of English and technological competences that all university students must have mastered upon their graduation.

1.3 Thailand 4.0 and English Language Learning Demand

Narrowing the scope down to the current situation in Thailand, it can be stated that Thailand is part of the global market that has been experiencing the effects of globalization, especially, during this fourth industrial revolution or the Industry 4.0. As a result, the current Thai government has launched the new economic developmental framework for Thailand and named it Thailand 4.0. This developmental framework focuses on developing the Thai economy in various ways. Apart from the emphasis use of technology in every field, one of the segments that involves the realm of language use is the High Value Services segment, commonly known as the lifestyle business sector. It is one of the main focuses in promoting the national economic growth. Maesincee (2016) points out that this business segment is considered one of the core industry enterprises. English is typically used for communication amongst foreign visitors coming to Thailand, both native and non-native speakers. As a result, businesses that are operated in the High Value Services segment, such as tourism, hotel and hospitality industries appear particularly to have created a high demand for English proficiencies amongst Thai workers. It can be mentioned that those who operate within these industries are required to equip themselves with both technological competency and strong English communication skills. This high market demand in English proficient professionals requires that the English department of universities in Thailand

must have developed students' technological capability as well as their English communication ability, especially the speaking skills at the business proficiency level, prior to their graduation (Maesincee, 2016).

In addition to new university graduates that must be fluent in English communication, existing professionals must also be able to exhibit an effective usage of English in order for them to be successful and advance to the next pay scales in their careers. The needs for careered professionals to improve their English have prompted many universities in Thailand to offer continuing education classes to these adults, in evenings and weekends. In order for universities to compete amongst themselves to attract clients, their reputation, pertaining their ability to actually improve English communication skills to their adult students is of the utmost importance. Since traditional English teaching methods have proven to yield little success for them to acquire English during their formal education, these careered professionals will undoubtedly seek to attend classes at universities that are reputable in using alternative teaching methods in helping them advancing their English proficiency levels. As many of Thai employees in the industries advance into management level, their colleagues are no longer limited to only Thais. Considering luxury hotel chains, for example, they employ qualified English-speaking managers and directors from all over the world. Thai professionals who wish to take up management positions cannot avoid improving their English skills for meaningful and effective business communication both for their interaction with clients and for meetings with their peers. English skill improvement requirements are not only limited to hotel management and front office staff, more and more hotels today import chefs from all over the world to cater to their clients' craving needs for international menus, Thai restaurant kitchen staff also cannot avoid using English in their communication. These facts emphasize the demand of English proficient professionals that result from the Thailand 4.0 economic development goals.

It is evident that the influence of technology that has created the new world order, together with the industry 4.0 that enables inter-connectivity amongst the world's citizens have awakened English educators in Thailand to a new reality. They have come to the realization that their current English teaching model and settings are neither efficient nor effective enough to cater to the strong need in helping Thai citizens

develop the required English-speaking ability. As a result, they must find more efficient and effective alternatives to traditional classroom teaching in order to meet much stronger demands for English language amongst all sectors involved.

1.4 Challenges of English Teaching and Learning in Thailand

In order for Thai students to thrive in the business environment, English communication competencies are, therefore, of the utmost importance. Being a global top tourist destination, Thailand receives tens of millions of tourists each year. In addition to foreigners who visit Thailand for pleasure, an increase number of them also come to the country for medical purposes, both for medical treatments at hospitals and for cosmetic surgery purposes. This implies that Thai universities are facing the challenge in training a sufficient number of students who will graduate to work in hotels, restaurants as well as in hospitals and clinics. At the same time, existing staff of these accommodations, along with medical and cosmetic businesses need to increase their English skills, in order to provide quality services to their foreign clients. As a result, all sectors involving English language teaching and learning are forced to be prepared for the upcoming future. In essence, this implies that they must be ready to welcome the flow of English speakers into the country.

However, the current situation of English language teaching and learning in Thailand's educational institutions, at all levels, seem unprepared to embrace the change and its associated challenges. There still appears many problems about English education, both in terms of teaching and learning. As far as students are concerned, most Thai university students have so far graduated without sufficient English communication competencies. Noom-ura (2014) illustrates that the cause of this problem is two-fold; students are unmotivated and are seldom exposed to English communication in their daily routines. Reasons being that, students have little motivation in using English, because they do not recognize the need for using it. Additionally, in their daily lives, they hardly hear anyone speaking English or encounter any English speaker. Therefore, they have limited chances to communicate in English. Yusica (2014) further indicates that one interesting psychological factor contributing to Thai students' inability to speak fluent English is anxiety. Thai students often become

anxious when being requested to speak English, both within the confinement of their classrooms or elsewhere. They often stumble to make smooth speeches, as they lack opportunities to practice speaking English. These psychological factors have generally prevented most Thai university students from becoming proficient in English communication. Their lack of English-speaking proficiency is manifested even more clearly than ever when they enter job markets.

In addition, according to the researcher's personal English teaching and learning experiences, it seems that causes of these problems can be broadly grouped into two dimensions. The first dimension is the teachers' dimension. A lot of Thai teachers still deploy the traditional method of English teaching, focusing on grammar, accuracy and native-like competencies. In the classroom, some Thai teachers still purely use a lecture-based instruction. As a result, students may find it uninteresting, and this can reduce their interests and motivation in participating in classroom's activities. This corresponds to the research results, concerning Thai teacher's teaching from Noom-ura (2014) which claims that there is an insufficient number of qualified English teachers in Thailand. It seems that Thai teachers still adopt the concept of monolingualism, which contradicts the notion proposed by Krachu (1992), stating that teachers should shift a teaching paradigm from the monolingualism to the bilingualism or multilingualism. Also, the current teaching should be moved to a more functionally oriented and culturally authentic practices (Krachu, 1992). The second-dimension concerns students. Apart from the lack of both inside and outside classroom's motivation, it seems that Thai students study English just to pass the exams. They do not think about the future usage of English language that they may encounter in their daily activities. This rationale amongst Thai students leads them to study by memorizing study materials and simply forget what they have memorized post examinations. These factors, hence, do not help promote English speaking ability amongst Thai students.

1.5 Blended Learning and the Current Situation

Evidence suggests that the current English teaching in Thailand is neither efficient nor effective. Consequently, a better alternative is needed. The current global pandemic has complicated and accelerated this issue, as educators are forced into effectively running blended learning curriculums without the time or resources to prepare for it. All teaching and learning must be a blend of face to face and online learning. Unprepared Thai teachers and students have been off guard, as a result. Worried Thai parents and educators fear that Thai students may not be able to complete their education per their designated academic year. The Thai Ministry of Education has mandated that educational institutions resort to online teaching with the hope to minimize or eliminate the impact on the education quality. Such mandate requires that Thai educators and students use technologies to aid their teaching and learning. As a consequence, it stimulates the demand on distance learning and blended learning amongst all educational institutes. To achieve the goal of blended learning implementation, it requires that all involving sectors make adjustments in teaching and learning. Within the scope of universities, this current situation forces Thai universities to revise and redesign teaching and learning programs. However, since the majority of both Thai teachers and students are unfamiliar with online teaching and learning, they struggle to adopt it. Students, teachers and administrators have to be able to utilize the internet technology as well as dealing with all possible technological problems. Therefore, it can be said that the COVID-19 pandemic changes the way teachers teach and students learn. It requires that all involving parties be able to adapt to the new paradigm of incorporating the use of technological tools in teaching and learning.

As a consequence, a number of Thai teachers and students have already started to embrace blended learning. This learning approach combines traditional in-class pedagogy with online teaching and learning. Blended learning can possibly help ease their struggle to adopt the pure online learning approach and may even solve or prevent problems concerning communication difficulties in the absolute online learning environment. To further elaborate this, there are many scholars who have defined the meaning of blended learning. For example, Allan (2007) defines blended learning as a learning mechanism that integrates technology into learning protocols by implementing

e-learning activities to supplement in-person teaching and learning activities. As the name implies, e-learning involves the use of many internet-based tools, such as the use of websites to help enrich the effectiveness of the traditional teaching techniques. This kind of teaching and learning model has increased its widespread acceptance within the past ten years. Through her viewpoint, it can be stated that blended learning lies between a hundred percent of learning residing on the web and other hundred percent depending on the traditional in-person teaching and learning environments.

Stein and Graham (2014) also suggest that blended learning is a kind of learning that occurs both in the confinement of a physical location and in the virtual world, allowing for productive and adaptable learning activities. According to them, blended learning falls in between one that is totally onsite and another one that is purely online, within the spectrum line. These two scholars further explain that the traditional teaching class can evolve into blended learning if there is the use of online activities during class. In contrast, the typical online class can also be blended if there are some onsite interactions. Moreover, there are many blended learning models that the instructor can adopt or adapt, depending on his or her personal and environmental factors. Therefore, blended learning is the mixture of the traditional in-class pedagogy together with online teaching and learning. It can be implemented through several modes with the aim of providing teachers and students effective teaching and learning outcomes.

Stein and Graham (2014) point out that blended learning can be beneficial for teachers and students, as it helps enhance motivation to learning and improves the learning quality. For learning motivation enhancement, implementing blended learning can be advantageous in terms of granting students an alternative way to learning, as well as providing them convenient learning activities. The use of blended learning provides more flexibility and freedom, comparing to the traditional teaching and learning approach. Teachers and students only participate in onsite classes when necessary, leaving the rest of the course for online sessions. Therefore, blended learning improves learning access and provide convenience to its users, resulting in higher learning motivation amongst students. In addition, this learning model also promotes learning engagement, using social interactions. Unlike the traditional learning class,

blended learning provides both in-class and online interactions, offering wider collaborations amongst teachers and students. Reserved students who do not interact much in the traditional classroom setting can also become more active when participating in the e-learning environment.

In terms of learning improvement, Stein and Graham (2014) claim that blended learning yields better results than using just traditional learning methods or a purely online learning alone. They propose convincing evidence to support this claim. First, this kind of teaching model helps improve students' learning as it gives students easy access to learning activities, since most of learning activities are in the online platform. Another benefit, regarding students' learning improvement is that students can individually manage their learning needs, as most of the course contents and materials can be accessed online. Students can visit and revisit those contents, materials or activities that they think they want to learn or practice as often as they want, as well as doing self-assessments at any time they prefer. Additionally, for instructors, learners' time spending on task is more visible to instructors, comparing to the onsite class since instructors can track every step of learners' progress in the online learning platform. It also helps increase guidance, as it requires instructors to provide explicit coaching and mentoring to learners along the way while the course operates both the onsite and the online environment.

Other scholars also express their viewpoints that involve the integration of technology in teaching. They believe that this kind of combination can be used to eliminate or reduce some causes of students' learning problems mentioned earlier, because of the benefits that it offers. As most students in this century are interested in using technology, according to Khan (1997), teachers can increase students' motivation by taking the advantage of blending the use of technology into the instruction. Dupuis (2003) also suggests additional reasons that people are motivated to learn. If the instruction provides a clear economic impact such as securing a new job or streamlining a business process, learners will be more likely to invest necessary time and effort to acquire new knowledge. Therefore, if the instructor adds contents that are relevant to students' learning goals, involving what they will encounter after graduation, it can help increase their motivation level in learning. In terms of environments, Dupuis (2003)

also points out that use of technological resources can provide students with greater opportunity for learning than otherwise, as it maximizes the utilization of limited resources, supports distance learning instruction and encourages independent learning as well.

1.6 Research Gaps in Blended Learning

In the context of this research, the researcher has identified three major research gaps, following the literature reviews. These gaps include inconsistent research results concerning blended learning effectiveness, the use of blended learning to improve students' speaking ability and students' learning motivation, and the findings about the perceptions of both students and teachers towards the blended learning implementation. Each of these gaps are described hereafter.

Blended learning as a teaching methodology, including both in-class and online learning, has its appeals and appears to be a subject of interests amongst scholars. Many English educators throughout the world have conducted research on this approach and even implemented it in their teaching. However, amongst the number of research that the researcher has reviewed, the results of the blended learning implementation yield inconsistent results. The effectiveness of the teaching and learning outcomes is somewhat inconclusive between being significantly effective and being insignificantly effective. For instance, the research results from the study of Bataineh, (2017), Hubackova and Semradova, (2016), Kintu, Zhu and Kagambe, (2017), Kosar, (2016), Lungu, (2013), Nazarenko (2015), Safranj, (2013), and Soler, (2017) indicated that changes were significantly different. On the contrary, research results conducted by Maulan and Ibrahim, (2012), Tosun, (2015) revealed that changes were not significantly different.

Although inconclusive research results may raise doubts amongst scholars on the effectiveness of this teaching methodology, one is not yet able to completely rule it out as being ineffective. As a result, this learning approach remains a subject of research topic amongst scholars who still believe that it can be implemented in their teaching environments to yield significantly effective results. It may be reasonable to believe that blended learning can now be implemented more effectively than in

previous attempts, due to the fact that the internet and social media platforms are available to a vast majority of students throughout the world. Nowadays, the younger generations are much more well-verse in utilizing internet technology and online applications than their predecessors that participated in previous research. The doubts about the effectiveness amongst scholars, coupling with the internet savvy students creates the need for further research to assess the effectiveness and applicability of blended learning, in the researcher's specific teaching and learning environment.

As most of blended learning studies in Thai context appear to cover three main aspects which are the effects of blended learning on students' learning skills (Banyen, Viriyavejakul, & Ratanaolarn, 2016), (Anggoro & Teeraputon, 2018), the effects of blended learning on students' satisfaction (Anaraki, 2018) and the effects of blended learning on students' motivation and attitude (Sucaromana, 2013), there is still the lack of studies that aim to focus on the implementation of blended learning to improve students' English speaking skill, the examination of students' leaning motivation and the exploration of students' and teachers' perceptions of blended learning practices. Therefore, the second and third gaps in the researcher's particular teaching environment and target audience involve the use of blended learning to improve students' speaking skill and their learning motivation as well as the lack of information about teachers' and students' perceptions towards blended learning. As none of English teaching lecturers, in this research setting, has embarked on a study of blended learning or has attempted to implement it, the researcher is interested in discovering as to whether the implementation of blended learning at this particular context can lead to the improvement in students' speaking ability. At the same time, the researcher wishes to take this opportunity to examine the effects of blended learning on students' learning motivation.

In addition, it may be necessary to understand how perceptions may positively or negatively impact the effectiveness of the blended learning implementation. When learning and teaching a liberal art subject such as English, the effectiveness of classroom teaching and learning may unarguably be affected by the perceptions of both students and teachers. English teaching requires instructors to utilize their unique sets of beliefs or perceptions to elaborate the teaching content that

makes it inviting and engaging to their students. At the same time, it is unarguable that students who possess positive perception are more likely to learn better than those who have negative perception. As human emotions can be contagious, students' and teachers' perceptions of the blended learning approach can either pass along a positive attitude or assert a negative attitude (Chingos, Whitehurst, & Lindquist, 2014; Hanushek, 2010). Therefore, it is important to obtain the research results that can somehow assess how students' and teachers' perceptions of blended learning affect the effectiveness of this teaching approach.

As mentioned earlier, the Thailand 4.0 initiative will inevitably create a high demand of English-speaking proficient professionals, especially in the area of tourism, hotel and hospitality industries. The researcher who is in the career of teaching English at one public university is inspired by such needs and is motivated to find ways to help the country develop qualified workers in this field. However, traditional English teaching methods seem to have fallen short of being able to produce enough qualified professionals to serve the industry demand. After having done a preliminary research, the researcher found that studies reveal inconsistent results, which raise doubts whether the blended learning implementation yields positive results in the researcher's own context. The researcher also wishes to gain insights into the impacts on whether the blended learning implementation can lead to the improvement of students' speaking ability and the increase in their learning motivation. The researcher, additionally desires to assess how students' and teachers' perceptions of blended learning may either positively or negatively impact the effectiveness of the implementation of this teaching approach. As a result, the researcher has decided to embark on the journey to find closure on these gaps and states the research objectives in the following section.

1.7 Research Objectives

        1. To investigate the effectiveness of blended learning in improving Thai university students' speaking ability

        2. To examine the effects of blended learning on Thai university students' learning motivation

        3. To explore students' and teachers' perceptions towards blended learning practices

1.8 Research Questions

        1. How effective is blended learning in improving Thai university students' speaking ability?

        2. How does blended learning affect Thai university students' learning motivation?

        3. What are students' and teachers' perceptions towards blended learning practices?

1.9 Scope of the Study

        This research investigates the effectiveness of blended learning in improving Thai university students' speaking ability, students' learning motivation, and students' and teachers' perceptions towards blended learning approach. The content used in this research focused on English for communication. The population of the study were first-year university students who enrolled in English for communication courses. However, research participants consisted of 102 students who enrolled in the two intact classes of the English for communication courses, at a public university in Chiang Mai, during the academic year of 2019. These participants were selected by using the convenience sampling method. In regards to variables, the variables used in the study comprised of both independent variable and dependent variables. The independent variable was the blended learning approach, whereas the dependent variables were students' English-speaking ability, students' learning motivation, and

students' and teachers' perceptions towards blended learning practices. The research took two semesters.

1.10 Definition of Terms

1. Blended Learning

In this study, blended learning (BL) refers to the mixture of the traditional in-class pedagogy together with online teaching and learning, implemented through the rotation models, including the station rotation model, the flipped rotation model and the individual rotation model.

2. Traditional Teaching

The traditional instruction refers to the traditional method of English teaching, focusing on grammar, accuracy and native-like competencies. In the classroom, the teaching appears in the form of a lecture-based instruction.

3. English Speaking Ability

English speaking ability, in the present study, refers to students' capabilities in participating in a role-play presentation, in terms of the use of appropriate grammar, vocabulary, pronunciation and interactive communication.

4. Learning Motivation

The learning motivation in this study refers to factors that can be a combination of both students' intrinsic desires as well as their external influences that effectively steer students towards and achieve their learning goals.

5. Students' and Teachers' Perceptions

In this research, students' and teachers' perceptions refer to the way in which students and teachers think about or perceive blended learning approach, formulated by their background knowledge and experiences. The focuses of exploring perceptions are on teaching and learning management, availability of technology and facilities required for the implementation of blended learning, success factors as well as teachers' and students' readiness.

6. Thai EFL Students

Thai EFL students refer to the research participants comprising of 56 Thai university students from the general sciences major and 46 students from the physics major. These students enrolled in the English for communication course in their first semester, at a public university in Chiang Mai, during the academic year of 2019.

1.11 Significance of the Study

The significance of this study has two main dimensions. The first dimension is the pedagogical significance. This study would be beneficial for students, in terms of helping them to improve their English-speaking proficiency. It may also benefit practitioners who wish to implement this teaching technique into their teaching contexts. The second dimension is the administrative significance. The findings may guide educational administrators on ways to prepare students to become qualified for work markets. The findings may also provide the administrators some guidelines for future educational management, such as budget planning, learning material preparation, as well as technology and facilities required to support the blended learning implementation.

1.12 Chapter Summary

After introducing the background information leading to the needs to improve English-speaking skill amongst Thai students, this chapter describes difficulties, pertaining to teaching and studying English in the Thai educational system, while also discussing the theoretical concepts learning motivation as well as English language teaching and learning perceptions. Furthermore, the chapter introduces the concept of blended learning and elaborating the reasons for the adaptation of the station rotation, flip rotation and individual rotation models. Before coming to an end by highlighting the importance of the study on the effects of the blended learning implementation, this chapter describes the needs for the study, purposes of the study, research questions, the scope of study, definitions of terminology. The reviews of literature involving all variables mentioned in this chapter are elaborated in the next chapter.

CHAPTER 2
LITERATURE REVIEW

This chapter presents the review of literature, in relation to blended learning. It also touches the area of the involving aspect; web-based instruction. The theoretical concepts of teaching speaking, the notions of learning motivation, as well as teachers' perceptions are also discussed in detail. The chapter ends with the presentation of related research studies.

2.1 Blended Learning

This section offers the notion of blended learning as a theoretical framework that instructors can use in teaching, while also explaining critical concepts of the blended learning approach. Furthermore, it depicts advantages and limitations of blended learning, as well as how instructors can develop a blended learning program. Additionally, this section also provides instructional models of blended learning. Lastly, it elaborates important aspects of blended learning assessment.

2.1.1 Definitions of Blended Learning and Related Terms

Allan, Stein and Graham are three major scholars, in speaking of blended learning. In regard to its definition, Allan (2007) states that blended learning is a learning mechanism that integrates technology into the learning protocol by implementing e-learning activities to supplement face to face teaching methods. As the term e-learning implies, it involves the use of many internet-based tools, such as the use of websites to help enrich the effectiveness of the traditional teaching techniques. This kind of teaching and learning model has increased its widespread acceptance within the past ten years. Through her viewpoint, it can be stated that blended learning lies between a hundred percent of learning resides on the web and another hundred percent depends on the traditional face to face environment.

Stein and Graham (2014) also give the definition of blended learning as the kind of learning that occurs both in the confinement of a physical location and in the virtual world, allowing for productive and adaptable learning activities. According to the authors, blended learning falls in between one that is totally onsite and another one that is purely online, within the spectrum line. These two scholars further explain that the traditional teaching class can become a blended learning environment if there is the use of online activities during class. In contrast, the typical online class can also be blended if there are some onsite interactions. Moreover, there are many blended learning models that the instructor can adopt, depending on his or her personal and environmental factors. Therefore, blended learning is the mixture of the traditional in-class pedagogy together with online teaching and learning. It can be implemented through several modes with the aim of providing teachers and leaners effective teaching and learning outcomes.

Speaking of blended learning and the related terms, it can be said that one of the most similar terms of blended learning is hybrid learning. These two terms share a number of similarities and are used interchangeable by different scholars. Whitelock and Jelfs (2003) state that hybrid learning is the combination of the traditional instruction (face-to-face) and web-based instruction through the use of a wide variety of media, tools and teaching methods. In hybrid learning environment, it requires that teachers should be experienced and flexible and students should be self-regulated and autonomous learners. This term is now widely used especially in the realm of higher educations. Graham (2005) states the viewpoint of hybrid learning, identifying that there are four main principles of hybrid learning implementation. First, there should be the right combination of face-to-face and online sessions. Second, there should be the innovative use of technology. Third, the current teaching and learning paradigms should be reconceptualized. The last principle deals with hybrid learning assessment and evaluation.

2.1.2 Critical Concepts of Blended Learning

As suggested by Brandl (2002), in order to successfully implement blended learning instruction, it requires that educators apply appropriate technological tools with well thought-out lesson plans. Withing the teaching context, blended learning practitioners should consider the right combination of ICT tools and the pedagogical intervention that promote the success of teaching. In addition, within the realm of English language teaching, Sharma and Barrett (2007) indicate that there are many factors that influence the success of blended learning implementation. These influential factors play a significant role as they help predict the possibility of success. The factors involve teachers' positive or negative attitudes about the use of technology, students' English proficiency levels, teachers' training, accessibility of technology amongst students and teachers and financial cost. As mentioned earlier that there are some vital aspects to consider when applying blended learning, Bonk and Graham (2012) suggest educators consider six major aspects when designing the blended learning course. The aspects involve live interaction mode, choices of students and their self-regulation, support of teaching, learning and training, technological issue, cultural adaptation issue and balance of teaching and learning activities.

According to Stein and Graham (2014), in order to implement a blended learning course, there are many variables that need to be considered. The course designer has to take variables such as modes of interactions, learning time spent and selection of appropriate technologies into account when deciding to create the blended course. The first variable deals with modes of interactions; the course designer has to decide whether he or she will adopt the synchronous, asynchronous or the mixture of the two. The author explains that the synchronous interaction refers to the interaction that occurs real time, which can be both onsite and online interactions, for example face to face onsite interaction, web conferencing, video conferencing, live chatting and instant massaging.

Conversely, another form of interaction is called asynchronous interaction. As the term itself implies, this kind of interaction does not occur in real time, and related activities do not happen at the same time. Examples of asynchronous interactions include emails, discussion forums or even blogs where teachers and students can read and respond at their conveniences, enhancing the degree of flexibility in learning. The course can also blend both synchronous interactions and asynchronous interactions together to enhance the effectiveness of teaching and learning activities.

Another variable that the course designer needs to concern himself with is the planning of learning time. At this point, the course designer has to think about the time management since learning activities can be both onsite and online. The course designer has to balance the appropriate ratio between the onsite and the online learning time, by considering relevant factors including the course type, the course objective and all activities designed for the class. If the teacher decides to reduce the traditional learning time, he or she has to be sure that the reduced onsite time will be replaced with high quality online activities. However, the time used in online sessions does not necessarily equal with the time used in onsite sessions. The time required, hence, depends on the condition of each learner, as some learners can learn faster while others can learn quite slowly. That means that fast learners may need less time while more time may be required for slow learners.

Integrating appropriate technologies into blended learning is another significant variable in the blended learning implementation. Because the online part of the blended learning method emphasizes the significance of online tools, it is necessary that the course designer selects an appropriate type of online resources to fit into each learning task and activity. The selected online resource or platform for each learning task or activity can be as simple as the website integrating with a discussion forum or may be other more complex web-based tools used for creating contents and collaborating and sharing amongst the instructor and the learner. By doing so, students will receive authentic and real-world interactions that can help promote their lifelong and autonomous learning beyond the classroom boundary.

2.1.3   Advantages and Limitations of Blended Learning

Blended learning, like other learning settings such as traditional classroom instructions and pure online learning has both advantages and limitations. One of the advantages of blended learning is its ability to engage and motivate students in a way that each of other learning models cannot achieve alone (Tayebinik & Puteh, 2013). The two aforementioned authors also assert that students participating in a blended learning environment can also develop a sense of belongings amongst peers. Senffner and Kepler (2015) further elaborate benefits of blended learning by suggesting that this learning methodology is very agile and can scale up or down to meet different students' learning demands. Additionally, they point out that the freedom that comes with the online portion of blended learning provides students not only borderless learning environment but also lending them the ability to freely pick learning partners at their own preferences.

In addition to advantages of blended learning that have been stated by the above-mentioned authors, Riel, Lawless, and Brown (2016) express their opinions that this learning model can help maximize students' learning success. They explain that the reason for such optional learning experience is due to the fact that students can interact and work together with the teacher and classmates both while spending time together in the classroom and during their online interactions. In their views, these offline and online interactions can often be seamless and are thus productive, as a result. Furthermore, Zhang and Zhu (2018) state that blended learning can help ease the burden in finding suitable physical learning environments for different students' learning needs by taking advantage of the online part of this learning model. Besides, Marsh (2012) states that blended learning can help promote students' learning autonomy while also concurring with other scholars on previously mentioned benefits of blended learning.

Furthermore, Stein and Graham (2014) point out that blended learning can be beneficial for administrators, teachers and students, as it helps enhance the overall teaching and learning effectiveness. The advantages of the blended learning approach are described in detail as follow.

1. Learning access enhancement

Implementing blended learning can be advantageous in terms of granting students an alternative way to learning as well as providing them convenient learning activities, as students are not required to only attend in regular classes at school. The online learning provides more availability as students can access to all learning materials or course contents at anytime and anywhere. Take, for example the learning content, instead of only learn from teachers' selected content in class, students have access to global resources and materials that meet their level of knowledge and interest. Additionally, within the researcher's context, a number of students have to do part-time jobs. This makes them a bit struggle in managing the balance of study and work as they have to complete both studying and taking other responsibilities such as working or parenting. The implementation of blended learning enhances the way they access learning providing them more convenience.

For teachers' side, this allows teachers to come up with more channels to locate all learning contents and materials that can help enhance more learning access. The learning access enhancement results in students' much greater interest in learning, indicating more success in students' learning outcomes.

2. Learning engagement and motivation

The blended learning approach also helps students to be more engaged and more motivated in learning. As almost everything appears on the online platform, it gives students a chance to spend more learning time after they leave the class which leads to the more engagement. This learning model promotes learning engagement by using social interactions. Unlike the traditional learning class, blended learning provides both in class and online interaction, offering a wider collaboration amongst teachers and students. Due to the fact that students in this century are digital natives and prefer to have various ways of learning, teachers can increase students' engagement and motivation by making online learning fun to them, through taking their learning styles and preferences into consideration when designing the blended course. A wide variety of learning formats also link to students' entertainment and satisfaction which increase the learning motivation as a result. To use the blended approach more

strategically effective, teachers can have students go through the assignment appearing online before or after attending the class, for instance. It is said that when students are engaged and motivated in learning, it results in the higher level of collaboration, both the collaboration between the teacher and students and the collaboration amongst students. Reserved students who do not interact much in the traditional classroom setting can also become more active when participating in the e-learning environment.

3. Tracking students' learning and evaluation

It can be said that the ability to track students' learning is one of the benefits that this teaching model offers. Through the use of the learning management system or the LMS, all information about tracking and reporting can be done throughout the course as this program has the ability to follow every stage student take. Students' time spending on task is more visible to teachers, comparing to the onsite class since teachers can track every step of students' progress in the online learning platform. For instance, teachers can use a program that shows which module students are learning. By doing this, teachers can see where each student stands and cater appropriate instructions to each student's learning behavior. Teachers can analyze students' performance on assignments or scores and come up with an improvement plan such as the extra face-to-face session or the personalize instruction. Students' themselves can also track their learning progress too. For evaluation, as it is considered to be a time-consuming activity as teachers have to evaluate each student individually, the use of blended evaluation gives teachers more convenience in grading as the learning management system or the LMS will automatically grade all tests and report all results. Instead of manually do all grading, the system offers a more convenient evaluation option through the use of online assessment via built-in grading rubrics.

4. Learning flexibility

The use of blended learning provides more flexibility and more freedom, comparing to the traditional way of teaching and learning. Teachers and students only participate in onsite classes when necessary, leaving the rest of the course for online sessions. Take, for example, the flexibility of the content presentation, teachers can present contents that are difficult to understand in class, leaving easier to understand

contents available online. The benefit is that teachers can spend time explaining and clarifying complex contents so that it leads to students' higher level of understanding. With the online platform, teachers can also increase the flexibility and convenience of teaching and learning by stating how and when all parties participate. In other words, the blended approach offers learning flexibility in terms of availability as all teaching and learning can occur at anytime and anywhere. Consequently, blended learning provides more convenience to its users.

5. Learning improvement

Stein and Graham (2014) claim that blended learning yields better results than using just a purely face to face learning method or an online learning activity alone. The two scholars propose possible reasons to support this claim. First, this kind of teaching model helps improve instructional design because it requires instructional designers and educators to work together. It also helps increase guidance as it requires teachers to provide explicit coaching and mentoring to students along the way while the course operates both the onsite and the online environment. Moreover, blended learning gives students easy access to learning activities since most of learning activities are in the online platform. Another benefit regarding learning improvement is that students can individually manage their learning needs, as most of their materials can be accessed online. Students can visit and revisit materials or activities that they think they want to learn as often as they want, as well as doing self-assessments at any time they prefer. To illustrate, teachers can easily make students practice standardized tests just by posting them online or providing links. Students can do some practices more at their convenient time and place which reduce their anxiety, stress and increase their satisfaction.

6. Learning costs and time deduction

By implementing the blended learning model tactically, learning costs and time can be reduced. Teachers, students and institution's executives can save more costs and time spent through blended learning implementation than implementing traditional learning method alone. It can be said that the blended learning provides more convenience and time-saving to all parties. Teachers and students can decrease costs

and time involving materials preparation, travel time and transportation. For instance, instead of spending most of the time to prepare all learning materials for students including all handmade processes, teachers can just upload those materials online or send students a link. Besides, posting all learning activities and materials online enables teachers to spend less time to teach face to face, supervises students' assessments and grades students' performance, leaving the time for other aspects to be investigated. Furthermore, when teachers host the online learning activity, students and teachers' cost of travelling can be eliminated as well. For the institution, institution's executives can gain economic advantages over the use of campus resources and supplies. For example, electricity bills and water expenses can be reduced, as the result of the use of blended learning courses. Another example is that the institution can reduce costs concerning the copy of thousands of papers, buying books, stationaries or machines that cost a bunch of money. These expenses are saved as everything is catered online and available to download, read, edit and submit back.

7. Learning styles and autonomy

Due to the fact that teachers should take students' learning styles and learning preferences into consideration as these two aspects directly affect students' learning outcome, implementing the blended learning can address several learning styles of students when it is carefully planned and designed. Through the use of various mediums, for example, teachers can cater a wide variety of teaching and learning activities that touch upon all learning styles of students. As each student has his or her own unique way of learning, the use of online teaching provides students the ability to personalize their own learning to meet their individual need. To illustrate, teachers can give students different articles to read and have them reflect based on their own particular reading. Speaking of learning styles, the blended learning model helps balance a learning environment that has both quick and slow learners. Quick learners can go further by participating in more challenging activities. The other way around, slow learners can spend time doing things at their own pace. As a result, the learning is personalized based on each person's own interest and style. Take the researcher's teaching context as the example, with a rising ratio of students per teacher, it is difficult for teachers to personalize all students' learning problems. However, the use of blended

learning may give teachers a solution to this issue as it offers more channels for students to state the problem that they are facing or the need for extra attention in specific areas.

In addition, by focusing on students' individuality, blended learning also helps promote autonomy amongst students. Within this kind of learning environment, it allows students to manage their own learning that helps promote the learning ownership. For example, students are able to set their own learning goals or take charge of their own learning, allowing them to be a more responsible person and a self-driven person.

8. Communication improvement

The blended learning model can enhance communication skills amongst students through the use of, for example, the online discussion activities. Apart from the regular face to face communication in class, teachers can add online components that aim to improve students' communication skills as well. As there are various online learning platforms with built-in communication systems, teachers can use the benefit of, for instance, the automatic email notifications, messaging, built-in bulletins, discussion boards, chat rooms or video calls which students can interact and communicate with teachers, their classmates and others. Thus, it helps increase communicative competences of students as even shy students can directly message or talk to teachers or their classmates. By carefully cater appropriate communicative activities to students' preferred channels, these online activities can effectively improve not only students' communicative competences but also other soft skills like maintaining relationship, thinking critically or cooperating in team, for instance.

As people said that there are two sides to every coin, similar to other learning approaches, this teaching model has its own benefits as well as limitations. Riel et al. (2016) suggests that there can be challenges for both teachers and students participating in blended learning. These challenges can be put into two different groups where each group contains three challenges for the total of six challenges all together. The first three challenges can be seen as more specific to the students than they are for teachers. In a blended learning environment, students may face one or more of these three challenges. First students may encounter difficulty collaborating amongst

themselves to complete required classwork without the usual teacher's supervision. Secondly, due to a diverse set of activities, students may lose focus and become disengaged if activities are deemed irrelevant to the course objectives and to their interests. Third, activities outside of the classroom confinement can be difficult for students to orchestrate by themselves. In addition to students' challenges, teachers conducting blended learning may also encounter obstacles of their own. Like students, teachers implementing blended learning may face one or more of the following three challenges. First, teachers must ensure to set learning goals and objectives that are not only relevant to the course design but also achievable by their students within specific timeline. This is not an easy task for teachers who are new to blended learning to do. Secondly, teachers may find difficulty creating a lesson plan that they can properly conduct within their usual work hours, since blended learning integrate both inside the classroom activities and online learning. Third, some teachers may find it difficult in acquiring new technological knowledge and skills required to facilitate blended learning properly. The learning curve can be very steep for some teachers in this aspect.

Through the viewpoint of Stein and Graham (2014), it seems that the most noteworthy disadvantage of implementing the blended learning model is the fact that this model usually relies heavily on technology to deliver all online teaching and learning. Within the blended learning environment, it requires that all online components are reliable. It requires a strong internet connectivity and depends on technological feasibility. Moreover, the online platform should be easy to use, reliable, up to date and friendly to students. Both teachers and students should equip themselves with technological skills when learning through this platform. All technological problems encountered by students or even teachers who are not tech-savvy can be a significant indicator in preventing the success of implementing this model. It is important for the course designer to prevent all possible issues to arise. The course designer should make sure that all course elements are in high quality and availability. Also, there should be a strong technical support whenever unexpected problems occur. Hence, it requires a careful work on the course designer's side and a good collaboration on students' side. Another challenge is about change. It can be difficult to change some teachers' or students' belief, especially those who are very familiar with traditional

methods of teaching and learning. However, as blended learning becomes more and more popular in the realm of language teaching, the benefits are more evident, resulting in higher rates of implementation amongst seasoned educators recently.

It can be said that the emergence of the digital world puts pressure to all parties to adopt blended learning. Nowadays, it is evident that this approach provides new ways for teachers to effectively teach students. This section illustrates both advantages and disadvantages of blended learning. This approach has the values of both traditional teaching and online learning. Overall, it improves the performance in learning. This approach also helps enhance learning access and flexibility. It also increases students' learning engagement and motivation. In addition, teachers can track students' learning and do evaluation easily. This particular model offers independent study as students' learning styles are considered. Indeed, it has the value of feasibility by leveraging technological advancements to save time and money. Besides, students' communication ability can be improved through blended learning. Apart from some disadvantages such as the technological dependency, this learning strategy is now adopted globally and it is one of the most adopted learning approaches worldwide.

2.1.4 Blended Learning Instruction Implementation

In the realm of blended learning implementation, there are a number of suggestions proposed by a number of scholars. Frank, Kurtz, and Levin (2002) recommend that blended learning practitioners follow a four-stage model when implementing blended learning instruction. In the first stage, the initial mode, it is recommended that instructors simply provide administrative information of a course. The second stage is when the teaching and learning appear in the form of communicative elements. The third stage occurs when teaching and learning activities involve IT materials. The last stage is conducted for students' particular learning needs through the use of technology. Additionally, Neumeier (2005) proposes a framework for designing a blended learning course, consisting of six vital parameters: teaching and learning modes, teaching and learning subjects, teaching and learning contents, involvement language teaching methods, integrative models and setting. The scholar further states that all of these parameters play a vital role in determining the

effectiveness of blended learning practices. Allan (2007) also introduces blended learning program development life cycle consisting of three major stages; modeling blended learning programs, planning and designing blended learning programs, and planning and designing blended learning activities. The detail is described hereafter.

    1. Modeling blended learning programs

    Allan (2007) suggests two models for effective blended learning, including the Peter and Mumford model and the Dunn and Dunn model. She further elaborates that the Honey and Mumford model is a model that is used extensively as it covers four learning styles namely activist, pragmatic, reflector and theorist. Although she recognizes some limitations of this model due to the fact that it is overly simplified Western approach to management training, she perceives it as a model that can be an easy-to-grasp model for learners. In her opinion, students can simply use it to explore their learning activities and to reflect on their learning experiences. As for the Dunn and Dunn model, Allan (2007) sees it as an extension of the Peter and Mumford model. The Dunn and Dunn model incorporates the four learning styles described in the Peter and Mumford model into its seven learning dimensions which includes perceptual, information processing, problem solving, environmental, physiological, emotional and sociological. She believes that these two learning models can be combined to develop effective blended learning programs.

    Although it is impossible for any learning model or any blended learning program to tackle all learning needs for everyone due to their various learning styles, when these two models are combined to create a blended learning program, it can, at least, address learning needs of students at some of the time during the program. The rationale behind this statement is that when these two models work hand in hand, they can be used to design and deliver blended learning programs that can lead to better understanding of different types of learners as well as their learning styles and objectives. The author, hence, summarizes that the Peter and Mumford together with the Dunn and Dunn models can be used together to develop effective blended learning programs that can be catered toward the learner-center pedagogy, because these two models include the concept of reflections required in effective learning processes.

2. Planning and designing blended learning programs

Allan (2007) states that it is critical to take sufficient amount of time and effort during the design and development life cycle in order for the blended learning program design to be responsive to learners and their needs. These processes of the blended learning program can be effective when the program designer properly follows the established design and development process that involves five mandatory stages. These stages include analyzing needs, designing the program, developing the course, delivering learning activities and assessing the effectiveness of the implemented program. Once the need analysis is completed, the author suggests that the program designer adheres to the fundamental design principles for the blended learning program development when moving to the second stage. The fundamental design principles embedded in the second stage involves fourteen sub-design principles including maximizing opportunities for social interactions, maximizing action, signposting, varying pace and rhythm, chunking content, mapping participants' world, giving participants choices, surfacing objections, balancing theory and practice, designing reflective activities, designing for accessibility, designing for closure and lastly, designing for support.

The third stage of the design and development life cycle is developing the blended learning program. In this stage, a website or an online learning environment is set up, along with necessary technical support eco systems. Furthermore, this stage dictates all related learning activities in which learning resources and documentation are created for the proposed blended learning program. It also requires that management and administrative supports be established at this time. During this stage, two other important issues must also be considered. The first issue concerns all technical aspects of the program development. It is important for the program developer to be considerate of the user's personal computer (PC) limitations and the speed of their network when developing the e-learning website or the virtual learning environment. Because not everyone may have access to the most updated or modern computer equipment or the network technology, the website or the e-learning platform should be developed to facilitate older versions of the PC or a primitive network technology like the Digital Subscriber Line or commonly known as the DSL.

The second development issue involves the copyright and other intellectual property considerations. That is, while developing an e-learning website or an online learning environment, the program developer must not violate copyright and intellectual property protection laws and regulations, either by accident or by intention. Following the program development stage, Allan (2007) suggests that the fourth step of the design and development life is the implementation stage. This is, perhaps, the most exciting and challenging stage, since this is when the blended learning program is delivered. During this stage, either or both the program leader and the e-tutor may have to become involved in order to monitor, inform and collaborate with relevant stakeholders to ensure that the program is implemented successfully.

The author finally concludes that the fifth and the final stage of the program development life cycle is the evaluation stage. She states that typically, the evaluation of a blended learning program consists of three important issues including, the learning environment and learning materials, the learning process, as well as learning about its impact on the information literacy skills or the ILS. A thoughtful program evaluation can provide insights on how the program should be improved as it continues.

3. Planning and designing blended learning activities

Allan (2007) emphasizes that in order for a blended learning program to succeed, it needs to contain a healthy balance of different types of learning activities. These activities should be comprehensive enough to assist learners in exploring fresh ideas and developing knowledge and abilities in a safe learning environment. She provides a list of examples of such learning activities that include but not limited to action planning, brainstorming, debates, group discussions, exercises, icebreaking, problem-based activities, pop quizzes, reflective practices, role play activities and team building works.

Blended Learning Program Development Life Cycle
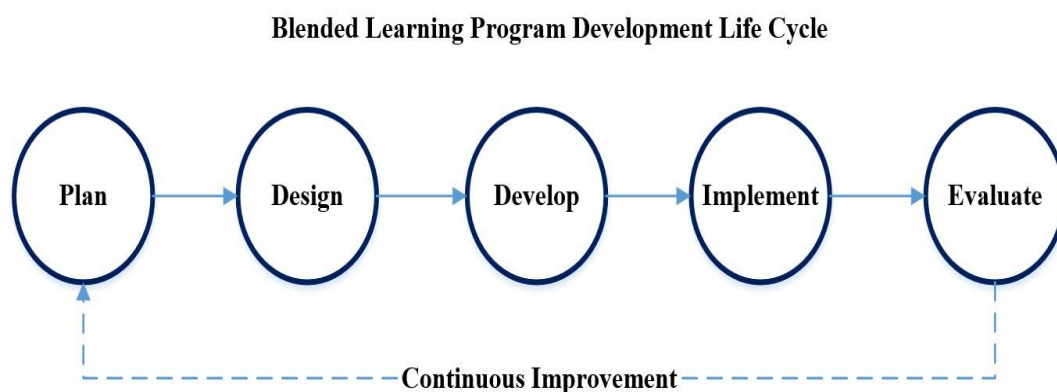
Figure 2.1

Blended Learning Program Development Life Cycle Adapted from Allan (2007)

2.1.5 Blended Learning Models

There are various blended learning models that are implemented by educational practitioners. Some famous models are, for instance, rotation model, flex model, a la carte model and enriched virtual model. However, the model that seems to be most applicable and practical to this research context is the rotation model.

As the name implies the blended learning rotation model is a learning model that requires students to rotate or move their learning experiences between two or more learning environments, settings or even instructions. There are four rotation types or sub-models within this model including station, lab, flipped, and individual. Although each of these models is typically implemented in traditional classrooms, one or more of them are also used in less traditional ways and go beyond the boundary of the typical classroom settings. That is, individual students or groups of students are required to finish a number of diverse learning activities online, in addition to completing their assignments in their classrooms. While it may be necessary to note other rotation learning models exists, they are conceptually similar to these four rotation models (Horn & Staker, 2015, Pace & Mellard, 2016).

The first sub blended learning rotation model is the station rotation. In the station rotation model, the teacher can designate two or more areas within a classroom for different groups of students to rotate between them. Students perform both online and typical classroom assignments, including but not limited to group assignments and collaborative projects within a fixed schedule. Once the designated time is consumed,

these groups of students have to rotate to do other online and traditional classroom activities in another learning station within the classroom, until all of them have rotated to all assigned stations (Pace & Mellard, 2016).

The second sub rotation model is the lab rotation model. This learning model takes place within the traditionally confined physical learning environments, with the twist of online learning activities. As the name suggests, the lab rotation model requires that students enter a computer lab or a classroom setting as a computer lab to complete online learning activities that are related to their typical classroom learning assignments, within a fixed time table. Once the set time is used up, students must then move to another lab to complete a different set of online assignments (Horn & Staker, 2015). Because students must complete all tasks within a fixed schedule in the confined area within the lab, their learning success or failure depend heavily on factors such as the capacity of the computer lab, the lab support personnel and the time given to them (Pace & Mellard, 2016).

The third sub rotation model is the flip rotation mode. This rotation model enables teachers of the traditional classroom to offer their students continuous learning experience and assign them to work outside of the school facility and class schedule by taking preparation of the next class online. In this model, students are encouraged to complete homework of the current class at school. After that, they will access the introductory materials of the next class online so that they can prepare themselves for in-class participation at school. The flip rotation model is, therefore, viewed as a model example for blended learning that gives students access to class material anywhere and anytime. It also provides students flexibility and proper time management in completing their assignments, based on their skill sets, learning speed and other aspects of life demands (Horn & Staker, 2015).

The last sub rotation model is the individual rotation model. This model takes a different approach than its other three predecessors mentioned previously. It is considered, rather, a disruptive innovation of the blended learning model. This rotation model, unlike other three rotation models, do not require students to rotate between physical classrooms, labs or even offline and online learning modes. Instead, teachers create a set of personalized or customized learning assignments for individual students and require that each student must rotate from one assignment to the next, per individual

instructions given by the teacher (Horn & Staker, 2015). It is worth noting that researchers also view or compare the individual rotation model to the personalized or customized learning which is catered to individuals' learning interests, objectives as well as to their learning strengths (Patrick et al., 2013).

After careful consideration of the rotation model and its sub-models, the researcher was convinced that it was applicable and practical to be implemented within the research context. The researcher, therefore adapted this model, either all of the sub rotation models or some of the four models, into practice and kept it as the instructional model in the lesson plans. The researcher also believed that the rotation model would make his lesson plans unconventionally interesting. The disruptive and innovative nature of the rotation model might also be well received by the target audience at the target community university where the researcher intended to conduct his research.

2.1.6 Blended Learning Course Design and Justification for the Adapted Model

In this study, the course design was developed based on the course description, course objectives and the blended learning instructional model. The course design applied the pre-, while-, and post-speaking instruction of Cohen, Weaver and Li (1998), together with the blended learning rotation model of Horn and Staker (2015). Altogether, there were six lesson topics namely "How was your vacation?", "I think it's exciting!", "Do it before you're 30!", "The best place in the world!", "Where's the party?" and "You should try it!". The course was designed to include both in-class learning on campus and online learning. During a three-hour on-site learning period, the station rotation model was implemented to induce both offline and online learning.

After finishing warm-up activities, the teacher introduced the pre-speaking stage in which the first station rotation model was blended. In this first station, the teacher conducted a review of some vocabulary and language use, necessary for students to perform the speaking tasks that usually appeared in forms of a role-play presentation, small talk and small group discussion. Moving to the second station, through the use of available online resources, students were then required to further study necessary language elements and create their own contents for the speaking tasks

assigned. In this second station, the available technological tools that were linked to web-pages, containing contents relevant to students' speaking tasks were utilized.

During the while-speaking stage, the third station was blended as students recorded and posted video, demonstrating their speaking skill online in the closed-Facebook group. During this activity, the teacher also encouraged and provided support to all students during their live performances, while they attempted to communicate their messages in the target language and gave assistance as needed. The post-speaking stage, after the end of each class, the teacher applied the individual rotation and flip rotation model. In the individual rotation, the teacher provided feedbacks to individual student's video and made suggestions on how they could improve their speaking ability. In addition, at a set time, in the online platform, the teacher conducted the live-chat session about the learning summary. Students were encouraged to ask questions or comment on any aspect as they were comfortable doing so. The teacher would then, answered questions accordingly.

As for the flip rotation, the teacher posted the next learning topic via a link on the Facebook private group for students to study prior to attending the next class on campus. Students were required to study the link and be prepared to speak in the upcoming class. The teacher monitored and tracked students' online participations through the "seen by", "like" and "comment" section. Last but not least, before implemented, all lesson plans together with a validation form were submitted to three ELT experts. The lesson plans were also verified for validity and reliability. Then, the experts' recommendations, regarding the lesson plans' format, teaching processes as well as the evaluation part were taken into consideration and revised afterwards.

In terms of justification, the theoretical concepts and logics behind the decision of using the three models, namely station rotation model, flip rotation model and individual rotation model of Horn and Staker (2015) are elaborated in detail hereafter. Based on the direct practical experiences in teaching university students as a full-time lecturer for five years prior to undertaking this study, the researcher observed three commonly distinctive characteristics of university students these days. Their first common character is obviously their favoritism towards the use of technology in their every day's life. This new student generation, also known as Generation Z, were born into the internet era. As a result, they appear to be favor in using a variety of

technological tools since their young age and are able to naturally acquire additional knowledge on advancing technology with ease. According to Freeman and Anderson (2011), incorporating technology into teaching and learning can be beneficial. As the three rotation models incorporate the use of technology in teaching and learning, students can be motivated to learn as they like to use technology in learning. Gass, Behney and Plonsky (2013) point out that motivation is a crucial sociopsychological factor that help predict the success of second language learning. Moreover, the selected rotation models also match students learning style as the models are similar to their preferred way of learning. Lightbown and Spada (2006) state that when learners learn the language in their preferred ways, it results in the success in language learning. Therefore, the use of the three rotation models can assumably be helpful in facilitating students to learn better.

Their second shared general trait lies in their learning attention span. Gass, Behney and Plonsky (2013) indicates that attention is one of the most important elements in second language learning as it directly affects students' learning proficiency. In this regard, it is quite observable that the attention span of a great majority of students is short, depending on each individual. These observations and beliefs are manifested in the behavior that these Generation Z students display inside the classroom; they are unable to stay focus on a certain topic or activity for long. The implementation of the three rotation models can help prevent or eliminate the issue of students' short attention as the teaching and learning are rotated to different stations over time.

The last but not least important characteristics of these students that convince the researcher to adapt station rotation, flip rotation and individual rotation models involve aspects of social distance and extroversion. Todays' students appear to be more intimate and more vocal than their predecessors, especially when they feel safe and perceive their instructors positively. Leaners' identities can directly affect how they learn things (Lightbown & Spada, 2006), as a result, the study of second language can be more effective when learners have minimum psychological and social distance from the teacher (Gass, Behney & Plonsky,2013). In terms of extroversion, as the stereotype of students nowadays is quite extrovert, learning via the selected rotation models matches this type of characteristic. This also correlates with the statement of Gass,

Behney and Plonsky (2013) as they mention that extrovert learners can perform productive skills such as the speaking skill quite effectively. Hence, implementing these models can presumably be beneficial in promoting students' English-speaking skill.

After a careful and thorough analysis of both the theoretical concepts of each rotation model and the three core common characteristics of students of this era, the researcher challenged in the shared traits amongst these students that the three selected rotation could help mitigate. At the same time, these challenges also presented opportunities that the researcher believed that the implementation of blended learning could be successful by adapting station rotation, flip rotation and individual rotation models.

In short, the justification of adapting theses three rotation models including station rotation, flip rotation and individual rotation lied on the researcher's conviction upon careful considerations that they could be used to both mitigate challenges and promote productive learning activities for the blended learning implantation to a success. The combined use of these models helped the researcher to avoid problems that might occur as a result of students' learning attention span. At the same time, they also assisted the researcher in taking advantage of students' inclination towards the use of technology and their inclination to interact with the lecturer in the environment was convenient and safe to them.

2.1.7 Blended Learning Assessment

As mentioned earlier that blended learning involves both onsite and online learning platforms, therefore, the blended learning assessment must also take these two aspects in consideration. Within the blended learning environment, teachers can assess students' performances both direct and indirect way. The direct assessment can be in the form of observation whereas the indirect assessment can be in the form of tests or reflections. Stein and Graham (2014) propose that teachers should assess students' performance by using both onsite and online assessments because the blending assessment is beneficial for many reasons. For example, blending assessment offers the opportunity to increase the variety of assessment as activities and tasks can be implemented onsite and online, helping the teacher to measure students' performance from different angles. Another advantage of this kind of assessment is that it enhances

the assessment frequency which results in the higher value of validity and reliability. Besides, the blending assessment promotes more authenticity as it enables more channels for the teacher to use as learning activities, contents or materials. It also enhances more chances of providing feedback as some feedbacks can be automated with full of detail.

Stein and Graham (2014) state that for the onsite assessment, instructors can use regular ways of assessment such as the use of tests, examinations, presentations, and demonstrations. It is worth mentioning that onsite assessments still have several benefits, for example, it ensures assessment integrity as teachers can certainly monitor students' testing behaviors or directly observe the way students present or communicate in the real setting. This aspect is considered very important for high-stakes assessment. The onsite assessment also provides complimentary supports to physical live learning activities occurring on the physical location. Teachers can get real senses of students' feelings, monitor them from different angles and provide real time comments or interventions when needed, resulting in a high degree of authenticity in teaching and assessing students' performance. Furthermore, the onsite assessment can help increase the degree of authentic interpersonal interactions between the teacher and students. It helps prepare students to be ready for the upcoming future of how people interact or communicate to one another in various scenarios. According to Stein and Graham (2014), it can also increase students' learning motivation as empathy and encouragement can be clearly and easily delivered through the onsite assessment. With the focus on expected learning outcomes, in this study, the onsite assessment will be in the form of tests that aim to measure students' speaking ability.

On other hand, the online assessment provides teachers even more opportunities for assessing students' performance. Stein and Graham (2014) suggest that almost onsite assessments can be implemented through online platforms. Tests, examinations, presentations, and demonstrations can be conducted through the computer-based model. However, the online assessment offers several obvious benefits that the onsite assessment cannot master, such as reusability, automation, multimedia richness and flexibility. Reusability and automation, for examples, are considered very crucial in helping teachers enhance the variety, frequency and feedback that aid students in their learning needs. With online tools available in the online assessment, test scores

can be automatically calculated and presented to both the teacher and students instantly. Therefore, it is beneficial for teachers in saving time and energy in developing, distributing and grading quizzes or tests. It is also beneficial for students as they can constantly practice doing all activities or tests throughout the semester as all activities and tests are right there. Research results reveal that this kind of retrieval practice can help promote learning.

Additionally, in regards to the test scores, the teacher can provide useful feedback to each student individually. As feedbacks should be given to students as soon as possible so that they can improve their learning, the online tools can help deliver the feedback automatically just by taking the advantage of computerized tests or through the online discussion, for instance. To illustrate, whenever students answer incorrectly, the feedback section will help clarify the answer or point students back to the learning material that locates the correct information. If students answer correctly, the feedback section may point to further areas that student can spend more time on. At the same time, students can ask the teacher to clarify any unclear aspects privately just by having a clear statement between the teacher and students regarding when and how the feedback session operates. In addition, the online assessment offers teachers the opportunities to track students' learning progress as the online platform provides blogs and analytical tools. All assessments appearing in both onsite and online can be in the form of scoring rubrics with specific criteria and descriptors. However, according to Stein and Graham (2014), although rubrics can be implemented on paper, it is suggested that online rubrics can be easier, faster and more practical. In the scope of this study, the online assessment will occur in the form of online speaking tasks and online reflection blogs.

In conclusion, this section explains that blended learning can be used as the research theoretical framework that integrates the online instruction with the traditional classroom learning. Instructors can use this framework to plan, design, develop and deliver the blended instruction by taking advantage of the internet to make certain course materials and teaching available online to students at all times and at low costs. At the same time, instructors can invite learners back to the classroom to aid their learning progress and close some gaps in the online knowledge acquisition. This section

also explains critical concepts, development, models and assessment of blended learning model.

2.2 Web-based Instruction

In order to distinguish blended learning from complete online learning, also known as web-based instruction (WBI), it is important to understand the meaning of the web-based teaching approach and its objectives. Furthermore, since blended learning adopts elements and techniques of the web-based instruction, it is also critical to have insights into details of this teaching approach. This section defines the term web-based instruction and explains significant elements of the web-based instruction in detail. It also elaborates that the web-based instruction method resembles a pattern consisting of nine actions while also providing potential benefits of the web-based instruction. Additionally, this section explains applicable framework as well as evaluation techniques that are appropriate for the web-based instruction implementation.

2.2.1 Definitions of Web-based Instruction

In the realm of web-based instruction, there exists three main key persons, namely Khan, Davidson and Dupuis. To begin with its definition, Khan (1997) describes that the web-based instruction is an electronic learning or simply an e-learning web-site or program that can be made widely available anywhere in the world, as it takes the advantage of the internet technology. The author further explains that the e-learning program is a software application that is developed based on carefully defined strategies that must include a collection of skills. The program can be used to cognitively instruct learners in an environment that promote collaboration between the teacher and students, amongst learning peers or even amongst all parties.

Similarly, Davidson and Rasmussen (2006) assert that the web-based instruction is a training program that is designed and customized to meet specific learning needs of learners, by delivering the content online either on the World Wide Web or within an organization's private network that is also known as the intranet. Regardless of whether the online content is made available to the public or within an organization, the web-based instruction can provide the learning environment where

the instructor can promote learning experience, which is not only meaningful but also authentic to online learners.

2.2.2 Elements of Web-based Instruction

Dupuis (2003) mentions that web-based instruction consists of nine elements. These elements include age, affiliation, internet access, technological skills, educational needs, culture, interests, motivation and expectation. They are described in details, hereafter.

1. Age

Depending on whether learners are children, teenagers, adults or seniors, each age group will have different experiences with online contents. Younger audiences, nowadays, most likely have been accustomed to learning on computers throughout most of their education life, while older audiences may be less likely to have interacted with online instruction environments. Age levels directly affect the types of information, sophistication of language and content verities. It can also strongly influence popular culture references that the instructor can expect the audience to understand in the provided content.

2. Affiliation

If the audience is affiliated with the same school, organization or geographical area, it may be easier to tailor the content that addresses the uniqueness of that institution or region. Commonalities in affiliation can lead to the development of appropriate contents for the project.

3. Internet access

Access to a computer with an internet connection is becoming increasing common. However, if audiences live in an economically disadvantageous area or a remote area, their internet access may be limited. Availability of access to the web will determine the amount of time that the lecturer needs to place on students' assignments. For instance, some people may need to access the internet by using computers at a public or a school library, while others can simply stay within the comfort of their home to go online.

However, even those with internet access at home may be limited to slow dial up connections. Because of different internet access and bandwidth, the content for each audience group may have to be customized, in such a way that the website design, graphics and interactivity features in the instruction are appropriate for the target audience.

4. Technological skills

The internet has a wide variety of uses, ranging from communications and social interaction to information gathering and researching. Each type of these uses may require different technological skills. For example, frequent users of chat programs may prefer using a chat module for their online instructions. Students who are experienced with distance education courses may be able to navigate web-based instructions with ease, while novice internet users may have a high learning curve to grasp the concept of online instructions and navigate through the web-based instructional environment. Additionally, some of them may require human assistance.

5. Educational needs

When considering educational needs, the lecturer may also want to understand both students' academic objectives and their learning styles. The understanding of these aspects can help the instructor determine appropriate online instruction programs and delivery methods that are suitable for the learner's needs. Moreover, it can help ensure that students will succeed in their educational endeavors.

6. Culture

The target learners' nationality and the culture are critical factors that must be understood in the web-based instruction. Testing the website with a few representatives of the culture will alleviate many potential problems, resulting from cultural misunderstanding. For example, although the audience's primary language is English, it is easy to lose the international users' interests without intentions, or it can even offend them through seemingly ignorant cultural references. It is, therefore, necessary to be mindful of the culture of the target audience when designing, developing and delivering the web-based instruction.

7. Interests

In any audience group, there can be a wide range of interests amongst learners. However, in a larger group of students and a group with more similarities in age and backgrounds, the more likely the lecturer will find shared interests amongst them. In contrast, in a smaller group of students or in a group with more diversities in age and backgrounds, the less likely the lecturer will find shared interests amongst them. With these facts in mind, strategically, the lecturer needs to avoid contents that audiences are not interested in and focus on delivering the content that they find interesting.

8. Motivation

Understanding what motivates the target audience to learn will help the lecturer designs the web-based instruction that can help students achieve their immediate studying needs. For example, if the lecturer can link the online instruction project to an existing course that will help students complete their assignments faster, it can strongly motivate students to participate in the project. Other factors may also help increase individual's learning motivation. For instance, if the online instruction can provide a clear economic impact such as securing a new job or streamlining a business process, students may want to invest their time and effort in the learning process.

9. Expectation

If students have prior experiences with the online instruction, they are likely to have developed preferences and expectations in this type of learning. However, for the audience that lacks prior experiences with the web-based teaching, they may be uncertain of what they can expect. In the latter case, the instructor may need to develop a supportive learning environment to help them become familiar with the new learning environment.

2.2.3 Web-based Instruction Methodological Framework

In 1993, Laurillard draws a design process for the web-based learning approach that resembles a pattern that consists of eight actions. These actions are described in order below.

1. Identify core capabilities that the target audience must learn and improve upon by consulting appropriate curricular planning materials from national, state-level or provincial-level and local institutions.

2. Simulate learning outcomes and test them on the target audience through interviews, quizzes, pre-tests, and other methods to learn about students' schema knowledge.

3. Modify goals and objectives, either by omitting, adding or rewriting them, based on a result of pre-instruction process that reveals the target audience' accurate knowledge and misconceptions.

4. Develop learning experiences that provide students with opportunities to achieve understandings identified in step three above. After that, the learning objectives should be explicitly articulated or identified for students. Then, teachers implement the teaching model in class.

5. Identify methods of assessment to determine evidences of students' understanding and specify criteria to determine whether such understanding has been achieved.

6. Collect and consolidate critiques and opinions about the web-based instruction by implementing regular discussion panels amongst learners and between the teacher and learners, in order to evaluate the success of the learning experience.

7. Adjust or even customize learning objectives to assist students in meeting their desired learning outcomes, from the beginning to the end of the learning process.

8. Impose a mandate that students monitor their learning experiences and become aware of their learning progress at all times so that they can reflect whether they achieve their learning outcomes.

Web-based Instruction Methodological Framework
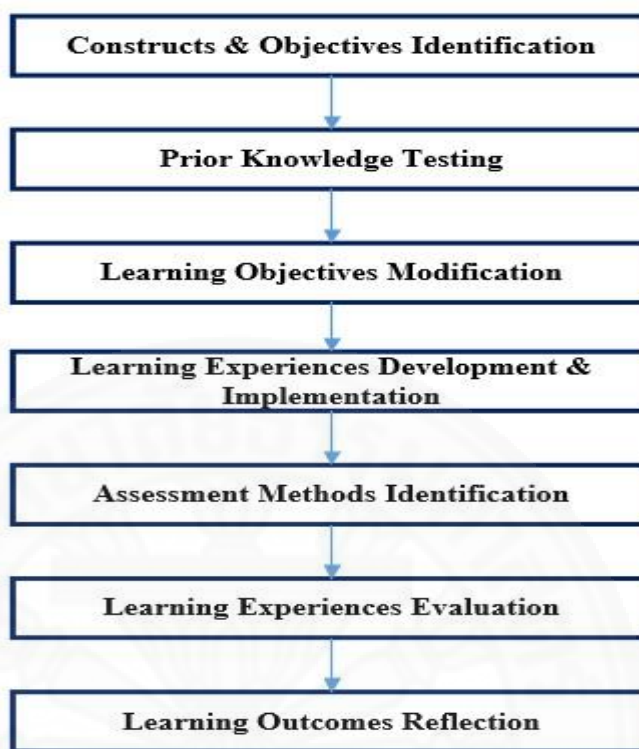
Figure 2.2

Web-based Instruction Methodological Framework Adapted from Laurillard (1993)

2.2.4   Benefits of Web-based Instruction Implementation

Implementing the web-based instruction can result in many potential benefits. Dupuis (2003) indicates that there can be a wide range of reasons for one to undertake the web-based instruction. The author provides five convincing reasons that one may find intriguing. These reasons are elaborated in more details as follows.

1. Impart new knowledge or skills

It is evidenced that most educational institutions and public organizations focus on the importance of ensuring that people of all ages develop necessary skills to seek, evaluate, manage, and create information. If the lecturer determines that members of the target audience such as students, staff, instructors, patrons, researchers or clients may benefit from an instruction in a particular topic in their leisure time, the web-based instruction can be a meaningful addition to existing educational offerings.

2. Maximize limited resources

Good instruction requires careful thinking and often, significant commitment from the instructor, resulting in spending a lot of efforts in terms of time management and energy consumption on the instructor's part. Although this may also true for a quality online instruction, by using the web-based instruction, the lecturer can reach a large number of the target audience by using less of his or her time and efforts. Additionally, the web-based instruction can be delivered without any concern on limitations of classroom space. Using this instructional model, the instructor can ensure that all audience members are introduced to the same content online and allow them to seek additional assistance only when needed.

3. Support distance learning initiatives

Many universities offer significant distance or distributed learning courses. These courses are offered through classroom instructions available remotely, by delivering them in the form of online instructions. If such initiatives are underway for their campuses, lecturers have good reasons to launch the web-based instruction project designed to complement these programs. However, if distance learning initiatives are not yet substantial for their institutions, Dupuis (2003) suggests that lecturers may consider taking the lead in this area by making online instructions available on their owns or in partnerships with another interested agency.

4. Transform connections with curriculum

Some educational institutions have information literacy requirements built into their curriculum. In this case, the web-based instruction may offer a solution that provides consistent and meaningful instructions to a number of courses that are catered to similar audiences or teaching similar topics. In the absence of these initiatives, any traditional partnership, such as a school teacher, a faculty member, a training coordinator or a community organizational leader may provide opportunities for these partners to integrate library instructions, research skills and even the use of specific resources together and develop them into online components or modules. Development of web-based alternatives with theses partners may encourage them to rethink and even redesign their instructions or training programs that they currently offer.

5. Encourage independent learning

Independent learning can be encouraged for people with certain characteristics. For example, busy individuals who want to learn something quickly from the internet, and if they are also regular users of the web technology, the web-based instruction can be catered to meet their demands and interests. Some people may prefer such on-demand learning model, especially in cases where the content can easily be addressed online with integrated interactive features.

Smith (2006) further elaborates that implementing the web-based instruction can be beneficial in several ways. She mentions that with the web-based instruction, teachers can teach a large number of students with variety of skills. Moreover, the web-based instruction can be interactive since teachers can provide immediate feedback to students while they are working on assignments. Another benefit is that the web-based instruction offers less time constraints than traditional classroom teaching methods. This model is independent of physical space limitations, because everybody can access learning materials any time they need as long as they have access to the internet. In addition, the web-based instruction helps increase the value of teaching validity and reliability, as the same content is presented similarly to all learners. As a result, problems related to teacher's inability to deliver instruction consistency can be reduced and even eliminated in some cases.

2.2.5 Web-based Instruction Evaluation

Davidson and Rasmussen (2006) suggest that when evaluating the effectiveness of the web-based instruction, either the formative or the summative techniques may be implemented. When the formative evaluation approach is deployed, the content of the online instruction is evaluated during the design and development phase, by using the formative evaluation method or combinations of methods appropriate for program design and its content. By doing so, the web-based instruction program developer has opportunities to review constructive feedback and improve the overall program effectiveness of both the design and the content of the online instruction, prior to delivering it to their target learners. In contrast to using the formative approach, the summative approach of assessment technique is implemented in order to assess the efficiency and effectiveness of the web-based instruction after it

has been delivered to target learners. The feedback can then be reviewed as to how well the instruction is received by learners, as well as how much it is perceived as valuable to them. Based on these feedbacks, the instructor of the web-based learning program can appropriately improve the program's effectiveness.

In summary, this section describes the web-based instruction as a way to provide education to learners by leveraging the availability of the internet technology so that learners can access the online course from anywhere in the world. When undertaking the web-based learning instruction, one must carefully consider all of its important elements mentioned previously. In addition, the section further elaborates that the web-based instruction method is a learning process that resembles a pattern consisting of eight relevant actions while also providing convincing reasons that teachers and learners may find the web-based instruction beneficial to them. Lastly, possible assessment techniques are also provided.

2.3 Speaking Ability

As the main interest of this research is to study the effects of blended learning on Thai university students' speaking ability, and since the information provided in the blended learning approach suggests that learners' speaking ability can possibly be improved through the adoption of this learning phenomenon, it is of significance for this research to also elaborate what speaking ability entails. This section explains the importance of the speaking ability, along with elements that must be presented to ensure the success of the speaking pedagogy. It also describes various ways of teaching the speaking skill as well as several ways of assessing the speaking ability.

2.3.1 Definitions and Importance of Speaking Ability

Bailey (2005) demonstrates the viewpoint regarding speaking skill, defining that it is the spontaneous and productive verbal ability. According to her thought, the speaking ability usually occurs in real time as interlocutors have no chance of revising the utterance and the response as they can do in writing. Additionally, the speaking ability is also considered as productive as it requires the direct production of the utterance. Amongst the four language skills; listening, speaking, reading and writing, Ur (1998) claims that the ability to speak naturally appears to be the most

desired skill for most people. People seem to have a false perception that being able to speak equals to knowing all of these four language skills. This observation is evident in the fact that individuals who speak a language are generally called the speaker of such language. Additionally, many language learners who study foreign languages are usually more interested in the speaking aspect than in other three aspects.

In contrast to such perception, Hubbard (1995) states that people cannot actually communicate effectively if they lack proper listening skills although they can speak English. For him, he thinks that the listening skill is important because people have to understand what other people say first and this skill must precede the speaking skill. He also states that many teachers ignore direct teaching of the listening skill, thinking that it is a passive skill. However, as students have various exposures to many kinds of listening sources, without proper teaching, it can lead to the problem of intelligibility in communication. This correlates with the thought from Cook (1991), in which she defines that listening is the process of decoding information from the utterance and interpreting it with the already known code, until the utterance becomes meaningful and comprehensible.

2.3.2 Elements of Successful Speaking Pedagogy

In order for a meaningful conversation to occur among parties, Ur (1998) states that the four signs must be present. The first sign is a display of the high-level of talking amongst learners. In a successful speaking activity, learners should dictate most of the talking during the learning activity, instead of having the instructor does all the talking like in the lecturer-centered teaching style. The second indicator of a successful communication is the distribution of the class participation. In order for a speaking activity to be considered successful, a small group of students should not dominate the discussion during class; however, everyone should have an equal opportunity to participate.

The third factor is the high motivational level amongst learners. Motivated participants generally display their eagerness in sharing their thoughts, because either the subject of the discussion interests them or they want to ensure that they accomplish the objective of learning activities. The fourth characteristic of a successful speaking activity is an acceptable level of the language use that suits their levels of learning. This

means that learners are able to speak the language accurately; and by elaborating relevant contents during their speaking activity, others can easily understand what they are trying to convey.

As mentioned earlier that the meaning of the conversion can occur when both parties are able to speak clearly and can listen comprehensively, Gower (1995), hence, suggests ways to improve students' listening ability. He proposes that the teacher has to think about what to say in the classroom. Many things that happen in the classroom involve students in listening both to the teacher and to other students. In one lesson, the student may have to listen to and understand greetings, instructions, explanations, opinions, correction, feedback and other topics of discussions. In that case, the teacher is an invaluable source of the listening practice. For that reason, the teacher should always be concerned about the language and the content he or she uses and how to express them, by keeping students' perspective in mind. Moreover, the teacher should encourage students to practice active listening and speaking amongst themselves, as well as providing texts and activities that will encourage students to develop listening skills. Hubbard (1995) furthers discuss that the teacher should consider the importance of teaching students sound recognition, stress patterns and intonations as students may fail to understand the utterance just because they are unable to recognize distinctive sounds and stress patterns or even unable to identify differences in intonation patterns.

2.3.3 Speaking Instructions

With regards to the speaking instruction, Brown (2001) introduces six efficient ways of teaching speaking. The first method is called imitative. As the word itself implies, this is when students practice imitating basic features of the oral production, for instance, letters and vowel pronunciation, stress and intonation. The importance of meaningful interaction is not focused in the imitative method. For intensive speaking, it is one step beyond the imitative level as students practice more difficult oral features which can be both in the form of self and peer's interaction. The third method is responsive speaking. Basically, students are required to response to questions or other kinds of stimulus. The transactional speaking is the fourth method to be introduced. In this method, students will be presented with dialogues. They are

expected to convey or exchange particular information. This is considered more advanced than the responsive speaking. The fifth way of teaching speaking is through the interpersonal speaking. Unlike the transmission of facts and information, this method is more authentic as students perform oral activities in the form of social interactions. Students are encouraged to use more complex language features like idioms, slangs or even sarcasm. The last way of teaching speaking is through extensive speaking. At this stage, students will be performing monologue task, for example, oral reports, discussions, summaries or speeches. However, in order to successfully implement each category mentioned, the teacher has to keep students' level and their performance in consideration (Brown, 2001).

2.3.4 Speaking Assessments

Assessing speaking skill can be conducted from the smallest part to bigger parts. As the success in speaking ability involves the ability to convey the message, using appropriate language, Evans and John (2013) mention ways of assessing speaking ability. The two scholars indicate that speaking tests actually assess a verbal interaction between people that include both speaking and listening, as they engage in a conversation. The interaction can be between the student and the examiner. In other cases, two or three students can even be tested together. Students can choose who they wish to be tested with, and the opportunity to make choices can boost their confidence. In conducting an assessment of the speaking ability, a standard procedure is to use band descriptors in which students will need a prompt card with the written instructions, along with hearing them.

The stimulus can be in a form of a note or through photographs and other non- verbal communication devices. Similar to writing, students do not have to search for all ideas but can just concentrate on the language and the communication. The best interaction used for assessment purposes should be purposeful. Besides, the result of the interaction should be unpredictable and can actually be used in real life. Moreover, the teacher has to keep assessments in high quality by focusing on what Hughes (2013) proposes. He states that the assessment should incorporate six elements which are reliability, validity, authenticity, interactiveness, impact, and practicality. These

elements will help enrich the assessment quality, providing the major justification for the use of results as a basis of making inferences or decisions.

In regards to reliability, it is often defined as a consistency of the measurement. It can be divided into test/re-test reliability, mark/re-mark reliability and student-related reliability. Another aspect deals with validity or the extent to which the test measures what it is supposed to measure, consisting of construct validity, face validity, content validity and criterion validity. The third element is authenticity or the degree of similarity of the test task and students' real-life target language use domain. In addition, the interactiveness is the way in which students' areas of language knowledge, metacognitive strategies, topical knowledge, and affective schemata are engaged in the test task. Concerning the impact, it is the way the test affects both macro level; society, educational system and micro level; individuals such as students or teachers. The last element, practicality, it is how practical the test is in implementing in the real context. These six elements are crucial in helping the teacher to assess speaking ability effectively (Hughes, 2013).

In this research, the speaking assessment appeared in the form of students' role-play presentations. The reason for choosing the role-play presentation is that it reflects the real-life speaking situation that students may encounter after they graduate. The assessment was conducted through the use of the speaking rubric, discussed in this following section.

2.3.5 Speaking Rubrics

In order for the speaking assessment to be more effective, the teacher is encouraged to implement speaking rubrics when assessing students. According to Brookhart (2015), it is stated that checklists, rating scales, and rubrics can be considered as speaking instruments. However, speaking of the efficacy of each, as the checklists and the rating scales do not provide detailed descriptions of the oral performance, they are quite weak in measuring the real oral ability. Unlike the checklists and the rating scales, the rubrics provide specific criteria for teachers to stick to and also provide detailed descriptions used for giving feedback to students. Therefore, rubrics can be viewed as useful tools to assess students' performance and teachers are encouraged to use them whenever they grade students' speaking performances.

Rubrics are significant for many reasons. To begin with, rubrics help teachers keeping the right track of their teaching by keeping teacher to stick to the set criteria. Also, rubrics help compliment the way teachers teach as they are designed to use repeatedly, at different times and for various tasks. Additionally, rubrics help guide students to be more competent as they follow the set criteria and the feedback reflection of teachers. Basically, there are two types of rubrics; analytic and holistic. The former involves the application of using one criterion at a time, the latter views performance as a whole. Therefore, the selection of rubrics can be different depending on the teaching objectives set (Brookhart, 2015). As there are various kinds of rubrics, in this study, the rubric that was used in order to measure students' performance was the speaking rubric, specifically the speaking rubric adapted from Cambridge's A2 speaking assessment. The rationale of choosing this rubric is that it is relevant to the construct to be investigated. In addition, it also provides detailed descriptions of the gained score and is frequently used by practitioners, predicting its validity and reliability.

This speaking rubric adapted from Cambridge's A2 speaking assessment consists of five band scores and three criteria, including grammar and vocabulary, pronunciation and interactive communication. The detailed explanation of each band score is described hereafter. Band one means that the student demonstrates a limited control of grammatical forms and uses a vocabulary of isolated words and phrases, in order to talk about daily situations. In terms of pronunciation, it is often unintelligible with very limited control of phonological features at both utterance and word levels. As for the interactive communication aspect, the student has considerable difficulty in maintaining simple exchanges and requires additional prompting and support. For band three, it means that the student demonstrates a sufficient level of control of grammatical forms and uses appropriate vocabulary, in order to talk about daily situations. The pronunciation of the student is quite intelligible with limited control of phonological features at both utterance and word levels. Moreover, he or she maintains simple exchanges requires prompting and support. The student with band five demonstrates an effective control of grammatical forms and uses a wide range of appropriate vocabulary, in order to talk about daily situations. The student's pronunciation is mostly intelligible with effective control of phonological features at both utterance and word levels. In

terms of interactive communication, the student maintains effective exchanges and requires very little prompting and support. In this rubric, band two refers to the performance that shares features of Bands one and three, whereas band four refers to the performance that shares features of Bands three and five. This speaking rubric also has some limitations as it does not contain all aspects required for the role-play presentation assessment. In addition, the shared performance features between bands can cause some confusions amongst raters which can be a threat to the assessment validity.

Table 2.1

Speaking Rubric Adapted from Cambridge's A2 Speaking Assessment

Band Scores	Grammar and Vocabulary	Pronunciation	Interactive Communication
5	- Demonstrates an effective control of grammatical forms. - Uses a wide range of appropriate vocabulary, in order to talk about daily situations.	- Is mostly intelligible with effective control of phonological features at both utterance and word levels.	- Maintains effective exchanges. - Requires very little prompting and support.
4	Performance shares features of Bands 3 and 5.		
3	- Demonstrates a sufficient level of control of grammatical forms. - Uses appropriate vocabulary, in order to talk about daily situations.	- Is quite intelligible with limited control of phonological features at both utterance and word levels.	- Maintains simple exchanges. - Requires prompting and support.
2	Performance shares features of Bands 1 and 3.		
1	- Demonstrates a limited control of grammatical forms. - Uses a vocabulary of isolated words and phrases, in order to talk about daily situations.	- Is often unintelligible with very limited control of phonological features at both utterance and word levels.	- Has considerable difficulty in maintaining simple exchanges. - Requires additional prompting and support.
0	Performance below band 1.		

In short, this section elaborates the meaning and the importance of the speaking ability. The information provided in this topic suggests that the speaking ability is not simply the mere vocal exercise. However, it is one's ability to provide collaborated and meaningful responses to messages received, either in the verbal or in the non-verbal forms. Furthermore, this section also demonstrates four signs that must be presented as the evidence of meaningful conversations, as well as explaining how instructors can teach and assess students' speaking ability appropriately and effectively.

2.4 Learning Motivation

The information in previous sections implies that blended learning may also increase students' learning motivation, in addition to improving their speaking ability. Hence, it is imperative to understand the meaning and aspects of learning motivation. This section, therefore, provides how scholars in the field of education give the explanation about motivation. It also elaborates different types of motivation. Additionally, the section covers relevant studies, regarding the learning motivation as well as ways that educators can measure learners' learning motivation.

2.4.1 Definitions of Motivation

In order for the second language learning to be successfully achieved, it can be said that the learning motivation plays a very significant role in helping learners to accomplish their learning goals. Many scholars who are in field of education, specifically in the realm of second language learning define its definitions differently. Take the one of Gardner (1985) for example, he defines the learning motivation as human's drive and attempt to individually work or learn. He also indicates that there are three elements that contribute to the success of language learning which are enormous efforts, strong desire and positive attitudes. Another definition offered by Crookes and Schmidt (1991) is slightly different as they emphasize more on learners' learning goals, stating that the learning motivation is a goal-oriented. The learners will be more motivated if they have a clear goal of language learning. In the similar vein, the definition proposed by Brown (1994) also puts the emphasis on the learning goal, pointing out that the learning motivation is when learners come up with their goals and

try their best to pursue those goals, which involve the use of tremendous efforts in making them happen.

Therefore, it can be said that the learning motivation is the process of language learning that requires learners to come up with learning goals. This process involves the use of learners' determined efforts and perseverance in bringing the success of their own learning.

2.4.2 Types of Motivation

It can be stated that there are two major classifications of motivation which are integrative motivation - instrumental motivation and intrinsic motivation - extrinsic motivation. The types of motivation are defined by different scholars which lead to slightly different explanations.

1. Integrative motivation

Gardner (1985) provides the explanation of integrative motivation as learners' attempt in learning the language, resulting from their own desire to be a part of that language community. Learners with integrative motivational operation have positive attitudes toward that particular language as well as its native speakers. As the term implies, integrative motivational learners usually want to be integrated with native speakers' culture. As they want to be like native speakers or to spend their lives out there, these learners try their best to learn the language so that they can communicate with native speakers or adapt themselves to fit in with the community and its members, for example. Therefore, the motivation is more likely to be permanent.

2. Instrumental motivation

Unlike the integrative motivation, the instrumental motivation is the kind of motivation that involves more with goals and outcomes orientation. Basically, learners who possess the instrumental motivation learn the language due to goals and outcomes. They are motivated by the drive to accomplish those goals and to gain expected outcomes. For instance, learners' motives come from the fact that they have to pass an examination, pursue a career path, get some job advancements like higher pay or even get higher economic and social status. With the focus on goals and outcomes, it can be said that this motivation category is temporal as learners'

motivation can be decreased after they have reached those goals, making this the most outstanding disadvantages of the instrumental motivational operation.

3. Intrinsic motivation

It can be said that the intrinsic motivation shares some similarities with the integrative motivation. Learners with the intrinsic motivational operation learn through existing interests, satisfactions and enjoyments. They learn things according to their inherent needs and interests. Unlike the integrative motivation, learners with intrinsic motivation may have positive, negative or neutral attitude towards the target language and its natives. It is believed that this motivational category can help promote high learning qualities as intrinsically motivated learners usually maintain their efforts and engagement in learning, even without extraneous rewards.

4. Extrinsic motivation

In the similar vein, the extrinsic motivation also resembles the instrumental motivation. Learners with the extrinsic motivational operation learn through external outcomes or rewards. They learn things from extraneous stimulations, requirements, social roles or even environmental influences. Similar to the instrumental motivation, extrinsic motivational learners are motivated by goals and outcomes. Usually, they are manipulated by reaching goals, such as gaining better grades, getting higher incomes, pursuing better jobs or gaining higher social status.

Another issue that arises from these various types of motivational classifications is the question, regarding the most important one. A number of scholars say that the integrative or intrinsic motivation plays a more prominent role, concerning the success of language learning. However, many scholars are convinced that the instrumental or extrinsic motivation can better help learners to become successful. Those who are encouraged by the integrative or intrinsic motivation like Crookes and Schmidt (1991) find that this kind of motivation can help enhance long-term efforts amongst students that contributes to higher success in learning. Interestingly, Brown (2007) displays the viewpoint stating that both integrative and instrumental motivation can be compatible in some ways. These motivations can complement each other and coexist within learners. For example, students who study aboard must have the integrative motivation to make themselves fit in that society. At the same time, they also have the instrumental motivation as they have to pass some academic tests.

Amongst all these arguments, it can be said that every kind of motivation has its own significance and should be generated to students' differently. As these various motivation types can substantially contribute to students' success and students possess dissimilar characteristics, learning goals as well as learning styles and preferences, they should be catered to students appropriately, according to their motivational orientations. Due to the fact that different students possess different motivational types, some learn the language to get financially or socially benefits, some learn the language to fulfill their personal preference of being part of that society, the encouragement of motivation should be varied and appropriately be generated.

2.4.3 Motivation and Language Teaching and Learning

In the study of Gardner (1985), this scholar investigates the correlation between motivation and second language learning. They indicate that motivation is operated by integrative and instrumental motivation. The integrative motivation plays a significant role as it involves learners' positive attitudes toward the target language. Learners with integrative motivation are more likely to become like a native speaker as they want to be a part of that culture. The learning motivation is also affected by the instrumental motivation as learners try to achieve their learning goals. The two scholars state these two motivational operations have a significant impact on language learning as they help enhance the success in language learning, especially with the integrative one.

The study of Dornyei (2007) puts more emphasis on cognitive aspects. He further introduces a new way of viewing language learning motivation. He proposes three levels of the learning motivation which are the language level, the learner level, and the learning situation level. Similar to Gardner, the language level deals with both integrative and instrumental motivation. For the learner level, it involves learners' learning aspects like achievement need and self-confidence. The learning situation level is comprised of three elements which deals with the course itself, the teacher and the learning group. Moreover, this model also covers the aspect of the attribution theory and self-efficacy. The attribution theory involves learners' failure and success in learning that affect their future learning. The self-efficacy is the way each learner views the ability of performing some particular actions. According to Dornyei (2007), learners

with high self-efficacy are more likely to be successful as they are able to maintain goals and try their best to achieve them. The importance of intrinsic motivation or instrumental motivation is also acknowledged by other scholars. Speaking of Indian context, the study of Kachru (1992) provided the same result, stating that the instrumental motivation played a significant role in second language learning. In India, as English is the language that is widely used, students have more instrumental purposes in learning. With high instrumental motivation, it helps students to acquire English language very efficiently.

2.4.4 Assessment of Motivation

Assessing motivation can be a complex process as it is about the inner quality of human being. However, famous scholars in the realm of language teaching have proposed some methods in assessing students' learning motivation. There are various tools of motivation assessment used in previous empirical studies such as tests, questionnaires and interviews. Amongst these tools, it can be said that questionnaires are widely used in order to gather information about language learning motivation. The questionnaires can be used at the beginning and at the end of the study to collect some useful data such as students' traits or characteristics and to diagnose some factors influencing their learning motivation. In addition, several tests can be used to measure motivation as well. Other methods can also be used to gather information about more diverse elements concerning students' motivation in order to come up with more well-rounded results.

In addition to previously mentioned tools, Gardner (1985) proposes the learning motivation tool entitled the Attitude-Motivation Test Battery or the AMTB. In his study, he uses this tool to investigate the relationship between learners' language learning motivation and achievement. The Attitude-Motivation Test Battery is modified by Gardner and his associates several times and is popular amongst educators. Basically, it consists of five categories. The first category is about integrativeness, consisting of students' integrative orientation, their interest in language learning and attitudes toward the second language. The second category is learning situation attitudes, involving the process of evaluations of language teachers and the course work. The third category is about motivation which deals with the motivational

intensity, students' desire to learn the language and students' attitudes toward learning that language. Additionally, the instrumental orientation is integrated as the fourth category. The last category is the language anxiety that combines of the classroom anxiety and the language use anxiety. However, these tools are critiqued in terms of its validity in measuring the learning motivation as they are not elaborative and informative enough. There is also the issue of the results' reliability, especially if all measurements are conducted by only one evaluator. Therefore, it is suggested that the researcher implements various kinds of tools and comes up with more than one rater to make the motivation measurement more reliable and valid.

Within the context of this present research, the researcher intended to implement the Likert's scale questionnaire adapted from Gardner's Attitude-Motivation Test Battery. The questionnaire consists of several items that aim to measure different elements of motivation as well as the blended learning implementation. Besides, apart from the use of the questionnaire, the researcher also used other instruments such as students' online reflection blogs to help measure and interpret the results gained from the questionnaire.

Table 2.2

Interpretation of Students' Learning Motivation

Mean Range	Interpretation
4.50 - 5.00	Highest Degree of Motivation
3.50 - 4.49	High Degree of Motivation
2.50 - 3.49	Moderate Degree of Motivation
1.50 - 2.49	Low Degree of Motivation
1.00 - 1.49	Lowest Degree of Motivation

In conclusion, this section explains what learning motivation entails. Scholars in the field of education agree that learning motivation is corelated to students' speaking ability. However, they still debate on the degree of impacts that it may have on the speaking ability improvement over a period of time. Different types of motivation are also stated in this section. Additionally, related studies concerning the learning motivation and the method which educators can use to measure learners' learning motivation are also elaborated in this section.

2.5 Students' and Teachers' Perceptions

The information included in the blended learning approach suggests that important factors that can be used as indicators as to whether an implementation of blended learning will be successful or not are students' and teachers' perceptions towards it. This section describes two aspects of students' and teachers' perceptions. It starts by conveying the importance of perceptions before explaining students' and teachers' perceptions of blended learning afterwards.

In educational context, one of the most important aspects of students' and teachers' perceptions is that it leads to the teaching and learning achievement. Formed by lived-experience and educational institutes, students' and teachers' perceptions can either be positive or negative. Since perceptions have direct impacts on teaching and learning, this aspect has been studied by a number of scholars and researchers. Withing the context of blended learning study, Stracke (2007) discovered that one of the most key elements of successful blended learning implementation is how students perceive it. Students' positive perceptions of this approach led to the success of teaching and learning, in this researcher's own context. As students perceived blended learning positively as it was relevant and beneficial for them, they performed better both in face-to-face and in online sessions (Sagarra & Zapata,2008).

Although there is a strong belief amongst researchers that perceptions have direct impacts on how well teachers teach and students do in their academic achievement, for teachers' part, some researchers suggest otherwise. Research overwhelmingly suggests that characteristics of teachers are the most significant factor that influence students' accomplishment (Chingos, Whitehurst, & Lindquist, 2014). However, further research conducted by Hanushek (2010) to study whether other factors may influence student's academic accomplishment suggests insignificant evidences of such claim. Factors under this study include class sizes, years of teaching experience and ways at which teachers obtain teaching positions, either it be through a traditional teaching degree or by means of receiving alternative teaching certificates. The research outcome clearly points out that these factors have little impacts on student's accomplishment. This leads to doubt as to whether teachers' attributes are directly correlated to their quality of teaching. Although it has been inconclusive thus

far in identifying specific attributes of teachers that reliably predict instructional effectiveness, evidence gathered through research on teachers' perceptions of blended learning suggest that teachers' perceptions may influence the teaching effectiveness which, in turn, leads to higher individual teaching achievement.

Research on the use of virtual technology innovations, coupling with face-to-face instruction provides additional information, regarding how people perceive their experiences when new technology is integrated into teaching instructions. A few prominent researchers have conducted studies on assessing teachers' perceptions, pertaining to new technologies. Capo and Orellana (2011) studied teachers' perceptions and their levels of acceptance of a set of Web 2.0 technologies. Capo and Orellana conducted their study to assess teachers' perceptions and to evaluate their rate of adoption of multiple social media platforms that can be used for teaching purposes. These social media platforms included blogs, wikis and social networking applications. The researchers conducted their study on high school teachers locating in a large county in southern Florida. In their research, Capo and Orellana used Davis's TAM in their attempt to gain insights into teachers' perceptions, regarding the practicality of these social media platforms, along with how they viewed whether they were easy or difficult to use. The research results yielded favorably towards the use of social media in teaching. Although 50% of teachers participating in the study stated that they did not currently use Web 2.0 technologies in their teaching, a great majority of the research participants perceived that when social media platforms were integrated into classroom teaching, interactions between teachers and students were increased. Students' motivation and their interactions amongst peers were also increased. Additionally, Capo and Orellana (2001) claimed that teachers participating in their research perceived that the ease of use of social media had direct impact on teachers' willingness to use them.

A couple of years later, Tamim (2013) conducted a research to try to get insights into teachers' minds when YouTube was used to aid students' learning. The researcher focused his research to study United Arab Emirates middle and secondary teachers' perceptions, concerning the pro and con of using YouTube for classroom teaching. His research results indicated that a vast majority of teachers participated in the research had positive perceptions when YouTube videos were integrated in

teaching. These teachers also perceived videos as the means that assisted students to understand teaching materials more easily while also increasing students' motivation. Furthermore, these teachers perceived that videos were easy to use, and they offered students additional information, along with real life examples that students viewed as relevant to them. Additionally, Tamim (2013) claimed that the use of YouTube for education could facilitate the learning process, increased students' interest, promoted efficiency and could enrich contents. However, about a third of teachers participated in the research perceived YouTube negatively and did not use it as actively as their counterparts who viewed YouTube positively. Tamim (2013) stated that teachers that had negative perceptions on YouTube faced challenges pertaining to certain contents, the technical aspects of using it, as well as their attitude towards it.

As students' and teachers' perception lead to their teaching and learning achievement, it is, therefore, important to explore the way student and teacher participants think or perceive about blended learning approach, formulated by their background knowledge and experiences. In this study, the focus of exploring students' and teachers' perception was on the implementation of blended learning, in terms of teaching and learning management, availability of technological facilities required, success factors as well as students' and teachers' readiness.

2.6 Related Research Studies

A study of blended learning carries similar characteristics to any research, in such way that it is imperative to review related research studies. Such exercise can serve as a powerful tool to the researcher to see what went right and what went wrong in those studies. It is also important to uncover whether there are research gaps in those studies. Several researchers provide positive evidence to support the teaching via blended learning, convincing that this model can be beneficial in enhancing students' learning performances. At the same time, a few other researchers demonstrate study results that showcase the benefits of blended learning in enhancing students' learning motivation as well.

There are many supportive evidences that display beneficial outcomes of implementing blended learning in the language classroom. For example, Bataineh (2017) examined the effect of blended learning utility on 32 Jordanian EFL students' reading comprehension and grammar competence. In his quasi-experimental research design, he divided students into two groups. The first group was taught through blended learning, whereas the second group studied within the traditional face to face context. The participants completed pre- and post-reading tests as well as pre- and post-grammar tests. After having done all descriptive and statistical analysis, the results demonstrated the fact that students who were taught via blended learning outperformed those who were taught via traditional teaching method, in both reading comprehension part and grammar part. The study of Ehsanifard, E., Ghapanchi, Z. and Afsharrad, M. (2020) also indicated that blended learning helped improve students' speaking ability and engagement.

In the similar vein of Bataineh' results, the research results of Tosun (2015) also revealed positive outcomes of blended learning implementation. Tosun conducted a study that aimed to investigate the effect of blended learning on EFL students' vocabulary enhancement. In the investigation, 40 students who studied intensive English in one university in Turkey participated in the study. Similar to Bataineh's work, students were separated into two groups. The former was taught using blended model, the latter was taught through the traditional way of English teaching. A paper-based vocabulary test was deployed after the teaching, following by a semi-structured interview. The results displayed that students in the experimental group performed slightly better than students in the control group. However, the difference was not very distant as the test scores were not considered as significance different. The qualitative results showed both positive and negative comments of students. Most students enjoyed practicing their vocabulary through the blended learning environment, but some of them had difficulty dealing with digital tools and they preferred in-class activities presented by the teacher.

In terms of blended learning design features, important elements and methodological implementation, there are a number of studies that touch upon these factors. Soler (2017) conducted a mix-methods study, aiming to explore how Spanish educators operated the blended course as well as involving elements. The instruments used to elicit all data were surveys, interviews, and documentary analysis. The results regarding how teachers operated the course were various. Each teacher had different proportion of how he or she weighed the combination of face to face and virtual session. The combinations were, for instance, 30% face to face + 70% virtual part, 50-50 and 70% face to face + 30% online session. Teachers used different online tools such as videoconferencing, chats, blogs, web pages and various open resources. Class activities, ranged from case studies, readings, essays, discussions, projects, group works to self-assessment exercises. For involving elements, it was recommended that educators should take contexts, objectives, contents, methodology and assessment into consideration when planning the blended course.

In order for blended learning to be successfully implemented, there are many studies that point out that teachers should take students' perceptions, characteristics, and learning styles into consideration. Kintu, Zhu and Kagambe (2017) conducted a study that aimed to investigate the effectiveness of blended learning when taking students' characteristics and blended learning design features as key predictors. The research participants were 238 university students, studying in both onsite and online session in one university in Belgium. The instruments used were online self-regulated learning questionnaires, intrinsic motivation inventory, and semester-end examination. The results revealed that students' self-regulation and their attitudes towards blended learning played a significant role in supporting the success in learning, in the aspect of students' characteristics. For the design features category, good quality of technology, friendly-to-use online tools and interactive face to face session were key predictors to the success of implementing this model. Therefore, it raises the need for teachers to investigate students' needs, their learning styles as well as their characteristics prior to launching this teaching model. The results aligned with studies of Mahmud (2018) and Hiasat (2018), stating that practitioners should take students' motivation, belief and attitude as key indicators when conducting the blended learning intervention.

In the attempt to understand students' perceptions towards blended learning, Hubackova and Semradova (2016) collected data about how students thought about blended learning program. In their study, 120 school students in Czech Republic were required to complete the questionnaire that aimed to evaluate this teaching program. All questionnaires were distributed to all student participants at the end of the semester, after they finish studying via blended learning module. The study results indicated that most of the students had positive attitude towards blended learning. Overall, students rated the virtual study environment at a very suitable level. The majority thought that the course was friendly to use and convenient to them. In addition, most of the respondents revealed that the course as a whole was beneficial for their learning, emphasizing the positive perceptions amongst the side of students.

Another study that shows the inclination that moves towards positive perceptions of students taking the blended course is the one conducted by Maulan and Ibrahim (2012). These two researchers conducted a mix-methods study with the purpose of exploring students' perceptions of this teaching model. Almost a thousand Malaysian students who were taking the English for specific purposes course participated in the study. The results indicated that most of students had positive perceptions of the blended course as they showed the sign of engagement in this learning environment. Students stated that they enjoyed participating in online discussion. However, some students stated that they needed more technical support and more efficient learning management system. In terms of the learning performance, it was evident that there was no significant difference between students' scores gained from the blended class and the traditional class.

Additionally, speaking of incorporating the blended learning in English for specific purposes, another study from Lungu (2013) also demonstrated some advantages of the blended course. Within the context of Romanian universities, Lungu investigated the increasing need of this teaching model in English for specific purposes course. The results indicated that blending learning technology into the English for specific purposes course resulted in two significant results. First, it was evident that students learned quicker and better through this virtual learning environment as all learning was flexible. It offered them freedom and autonomy in regards to their needs

and interests. Second, teachers had more time to manage their teaching. They could use various kinds of resource in teaching, enabling them to teach more effectively.

One more study that was launched within the context of teaching English for specific purposes was conducted by Safranj (2013). In the context of Serbia, the researcher compared blended learning approach to the traditional English teaching. The data was gained from two groups of Serbian students along two semesters. The results showed that the experimental group had significant improvement in all language aspects. Furthermore, in terms of the learning motivation, it was found that students who were exposed to the blended learning environment showed the increased participation in participating in non-compulsory learning tasks. They acquired higher marks in both in-session part and final examination part. The researcher stated that the results could be used as the supportive evidence for the adoption of the blended learning approach in the language teaching area.

Moving on to teachers' perceptions of blended learning, Kosar (2016) explored Turkish EFL teachers' perceptions of this kind of teaching. In the study, 32 EFL teachers in two state universities in Turkey joined the study. All teachers were required to complete the questionnaire and participated in the semi-structured interview. Similar to those of students, the finding illustrated teachers' positive perceptions of blended learning, stating that this model could eliminate time and space constraints. Moreover, it helped promote autonomous learning amongst students. It also helped increase students' learning motivation as well. However, Turkish EFL teachers also expressed their concerns about blended learning approach. They pointed out that implementing this approach may cause some challenges, such as the need to train students and teachers technological skills or technological tools. Besides, some of the teachers were worried about increasing workloads. The blended learning course design could increase teachers' workloads, especially in the aspect of material design (Waluyo, 2020).

In the realm of blended learning assessment, a study conducted by Nazarenko (2015) provided educators useful information in evaluating blended learning lesson. In the study, 62 university students in Russia participated in the online surveys. The course assessment was divided into four main parts; course usefulness, learning activities, testing and attitudes. The online survey results illustrated that the majority of

students viewed the course as very useful. Most of the students perceived that all learning activities were appealing to them as they rated the online discussion activity as the most interesting one. In terms of testing, about 80% of students displayed positive view towards blended learning testing. Additionally, students revealed positive attitudes towards this teaching approach. The evidence could be used as the model of assessment criteria of the blended learning course.

In Thai context, most of blended learning studies in Thailand appear to cover three main aspects; the effects of blended learning on students' learning skills, the effects of blended learning on students' satisfaction, and the effects of blended learning on students' motivation and attitude. Generally, these research studies reveal positive correlations of blended learning implementation, language skills and other involving attributes. In regards to the implementation of blended learning, in 2016, Banyen, Viriyavejakul and Ratanaolarn developed a blended learning model with the aim of measuring students' learning achievement and satisfaction. After deploying the model, the findings uncovered that students were satisfied with the developed blended learning model, as it helped them perform better in their examinations. Similarly, the study of Anaraki, (2018) in which he tried to explore the effectiveness blended learning and students' satisfaction also revealed similar inclination towards positive results of this learning approach. Furthermore, this study discovered that students acquired greater understanding of the learning subject when the teaching and learning were conducted in a blended learning environment. Hence, it resulted in their satisfaction towards blended learning as well. In a similar vein, the use of blended learning that focused on assessing students' and teachers' perspective, the study of Simasathiansophon, (2014) showed that when incorporating the author's adaptive form of blended learning approach called the course management system within traditional face to face teaching, both students and teachers demonstrated positive perspective toward the blended learning course. However, they expressed concerns about the issue of learning determination and responsibility amongst some students.

However, unlike most research studies conducted in the Thai context that demonstrated positive results of implementing blended learning, the study by Thomas, (2018) discovered that there was no statistically significant difference in students' academic performance, relative to their pre-test and post-test scores, when deploying

blended learning. Furthermore, the investigation on the association of blended learning with other aspects, such as gender, study program and grade level also indicated a weak association amongst these aspects.

In terms of blended learning and its effect on collaboration, Suwanwihok, Lekdeesed and Phoophet, (2018) developed a blended instructional model with the focus on encouraging adult students' collaborative skills. These three researchers suggested that in order to enhance students' collaboration, the practitioners would need to consider components necessary for blended learning, consisting of information technology (IT) tools, applications, internet connectivity, technical support staff and lesson plans. Additionally, these three researchers also introduced three major procedures to help encourage learning collaboration, namely 3Ts, standing for Think, Talk and Task.

As far as motivation is concerned, Sucaromana, (2013) and Tananuraksakul, (2015) conducted studies that aimed to investigate the effect of blended learning on students' intrinsic and extrinsic motivation. In the study conducted by Sucaromana, it was uncovered that after learning via blended learning, students' intrinsic motivation in English learning was significantly higher than prior to participating in blended learning. Besides, they also possessed better attitude towards English studies as well as greater satisfaction with their English learning, comparing to those who were instructed using face-to-face learning. In a similar vein, the study by Tananuraksakul also discovered that blended e-learning helped improve students' extrinsic motivation. Moreover, the author's adaptive blended e-learning approach also promoted students' positive attitudes towards their learning of the English language.

In addition to assessing students' motivation in the aforementioned studies, s the study of Suwannasom and Catane, (2016) also demonstrated that blended learning helped promote positive attitude in English learning amongst students, as a result of the use of online activities to supplement in class instruction. Furthermore, participating students also elaborated that blended learning activities were convenient and helped promote self-directed learning. These students stated that online activities allowed them to have more control of their learning. As a consequence, they felt more accountable in their learning and tended to practice English skills more, in comparing to doing non-online class activities. The researchers also pinpointed that although blended learning

instruction and online activities might have the potential to promote autonomous language learning, practitioners should still provide guidance and assistance as required.

Additionally, as for the review of literature in the realm of blended learning and co-teaching, derived from existing documents; books, researches and articles, Anggoro, and Teeraputon, discovered that both co-teaching and blended learning had been implemented to facilitate English language learning. After the analysis of all information, they recommended that in order for blended learning implementation to be successful, practitioners should follow three models, namely co-station rotation model, co-lab rotation model, and co-flipped classroom model.

Lastly, in the exploration of blended learning's need, the study of Deechai, Sovajassatakul, and Petsangsri, (2019) showed that when focusing on students' and teachers' needs, participating vocational students and teachers agreed on one point that there were many aspects that contribute to the success of blended learning implementation. The first aspect is the development of students' critical thinking skills. In this regard, the authors suggest there should be the development of critical thinking skills in conjunction with learning achievement and learning management. The second aspect involves the need in technological facilities; it requires that the institute to provide sufficient and up-to-date technological facilities to support the teaching and learning. The next aspect deals with testing, which the research participants stated that the test questions should be appropriate and relevant to the teaching and learning. The last aspect touches upon the area of teaching and learning styles which suggests the teaching should match students' learning needs, their preferred ways of learning, as well as their every day's life usage.

2.7 Critical Analysis of Related Research Studies

A critical analysis of the studies related to the concept of the current blended learning research identifies relations amongst several studies while also points out contradictions and inconsistencies amongst other research. Several studies published results that depict language skill improvement relations. While Bataineh (2017) stated that blended learning helped improve reading comprehension and grammar competence amongst student participants, Tosun (2015) also published

related results that illustrated vocabulary improvement amongst the students participated in the study. Additionally, Ehsanifard, Ghapanchi and Afsharrad (2020) suggested that this learning approach helped improve participating students' speaking ability which further emphasizes a strong relation amongst these studies. Overall, these researchers agreed that blended learning help improve various elements of the students' language skills. In addition to demonstrating the improvement in students' language skills, Hubackova and Semradova (2016), along with Maulan and Ibrahim (2012) also revealed that the perceptions of students participated in the study were positive. They derived a similar conclusion that a majority of their participants had positive viewpoints towards blended learning and thought that the course was beneficial, friendly to use and convenient for them.

However, in addition to the positive relations in many blended learning studies, teachers wishing to implement blended learning should also consider other aspects, such as students' characteristics, learning styles, attitude and motivation. Kintu, Zhu and Kagambe (2017) conducted the study that aimed to investigate the effectiveness of blended learning when taking students' characteristics as key predictors. The results revealed that students' self-regulation and their attitudes towards blended learning played a significant role in supporting the success in learning. The results align with studies of Mahmud (2018) and Hiasat (2018), stating that practitioners should take students' belief, attitude and motivation as key indicators when implementing the blended learning intervention. Besides, Soler (2017) recommended that educators should take teaching contexts, course objectives, contents, methodology and assessment into consideration when planning the blended course, as well.

Although there are relations amongst many study results, contradictions in research results were published by a few authors. Their results illustrate contradicting outcome in the studies about teachers' perceptions toward blended learning, and these studies also suggest inconsistencies in the research results. In the study conducted by Kosar (2016), the teacher participants perceived blended learning positively, because it helped them reduce the time and space constraints while also improving students' learning motivation. Similarly, the teachers participated in the study conducted by Capo and Orellana (2011) also perceived blended learning positively, as they enjoyed the use of social media to facilitate students' learning activities. However, in contradiction to

the results published by these three researchers, Waluyo (2020) stated that the teachers participated in the study perceived blended learning negatively, because it increased their workload. Similarly, the research results published by Tamim (2013) indicated that teacher participants had negative perceptions towards blended learning, as they had difficulty using technology required in this learning approach.

Based on the outcome of the critical analysis of the related studies, as described above, this current research aims to either dismiss or confirm the relations, the contradictions and inconsistencies of the previous studies. The mixed results on the effectiveness of blended learning implementations, coupling with the mixed perceptions of students and teachers create further needs for this research to assess its effectiveness and applicability within the researcher's own context.

In summary, this last section of the literature review provides a number of research studies related to blended learning that suggests that blended learning is the critical ingredient in facilitating effective learning. It is believed that this teaching model can particularly help promote success in the area of speaking ability as well as in the area of learning motivation. From the above related studies, it can be inferred that both EFL teachers and students can get the benefits that this teaching model offers when deploying blended learning. Additionally, the above studies also elaborate that this kind of instruction need to be carefully planned, prior to the launching stage as there are a number of important related elements that predict the success or failure of blended learning implementation.

CHAPTER 3
RESEARCH METHODOLOGY

This chapter discusses the research methodology. It consists of various research methodological elements, ranging from the research design, research setting, population and participants, instrumentation, data collection procedure, data analysis to ethical consideration.

3.1 Research Design

This study utilized a mixed-methods embedded experimental research design introduced by Creswell (2003). The elements of both the quantitative and qualitative research were combined to ensure proper integrations of the quantitative and qualitative data collection techniques and data analysis. Creswell (2003) elaborates that mixed-methods design can be broken down into six sub-categories. These six sub-categories include sequential explanatory design, sequential exploratory design, sequential transformative design, concurrent triangulation design, concurrent nested design and concurrent transformative design. In the three sub-categories within the sequential design group, there are several phases of data collection for both quantitative and qualitative data collections. If the quantitative part dominates the qualitative part, the interpretation will rely more on the quantitative data and vice-versa. On the other hand, the other three sub-categories that are in the concurrent design group, as their names imply, involve simultaneous data collection and the interpretation of both quantitative and qualitative procedures. Factors that determine each design depends on particular research purposes or questions. However, within the scope of this study, only the concurrent nested design was adopted, as the quantitative data set assumed the primary role, supported by the qualitative data set that occupied the secondary role.

In addition to Creswell, several other prominent researchers also praised the use of a mixed-methods research design. According to Dornyei (2007), implementing a mixed-methods research design can be beneficial, because it elaborates higher levels of understanding of the phenomenon, since a researcher can investigate the study from different angles. Another benefit is that this research design enables the researcher to triangulate all information together for a thorough and well-rounded

interpretation. It is generally believed that conducting the research by using this research design can help increase the research's internal validity, because it takes the participants' perspective, gained from questionnaires and interviews to support experimental findings (Dornyei, 2007).

Nunan and Bailey (2009) further elaborate that the mixed-methods research design touches elements of an experimental design, as it involves three main ingredients that includes the manipulation of variables, the quantitative data collection and the statistical analysis. It also touches elements of a survey research, since there is the research procedure that the researcher aims to elicit information, without influencing involved variables. There will be the use of elicitation devices to get the participants to respond to statements and questions. Additionally, the qualitative data analysis is also implemented in this type of study. Figure 3.1 below depicts the mixed methods design.
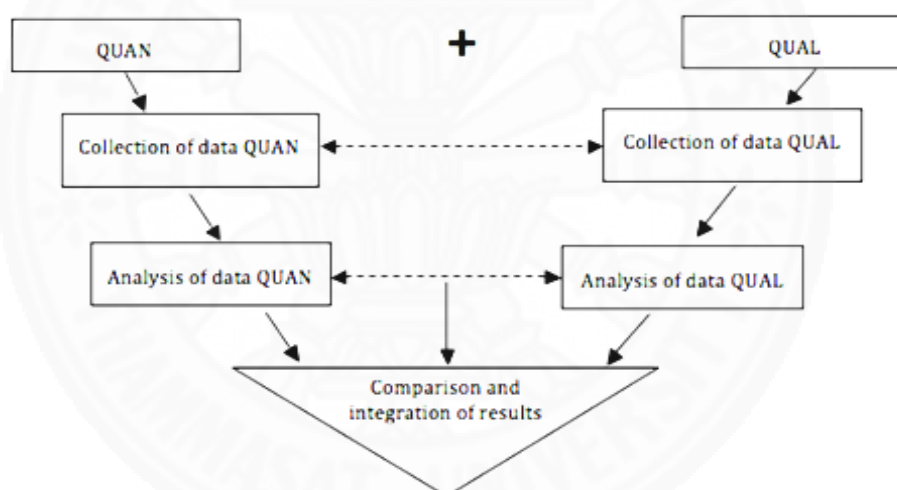
Figure 3.1

The Mixed-methods Design by Creswell (2003)

Adopting the Creswell's mixed-methods embedded experimental research design model, the design of this study, hence, involved six phases, as depicted in Figure 3.2 below. As demonstrated in this figure, the study showcased the quantitative research as the primary technique while also using the qualitative research as its secondary technique. With the ultimate goal to develop effective research instruments, the first phase of this six-phase research design began by utilizing the qualitative research. The

second phase involved the quantitative pre-measurement of the participants' speaking ability, using the role-play presentation as the instrument. In the next phase, the blended learning approach was implemented to all participants who were in the treatment group. During the period of the blended learning intervention, qualitative data collections were implemented to gather in-depth information, using online reflection blogs. The fourth phase of the study dealt with the quantitative measurement of the participants' post-implementation proficiencies. The aim of this phase was to gain the participants' learning outcomes after receiving the blended learning treatment. The fifth phase utilized the qualitative data collection technique to obtain both students' and teachers' perceptions towards blended learning, by administering the semi-structured group interviews. The last phase involved the interpretation of research results that integrated both the quantitative and qualitative methods, where the findings obtained from the qualitative part, occupying the supplemental role, were used to effectively explain research results receiving from the quantitative angle.

Figure 3.2

The Embedded Experimental Model by Creswell (2003)

3.2 Research Setting

3.2.1 General Information of the Research Setting

The research setting of this study was located at the community university in the North of Thailand. With its original founding vision, the university has four campuses, offering students convenient accessibility and serving community needs to people living in the nearby areas and provinces. The university is under the Royal Thai Ministry of Education and offers bachelor, master and doctoral degree programs in many fields. There are five faculties, including Education, Humanities and Social Sciences, Science and Technology, Management Science, and Agricultural Technology. The university also offers various courses in many languages. Under the department of Western Languages, the English department was the research setting of this study. The department offers both English major students and non-English major students a wide variety of courses. Each semester, approximately 20,000 students enroll in all English courses at the English department, and there are 33 full-time lecturers and about 20 part-time lecturers to teach these English classes.

3.2.2 English for Communication Course

In this study, two classes of English for communication course were selected to be the experimental section and the control section. The reason for choosing this course was that the course's focus was on the oral communication ability, which was the construct to be investigated. Each semester, approximately 2,500 students enroll in this course, and there are about 30 lecturers to teach these 50-60 English for communication sections. Generally, it is the topic-based instruction as the content appeared in each unit corresponds the main topic of that particular unit. The course description emphasizes students' fundamental English communication in improving their communicative skills in various situations. Basically, it aims to improve students' oral skills for their everyday life uses, so that they can communicate appropriately and efficiently. From the course description, it can be interpreted that students should be able to improve their speaking skills after completing the course. They should also be able to use English to communicate in their daily life appropriately and effectively. Furthermore, they should be able to bring appropriate language rules and language

patterns to use in their speaking in various situations. As a consequence, the design of all course activities is based on the course objectives. This course operates in every semester and offers a number of sections as it is the first English fundamental course that every student must enroll. With its three credits of measurement, apart from the learning participation, quizzes and examinations, students are also required to do speaking activities. Due to the fact that the focus of the course is on communication, the most obvious skill that was investigated in this study was the speaking skill. According to Bygate (1988), the speaking skill is the most critical skill for students, as they need to speak in order to convey basic meanings. Additionally, their language skills are often judged by their ability to speak the language.

3.2.3 Learning Conditions

In regards to learning conditions, as there are many factors that influence students' learning outcomes, one of the most important aspect is their learning motivation and engagement. Within this research context, according to the pre-intervention qualitative inquiry, it could generally be interpreted that students were not motivated in learning, as it was evident in their relatively low English placement test scores. When grouping students, based on their placement test scores, most students appeared to be at the lower intermediate level. This probably implied that they were not interested in English language. Additionally, their learning engagement was also presumably low, as many students thought that English was not relevant to them, especially for those who were non-English major students.

In terms of learning supports, the university offers students the English language supports through a wide variety of free courses that students can enroll, according to their interests. On technological supports, the university has two self-access centers, equipped with useful e-learning programs and skilled technical staffs. The first self-access center is under the operation of the Language Institute, while the second one is under the Western Languages Department. However, due to a large number of students, all technological supports are sometimes insufficient, and some students have to seek other alternative options.

3.3 Population and Participants

The population of this study included approximately 2,500 students, who enrolled in the English for communication course in their first semester, at a public university in Chiang Mai, during the academic year of 2019. However, the research participants comprised of 56 Thai university students from the general sciences major and 46 students from the physics major. The majority of the student participants were female (79 students), whereas the rest of them were male (23 students). The age of the student participants ranged from 18 to 20 years old. All of them have been studying English since their primary educational level and graduated from high schools in Thailand. In terms of computer literacy, students are familiar with the internet technology and social media platforms. In addition, they appear to have adequate knowledge in required devices used in this research including mobile phones, laptops and computer desktops. All student participants enrolled in the English for communication course in their second semester of the 2019 academic year, at a public university in Chiang Mai, Thailand. The participants were selected by using a convenience sampling method. Prior to participating in the study, the participants' English proficiencies were assessed through the university placement test and the Cambridge English test. The results showed that their proficiency levels were similar, as most of the participants' English proficiencies were at A1and A2 CEFR. The research was designed such that all participants in the treatment group were taught in the blended learning environment. In contrast, students in the control group were taught using the traditional teaching method. Both classes were a three-hour period class, taking place one time per week, for 16 weeks.

In addition to these student participants, there were also seven English teachers, participating in the research. The majority of the teacher participants were female (6 teachers), whereas the other teacher participant was male (1 teacher). The age of the participants ranged from 35 to 55 years old. In terms of computer literacy, most of the teachers are familiar with the internet technology and social media platforms. They have adequate knowledge in using mobile phones, laptops and computer desktops. Regarding their experiences in teaching English, their years in the career ranged from 10 to 25 years. These teacher participants were selected through a convenience

sampling method. The researcher intended to choose available and willing participants as they could provide a rich dataset (Dornyei, 2007). Roughly, the teacher participants shared three common characteristics. First, the participants had taught this subject before. Second, they had the experience in using internet technology and technological tools in various degrees. Third, they had some schema knowledge about blended learning. All research participants were requested to sign the consent form, prior to participating in the study. The form indicated that their participations were totally voluntary. The purpose of these consensual agreements was to ensure that scoring and grading of participating students' regular courses would not be affected. Additionally, the participating teachers would not also be affected professionally, by joining this study.

3.4 Instrumentation

The research instruments used in this study consisted of pre- and post-speaking tests, learning motivation questionnaires, students' online reflections and students' and teachers' semi-structured group interviews.

3.4.1 Research Instruments

1. Pre- and Post-speaking Tests
1.1 Development

In order to answer the first research question, regarding the effectiveness of the blended learning approach in improving Thai university students' speaking ability, pre- and post-speaking tests were utilized as research instruments. These tests were implemented onsite, before and after the treatment. The reason for using pre- and post-speaking tests was to investigate whether blended learning helped increase students' oral proficiencies. In order to develop the test, the researcher first studied test types. According to Hughes (2013), test types are categorized according to information types provided or by the way test results are used. The pre- and post-speaking tests were constructed based upon the research objectives. The direct test was chosen for this study, since this kind of testing method requires students to perform the actual target skill, namely the speaking skill. The role-play presentation, one form of the direct test, was then selected for the pre- and post-speaking tests, as this type of oral test form

generally depicts real-life situational scenarios that all students may encounter in their job markets. Once this specific test form was chosen, the test specification and the overall test structure were then developed. After that, the test task, along with test items were constructed accordingly. However, before the test was actually implemented and administered to participating students, it was going through the pilot stage to solicit feedback which was incorporated into the research-ready version.

In terms of test quality, the test was evaluated in combined effects for the overall usefulness of the test, consisting of reliability and validity. In regards to the speaking skill evaluation, a speaking rubric, together with an analytic scoring adapted from the speaking rubric of Cambridge's A2 speaking assessment were used for this study. The rubric is illustrated in Table 3.1. The rationale of choosing the analytic scoring was that students could receive the score for each criterion, with detailed descriptions from using this kind of rubric. This resulted in students getting useful and relevant feedback, concerning their oral performances. As far as the test administration was concern, the pre-test was administered to all participating students at the beginning of the first period, whereas the post-test was administered to them during the last class period.

1.2 Validation

All tests, together with the speaking rubric were validated by three experts in terms of reliability, validity, authenticity and practicality. Particularly, the tests and the rubric were certified for the IOC of Rovinelli and Hambleton (1977), in order to assess whether all elements were congruent and appropriate. All three experts unanimously confirmed that all tests and the speaking rubric were congruent and appropriate. However, they pointed out grammatical errors in the scoring rubric and made corrective suggestions which were then incorporated into the speaking rubric accordingly.

Table 3.1

Speaking Rubric Adapted from Cambridge's A2 Speaking Assessment

Band Scores	Grammar and Vocabulary	Pronunciation	Interactive Communication
5	- Demonstrates an effective control of grammatical forms. - Uses a wide range of appropriate vocabulary, in order to talk about daily situations.	- Is mostly intelligible with effective control of phonological features at both utterance and word levels.	- Maintains effective exchanges. - Requires very little prompting and support.
4	Performance shares features of Bands 3 and 5.		
3	- Demonstrates a sufficient level of control of grammatical forms. - Uses appropriate vocabulary, in order to talk about daily situations.	- Is quite intelligible with limited control of phonological features at both utterance and word levels.	- Maintains simple exchanges. - Requires prompting and support.
2	Performance shares features of Bands 1 and 3.		
1	- Demonstrates a limited control of grammatical forms. - Uses a vocabulary of isolated words and phrases, in order to talk about daily situations.	- Is often unintelligible with very limited control of phonological features at both utterance and word levels.	- Has considerable difficulty in maintaining simple exchanges. - Requires additional prompting and support.
0	Performance below band 1.		

2. Learning Motivation Questionnaires

2.1 Development

Another source of the quantitative data was from the learning motivation questionnaires, distributed to all student participants at the end of the treatment. The questionnaires were conducted with the aim of eliciting information, regarding the effectiveness of the blended learning instruction, as well as the level of students' learning motivation. This was to answer the second research question, which mainly investigated students' motivational level after the implementation of blended learning. In this study, students' learning motivation questionnaires appeared in the five Likert scale questionnaires adapted from the Gardner's Attitude-Motivation Test Battery. The questionnaires consisted of 20 close-ended questions and three open-ended questions.

The respondents were required to state their level of preferences, ranging from strongly agree, agree, neutral, disagree to strongly disagree.

The questionnaires were developed by setting a set of questions on a structured format. Adhering to the suggestion of Kothari (2004), in order for the questionnaire to be effectively created, the wording, question sequences and formulation should be carefully constructed. In terms of wording, the researcher ensured that a clear, simple, and easy-to-understand language was used. For the question sequences, all questions were proceeded in logical orders, starting from general and easy-to-answer questions to specific and difficult questions. As for the formulation, the questions were moved from question to question smoothly. On the format, the structured questionnaire was selected due to the fact that it helped increase the value of reliability, as all respondents received the same questions, the same orders and the same wording. Another reason for administering the structured questionnaire was that the results could be analyzed and interpreted according to the criteria. Table 3.2 depicts the criteria of students' learning motivation interpretation.

Table 3.2

Interpretation of Students' Learning Motivation

Mean Range	Interpretation
4.50 - 5.00	Highest Degree of Motivation
3.50 - 4.49	High Degree of Motivation
2.50 - 3.49	Moderate Degree of Motivation
1.50 - 2.49	Low Degree of Motivation
1.00 - 1.49	Lowest Degree of Motivation

According to Kothari (2004), implementing the questionnaire can be beneficial in many ways. For example, the respondents can freely answer the questions, resulting in lesser researcher's bias. In addition, the respondents can have sufficient time to provide their well thought out answers. Moreover, the questionnaire can be used for a large group of participants, which can lead to more valid and reliable results. In this study, the developed questionnaires were firstly be piloted to uncover and eliminate most, if not, all weaknesses. After that, the questionnaires that had been improved were distributed to all participants to respond.

However, students' English learning motivation questionnaires used in this study had some limits. Since they were adapted from Gardner's questionnaire used to assess students' learning motivation in a general sense, they could not be specifically applied for the measurement of students' English learning motivation in blended learning environment. Therefore, the assessment of students' learning motivation following the blended learning treatment in this research could only be partially claimed for its validity.

2.2 Validation

The questionnaire questions, sequences, formats and wording were validated by three experts. The issues of leading questions, complex questions, double-barreled questions, questions with jargons or technical languages were carefully examined. Overall, all three experts agreed that both 20 close-ended questions and three open-ended questions of the questionnaires were congruent. However, these experts made suggestions on how to correct grammatical errors and improve the language use aspects including word choices, wordiness, as well as sentence structure for both the English and the Thai languages. The questionnaires were revised according to the experts' recommendations, prior to the actual use.

3. Students' Online Reflections

3.1 Development

Students' online reflection blog was another research instrument that was used to elicit their learning motivation after the blended learning had been implemented as well as their viewpoints and perceptions of blended learning. This instrument was used to provide additional support as to whether or not the results obtained revealed the same inclination towards those from the questionnaires and interviews. As a result, it helped answer the second, and third research question. Stein and Graham (2014) elaborate that the word "blog" is literally derived from the word "web log". The blog is an online space that is personalized by its user. The online blog is usually open. The owner can use texts to post, reflect or summarize any topic of interests. In this study, students were requested to create their own blogs and reflected on their learning as well as their learning motivation within the blended learning environment. In comparison to journals, blogs can be considered bigger, as there are more activities and more sharing options. In terms of audience, the use of blogs can capture involvement from more

people than journals can. The audience can be teachers, students, peers or others. Blogs also encompass broader contents, comparing to journals. In terms of access, journals are closed whereas blogs are open. In general, most journals are teacher-owned, with finite lifespan, since they usually appear in the form of the learning management system or the LMS. In contrast, blogs are students-owned, and they last indefinitely in the internet (Stein & Graham, 2014).

According to Stein and Graham (2014), blogs provide more flexibility, greater participation and deeper reflection. In regards to flexibility, implementing blogs can be appealing to students, because they can contribute to reflect on the learning at their most convenient time and place. As a result, the elimination of time and place constraints can lead to a greater participation of all students. Additionally, as students have more time to reflect, it encourages deeper reflections. That is because students will have more time to think thoroughly, to give more supportive evidence to their blogs and to ultimately provide more thoughtful reflections (Stein and Graham, 2014).

In the study, the blogs were administered at the end of the treatment. The participating students were assigned to create their own blogs in which they were required to write their reflections of learning, as well as their learning motivation after the implementation of blended learning. The reflection topic and for sub-topics were distributed to all participants so that they could stay focused. The student participants could reflect using English or Thai, to prevent the barrier related to the language limitation. As the blog is an online space that is personalized by its user, according to Stein and Graham (2014), it is students-owned, and it can last indefinitely in the internet.

3.2 Validation

Students' online reflection blog topic and its four associated leading questions were validated by three experts for appropriateness and suitability. After having examined them, all three experts agreed that the blog topic and questions were congruent. However, these experts made suggestions on how to improve word choices for the Thai language. The questions were then revised according to the experts' recommendations, prior to the implementation.

4. Students' and Teachers' Semi-structured Group Interviews

4.1 Development

Another source of the qualitative data was collected from semi-structured group interviews, which was conducted at the end of the treatment. The purpose of this interview sessions was to help answered the third research question, regarding Thai university students' and teachers' perceptions on blended learning practices. The semi-structured group interviews were conducted with all student participants and teacher participants. The student participants were randomly be divided into a group of five to seven persons each. The rationale of dividing all participants into groups was that it could provide opportunities of interaction and thinking stimulation amongst the members of the same group (Lichtman, 2013).

The semi-structured group interview was chosen, due to the benefits that this format offered. According to Lichtman (2013), implementing this kind of interview format enables the interviewer to elicit well-rounded information from the interviewees. The reason is that the nature of the semi-structured group interview allows the interviewer to develop a set of questions and formats beforehand. In the real situation, this type of interview also provides both the interviewer and the interviewees' opportunities to ask and respond diversely, depending on the situation. Moreover, the interviewees can be more carefree, since they do not have to strictly answer each particular question without chances for further talks. As for the part of the interviewer, he can be certain that, at least, he has a set of guidelines to follow. Still, the interviewer can ask additional questions whenever clarification is needed (Lichtman, 2013).

In terms of question development, 12 open-ended questions were asked with the focus on students' and teachers' perceptions towards the blended learning practices. The focuses of the interview questions were on students' and teachers' perceptions, regarding the implementation of blended learning in terms of learning experiences and teaching management, availability of technological facilities required, success factors and students' and teachers' readiness. All questions were developed based on the literature review of perceptions on blended learning of Capo and Orellana (2001) and Tamim (2013). The researcher had developed a set of questions and the note of all related terms and sent them to all interviewees, prior to the interview session. The reason was that the interviewees were able to prepare for the answers beforehand.

As mentioned earlier, the whole process was conducted at the end of the treatment. All participants were informed that they would not be academically and professionally affected by the given responses. The participants could freely provide comments, concerning the blended learning practices. The whole interview took approximately half an hour per group. In terms of the language use, Thai language was used amongst student participants to prevent the language boundary. For teacher participants, due to the fact that all teacher participants were English teachers and some of the teachers were not native Thai speakers, the language use was in English, in order for the talk to be generally be understood. As far as ethical considerations were concerned, the interviewees' audio recording permission was granted before interviewing. In addition, whenever the interviewees were mentioned, there were addressed using pseudonyms so that their anonymity was protected and assured.

4.2 Validation

All interview questions and formats were validated by three experts. Aspects of leading questions, complex questions, double-barreled questions, questions with jargons or technical languages were carefully examined. All experts were in a complete agreement that all 12 questions were congruent, and no revision was required.

3.4.2 Instructional Instrument

1. Sixteen-week Lesson Plan

1.1 Development

In this research, all lesson plans were developed with careful consideration to suit the course description and course objectives, whereas the blended learning instructional model was meticulously integrated into the course design as the main focus. The justification of adapting three rotation models; station rotation, flip rotation and individual rotation lied on the fact that they could be used to both mitigate challenges and promote productive learning activities. By adapting the station rotation model, it helped the researcher to avoid problems that may occur as a result of students' attention spans. At the same time, the use of flip rotation and individual rotation models also assisted the researcher in taking advantage of students' inclination towards the use of technology and their inclination to interact with the lecturer in the environment is convenient and safe to them.

All lesson plans applied the pre-, while-, and post-speaking instruction developed by Cohen, Weaver and Li (1998), together with the blended learning rotation model proposed by Horn and Staker (2015). Altogether, there were six lesson topics namely "How was your vacation?", "I think it's exciting!", "Do it before you're 30!", "The best place in the world!", "Where's the party?" and "You should try it!". The course was designed to include both in-class learning on campus and online learning. During a three-hour on-site learning period, the station rotation model was implemented to induce both offline and online learning. The class life cycle went through different stages, as described hereafter.

Each on-site class period started with a warm-up activity. After completing the warm-up activities, the teacher introduced the pre-speaking stage in which the first station rotation model was blended in. In this first station, the teacher conducted a review of a set of vocabulary and the relevant language use, necessary for students to perform the speaking tasks that usually appeared in forms of a role-play presentation, a mini conversation or a small group discussion. When moving to the second station, through the use of available online resources, students were required to further study necessary language elements and then to create their own contents for the assigned speaking tasks. In the second station, students could utilize available technological tools, containing contents relevant to students' speaking tasks, that were linked to the several webpages.

During the while-speaking stage, the third station was blended in, as students recorded and posted videos to demonstrate their speaking skills online, on the closed Facebook group. The post-speaking stage occurred at the end of each class. At this stage, the teacher then applied the individual rotation and flip rotation model into the learning activities. In the individual rotation, the teacher provided feedbacks to individual students' videos and made suggestions on how they could improve their speaking abilities. At the same time, students were encouraged to ask questions or comment on any aspect, as much as they were comfortable doing so. The teacher would then, answered questions or respond to their comments accordingly and courteously.

As for the flip rotation model, the teacher posted the next learning topic including website links on the closed Facebook group, for students to study prior to attending the next class on campus. This task was of importance, as students were required to study the content in the provided websites and be prepared to participate in the upcoming class. The teacher monitored and tracked students' online participations through the "seen by", "like" and "comment" section. The class life cycle went on like this until the end of the semester. Last but not least, it is critical to also note that this instructional instrument was assured of its validity prior to the implementation. Before the instrument was implemented, all lesson plans, along with validation forms were submitted to three ELT experts for a careful verification. These experts first verified the lesson plans for validity and reliability and made suggestions for improvement. After that, the experts' recommendations, regarding the lesson plans' format, teaching processes, and the evaluation protocol were taken into consideration and revised accordingly to derive the valid and reliable instructional instrument for this research.

1.2 Validation

In this process, all lesson plans, together with a validation form were submitted to three ELT experts. The lesson plans were verified for validity and reliability. The experts agreed that all but one IOC items were congruent. Two of these three experts questioned the feasibility of the IOC item 2.7, as they doubted whether all required learning activities could be completed in the allocated hours of the class period. They suggested that the number of activities should be reduced. These suggestions were taken into careful consideration, and the number of warm-up activities were decreased to suit the duration of the class period.

Table 3.3

Blended Learning Instructional Framework

The pre-while-post Speaking Instruction Adapted from Cohen, Weaver and Li (1998)	The Blended Learning Rotation Model Adapted from Horn and Staker (2015)
Warm-up (In-class) - Introduction of topic - Activation of background knowledge	
Pre-speaking (In-class) - Preparation for speaking tasks	**The first station rotation (In-class)** - The teacher conducted a review of vocabulary and language use, necessary for students to perform the speaking tasks **The second station rotation (In-class)** - Students were required to use available online resources to further study necessary language elements and create their own contents for the speaking tasks assigned
While-speaking (In-class/outside) - Performing of speaking tasks	**The third station rotation (In-class/outside)** - Students recorded and posted video, demonstrating their speaking skill online
Post-speaking (Online) - Assessment of speaking tasks	**The individual rotation (Online)** - The teacher individually provided comments and suggestions and conducted personalized coaching for each student, according to the actual performance
Wrap-up (Online) - Summary of the lesson learned - Opportunity for students to ask questions or comment on any aspect	**The flipped rotation (Online)** - The teacher assigned learning tasks for the upcoming class. Students were required to study and be prepared for the next speaking activity

3.5 Data Collection Procedure

The data collection procedure was conducted in the second semester of the academic year of 2019 (November, 2019 – February, 2020), in two sections of the English for communication course. The data collection procedure of the study comprised of four phases, as follows:

3.5.1 Phase I: Preparation of Blended Learning Instruction

1. Study of current situation, researcher's own context, involving theories, related frameworks, research studies and research gaps to be bridged.

The researcher first reviewed the current situation that he encountered within his own teaching contexts. After that, the researcher studied and consulted related theories, principles and frameworks until coming up with his actual conceptual framework. All information acquired were used in order to find and bridge research gaps. Besides, the information gained were also used to support whether all hypotheses that had been set were likely to be correct.

2. Research instruments development; pre- and post-speaking tests, online reflections, students' learning motivation questionnaires, students' and teachers' semi-structured group interviews and a 16-week lesson plan.

Prior to the launch of blended learning, all research instruments were carefully developed. The English speaking pre- and post-test was in the form of the speaking task, specifically the role-play presentation. Additionally, there were students' online reflections. Students' learning motivation questionnaires were also developed. Similarly, students' and teachers' semi-structured group interviews were constructed, and a 16-week lesson plan was written. As mentioned earlier, all research instruments were verified for validity and reliability by three experts in the field.

3.5.2 Phase II: Pilot Study

1. Pilot study planning

In order for the real blended class to be efficiently implemented, there was the pilot stage of the research experimentation to help predict whether the real full-scale study was likely to be feasible as planned. In this research, the main aspects of this pilot stage focused on the feasibility of the research process, resources and management. In

terms of the research process, the researcher was attentive to the possibility of all data collection process whether all research questions were answerable from the use of the proposed process. In regards to the resources, the aspects of the availability of technology and facilities required for the implementation of blended learning were put into considerations. For management, this was to investigate whether the proposed blended learning model could actually be implemented. The results gained from this procedure were used for the adjustment of the real data collection process afterwards.

2. Pilot study implementation

In the process of the real implementation, the researcher had trialed all developed instruments with about 60 students who were similar to the real research participants. Then, all data were collected and analyzed according to the information demonstrated from the research intervention. All unforeseen issues found were adjusted and resolved for better outcomes and for the real implementation.

3.5.3 Phase III: Implementation of Blended Learning Instruction

1. Measurement of students' English-speaking ability

In the first class, following the course orientation, the consent forms were distributed to all students. Then, their English-speaking proficiencies were measured through the use of the pre-test. The test was used to measure students' English-speaking ability, before the treatment was implemented. The score earned from each student was kept as the reference to the post-test score, indicating whether their speaking ability had improved, following the treatment.

2. Teaching via blended learning instruction

This was the time when all research participants were exposed to this teaching model, the blended learning instruction. The instruction took place both onsite and in the online platform. The instruction lasted about 16 weeks. The 16-week lesson plan followed the pre-, while-, and post-teaching method and was developed to meet all course objectives. During the treatment, students were required to do online reflections. This was to investigate their learning motivation while they were participating in the research study.

3. Collection of data

During the research, the researcher started collecting the data from the first day of the teaching onward. The data loads were then be collected again at the end of the treatment.

3.5.4 Phase IV: Evaluation of Blended Learning Instruction Implementation

1. Evaluation of students' English-speaking ability and learning motivation of the blended learning instruction implementation

All participants' English-speaking proficiencies were measured through the use of the post-test. In the last period, the speaking post-test was administered to investigate the overall effectiveness of this teaching model. The evaluation of the learning motivation was conducted through the use of students' learning motivation questionnaires and their online reflections. After receiving the treatment, each student was required to complete the questionnaires, concerning their learning motivation. The questionnaires' results were analyzed to investigate whether students revealed the similar results as in their online reflections. The questionnaires appeared in a five-scale Likert's model, asking students to select their degree of agreement for each question. The degree ranged from strongly agree, agree, neutral, disagree to strongly disagree.

2. Investigation of students' and teachers' perceptions of blended learning practices

After finishing the instruction, students' and teachers' perceptions were investigated through the use of the semi-structured group interviews. The semi-structured group interviews consisted of pre-determined questions. Some other open-ended questions were also be administered to elicit more in-depth detail about students' and teachers' perceptions of the blended learning practices.

3. Statistical analysis

The data gained from quantitative sources were analyzed using both descriptive and inferential statistics. The qualitative data were analyzed using codes and themes. Then, all data were blended together for the triangulation purpose.

4. Presentation of results and discussions

After having complete well-rounded information in hands, the researcher, then presented all results descriptively and discussed them intensively, regarding the obtained results.

3.6 Data Analysis

Due to the nature of a mixed-methods research approach, both descriptive and inferential statistics were used in the process of data analysis. The mean, standard deviation and *t*-test were used to analyze the quantitative data, which included students' pre-test and post-test scores of their English-speaking ability. This was to determine whether students receiving the treatment gained some improvements. Another set of the quantitative data from students' questionnaire was analyzed using mean, standard deviation and percentage. Additionally, the qualitative part of the data obtained from students' and teachers' semi-structured group interviews and students' online reflections were analyzed through qualitative methods. The data were systematically coded and grouped into themes. All data types were blended together for a well-rounded interpretation and for the triangulation purpose.

3.6.1 Quantitative Data Analysis

1. Pre- and Post-speaking tests

Students' pre- and post-speaking tests were analyzed using mean, standard deviation and *t*-test. These statistics were used to answer the first research question, regarding the effectiveness of blended learning in improving Thai university students' speaking ability. According to Nunan and Bailey (2009), the descriptive statistic as mean is considered the measurement of central tendency, used to calculate for the average score. In order to witness the improvement of students' proficiencies, the researcher used mean scores gained from pre- and post-speaking tests to compare students' improvement. Categorizing under the measurement of dispersion, the standard deviation was used in providing the average distance from the mean score whether the average distance was vast. In addition, the inferential statistic used in this study was the *t*-test. This statistic was used in order to make inference as the researcher wanted to prove whether the gained results were significantly different and that the

difference was too substantial to occur by chance (Dornyei, 2007). Specifically, the independent *t*-test was implemented in the study, as there were two groups of investigation; the control group and the treatment group. Using the independent *t*-test enabled the researcher to compare two means of the two groups, in order for investigating differences between pre- and post-test scores and that the scores of the two groups were not influenced by each other (Nunan & Bailey, 2009).

2. Learning Motivation Questionnaires

To answer the second research question whether Thai university students' learning motivation increases after the blended learning implementation, the results elicited from students' questionnaires were analyzed using mean, standard deviation and percentage. The questionnaires appeared in the form of the five Likert scale in which students were required to state their degree of agreement, ranging from strongly agree, agree, neutral, disagree to strongly disagree. The results gained from the questionnaires were interpreted and linked to the degree of students' learning motivation.

3.6.2 Qualitative Data Analysis

1. Students' Online Reflections

Speaking of the second and third research question, concerning students' learning motivation and their viewpoints of effective blended learning implementation, another instrument that was used to answer these two questions was the online reflections. Students' online reflections were interpreted via qualitative methods. As the nature of the data was in the form of the language-based data, according to Saldana (2013), these online reflections should be coded. Adapting the process of qualitative data analysis of Seliger and Shohamy (2003), Dornyei (2007) and Saldana (2013), the analysis went through different stages. First, in the pre-coding stage, the raw information gained from students' online reflections were transcribed. Then, in the coding stage, with the pre-determined concepts, all data was systematically organized and grouped into categories. After that, the researcher interpreted meanings that emerged from the categories. In the post-coding stage, the researcher had two external advisors to check for all codes and reports for reliability and validity.

2. Students' and Teachers' Semi-structured Group Interviews

To answer the third research question, regarding Thai university students' and teachers' perceptions of blended learning, the semi-structure group interviews were implemented. As indicted by Seliger and Shohamy (2003), the nature of the qualitative interview data usually appears in the form of words in written mode. Applying the process of qualitative data analysis of Seliger and Shohamy (2003), Dornyei (2007) and Saldana (2013), within the organizing scheme, the researcher began the pre-coding stage by transcribing the interview data. In the diversity of data, the initial coding process was conducted as the researcher identified, shaped and sorted relevant information together. In the coding stage, the researcher approached the data with pre-established categories and focused on common patterns that emerged regularly. Then, the coded data was systematically analyzed and interpreted in order for growing ideas and developing major themes. The post-coding stage went on as all qualitative data analysis were validated and verified by two independent researchers.

Overall, in this research study, as the data was gained from different sources and was elicited from multiple methods, it helped promote the value of data validation through cross verifications. In regards to the reliability and validity of the research, all previously mentioned data, gained from multiple instruments and from various data sources were blended together for the triangulation purpose.

Table 3.4

The Summary of Instruments and Statistical Analysis Used in the Study

Research Questions	Instruments	Analysis
1. How effective is blended learning in improving Thai university students' speaking ability?	1. Pre- and post-speaking tests	1. Mean 2. Standard deviation 3. *t*-test
2. How does blended learning affect Thai university students' learning motivation?	1. Questionnaires 2. Online reflections	1. Mean 2. Standard deviation 3. Percentage 4. Coding
3. What are students' and teachers' perceptions towards blended learning practices?	1. Semi-structured group interviews 2. Online reflections	1. Coding 2. Coding

3.7 Ethical Consideration

The ethical principles were also applied in this research study. The ethical consideration consisted of three issues, including participants' voluntary, anonymity and confidentiality. In regards to participants' voluntary, prior to conducting the study, all participants were asked to sign the consent form. The detailed consent form, indicated that participants' cooperation was considered voluntary, and they were able to withdraw their participation at any time. Regarding the issue of anonymity, the pseudonyms were used whenever referring to participants' names. The student participants were assured that by participating in this study, the scoring and grading of their enrolled courses would not be affected in any way. Also, participating teachers were ensured that they would not be affected professionally, by joining this study. In terms of confidentiality, all audios and personal data were kept confidential. The researcher and experts, involving in the study were the only persons who had the rights to use them for scoring and analyzing purposes.

In summary, this chapter illustrates methodological operations of the study that includes seven major sections. The research design is firstly mentioned, followed by the research setting, population and participants, instrumentation, data collection procedure, data analysis and ethical consideration respectively. In each section, the researcher elaborates his chosen approach while citing theories and works of other prominent researchers to support his ideas. Regarding the research design, the researcher adopted a mixed-methods research design. The research was set to take place at the community university in the North of Thailand in which the researcher had chosen to conduct the study on students of the English for communication course. The target research participants consisted of 102 students from the two intact classes. The English proficiency of most students appeared to be at the lower-immediate level. Following the detailed explanation of the research instruments, the data collection procedure involved four main phases including research preparation, pilot study, research implementation and evaluation of blended learning. The data analysis utilized both the quantitative and qualitative data analysis techniques. Last but not least, the researcher had ensured that participants' voluntary, anonymity and confidentiality of the data collection were carefully considered and administered.

CHAPTER 4

RESULTS AND DISCUSSION

This chapter highlights the research results and discussion. It consists of various research results, ranging from effects of blended learning on students' speaking ability, effects of blended learning on learning motivation, students' perceptions of blended learning practices, teachers' perceptions of blended learning practices, as well as the detailed discussion of all research results.

4.1 Effects of Blended Learning on Students' Speaking Ability

This first section reports the research results obtained from student's pre- and post-test scores of their role-play presentations. It responds to the first research questions, regarding the effectiveness of blended learning in improving Thai university students' speaking ability.

Table 4.1

Results of Between-groups Comparison of Students' Pre- and Post-speaking Test

	Control Group (N=46)		Treatment Group (N=56)		Mean Dif.	*t*-test for Equality of Means	
	Mean	S.D.	Mean	S.D.		*t*	Sig.(2-tailed)
Pre-test	2.83	.797	2.91	.721	.085	.563	.575
Post-test	3.11	.737	3.98	.863	.873	5.426	.000

Note. Significant at *p < .05 level.

The results of the independent samples *t*-test in Table 4.1 show that the pre-test mean score of the control group was 2.83 and the pre-test mean score of the treatment group was 2.91. The results indicated that before the intervention, the control group and the treatment group were identical as there was no statistically significant difference between the pre-test mean scores of the two groups (p = .575). However, after the intervention, the treatment group outperformed the control group, since the post-test mean score of the control group was 3.11 and the post-test mean score of the treatment group was 3.98. The results demonstrated that there was a statistically significant difference between the two groups (p = .000). It could, therefore, be interpreted that blended learning instruction helped improve students' speaking ability.

When investigating the results of within-groups comparison of students' pre- and post-speaking test, the results show that the post-test mean scores of both groups had increased significantly. In the control group, the mean scores increased from 2.83 to 3.11, with the .002 *t-*test for equality of means. However, in the treatment group, the mean scores increased from 2.91 to 3.98, with the .000 *t-*test for equality of means. It could, therefore, be interpreted that the increase of the mean scores of the treatment group was at higher rate, in comparison to the control group mean scores. The results are presented in Table 4.2 below.

Table 4.2

Results of Within-groups Comparison of Students' Pre- and Post-speaking Test

	Pre-test		Post-test		Mean Dif.	*t*-test for Equality of Means	
	Mean	S.D.	Mean	S.D.		*t*	Sig.(2-tailed)
Control Group (N=46)	2.83	.797	3.11	.737	.283	3.284	.002
Treatment Group (N=56)	2.91	.721	3.98	.863	1.071	8.993	.000

*Note. Significant at *p < .05 level.*

In addition, as shown in Table 4.3, the intraclass correlation coefficient results show that the two raters tended to give similar scores in the pre- and post-tests as the ICC values were higher than .800. It also demonstrates high level of raters' reliability.

Table 4.3

Intraclass Correlation Coefficient

	Intraclass Correlation Coefficient	
	Control Group	**Treatment Group**
Pre-test	.936[c]	.947[c]
Post-test	.854[c]	.932[c]

In addition to the first source of information used to assess students' speaking ability, the second source of data was derived from students' reflection blogs that students were asked to freely express their thoughts and comments on blended learning implementation. While their comments were very diverse and scattered, the three top thoughts that these students expressed included the feelings that they became more developed, became more confident in using and speaking English, as well as feeling that blended learning was suitable for the current situation, as the world including Thailand had been experiencing the Covid-19 pandemic, since the beginning of the year. The following excerpts serve as examples of their thoughts.

Student D: *I feel that I have learned a lot during the semester and got better at speaking English. I even feel more confident to speak English in public now. If I ran into a foreigner again, I think I would not run away this time. Instead, I feel that I can communicate with foreigners now.*

Student W: *I feel that my English skills have improved, not only the speaking skill but also in the area of vocabulary. I feel like more confident to use English in a conversation. During the class activities, I did a lot of practices on English speaking, and I acquired new vocabulary in the process. Thus, I feel that I can speak better and use English with more confidence now.*

Student N: *I felt very lucky that I was part of the blended learning study, because it helped prepare me for online learning classes I must attend amid the current COVID-19 pandemic. I feel that blended learning is very suitable for the situation that people around the world including Thailand are facing currently.*

The outcome of the study on the effects of blended learning on students' speaking ability, as documented above demonstrates that the speaking ability of the students in the treatment has improved significantly, comparing to the speaking ability of those in the control group. While assessing the improvement of the students' speaking ability is of importance, it is not the only interest of this study. Another major area of interest of this research is on the effects of blended learning on students' learning motivation, which will be elaborated in the following section.

4.2 Effects of Blended Learning on Learning Motivation

The research results about the effects of blended learning on students' learning motivation are divided into three parts; the general information of the research participants, students' instrumental and integrative motivational levels and the results gained from open-ended questions.

4.2.1 General Information of the Research Participants

The presentations of the research participants' general demographic information are divided into two parts; the gender of the participants and the age of the participants.

Table 4.4

Gender of Participants

Gender	Numbers	Percentage
Male	8	14.29%
Female	48	85.71%
Total	56	100%

Table 4.4 shows that the majority of the research participants were female (85.71%), whereas the minority of the research participants were male (14.29%). Altogether, there were 56 participants in the treatment group.

Table 4.5

Age of Participants

Age	Numbers	Percentage
18	11	19.64%
19	35	62.50%
20	10	17.86%
Total	56	100%

As illustrated in Table 4.5, in the treatment group, the age of the research participants ranged from 18-20 years old. The majority of the research participants were in their 19. The minority of the research participants were in their 18 and 20, respectively.

4.2.2 Students' Instrumental and Integrative Motivational Levels

The research results of students' instrumental and integrative motivational levels are presented in this section. The results of both types of motivation, together with the itemized mean scores and the interpretation of the mean scores, appearing in the forms of motivational levels are outlined in these following tables.

Table 4.6

Mean Scores of Instrumental Motivation

Instrumental Motivation	Mean	S.D.	Level
1. I use English only for class assignments and tests.	3.66	.83	High
2. I simply quote what textbooks say instead of formulating my own speech or writing.	2.91	.94	Moderate
3. I read only English textbooks required for educational purposes but not for daily life.	3.14	.94	Moderate
4. I study English to earn a university degree and to succeed in my future career, instead of improving my English skills in general.	3.16	1.20	Moderate
5. I study English to pursue a higher education, instead of improving my English skills in general.	3.09	.92	Moderate
6. English skills are essential for overseas travelling.	4.73	.67	Highest
7. Learning English can help me to be a knowledgeable and skillful person.	4.41	.78	High
8. English proficiency can make me appear more educated.	4.30	.87	High
9. English skills can help a person to become more successful both in professional career and in personal life.	4.46	.71	High
10. People tend to respect those who are proficient in English.	3.96	1.00	High
Total	3.78	.44	High

As presented in Table 4.6, it is evident that after studying via blended learning, the respondents in the treatment group possessed a high level of instrumental motivation (mean = 3.78). The highest mean score (4.73) is statement number 6 (English skills are essential for overseas travelling). The lowest mean score (2.91) is statement number 2 (I simply quote what textbooks say instead of formulating my own speech or writing).

Table 4.7

Mean Scores of Integrative Motivation

Integrative Motivation	Mean	S.D.	Level
11. I study English because I want to understand English books, movies, music and other English media.	3.80	.86	High
12. I study English because I want to understand and appreciate the culture of native English speakers.	3.18	.95	Moderate
13. I study English to keep contact with my foreign friends and colleagues.	3.34	.99	Moderate
14. I study English because I want to use it as a means for global communication.	3.82	.95	High
15. I study English for knowledge transfer purposes.	3.52	1.00	High
16. I study English because I want to be able to participate in academic, social, and professional activities with people from around the world in any setting.	3.88	.95	High
17. I study English because I want to sound like native speakers when speaking English.	3.61	1.03	High
18. I study English because I want to enjoy English arts and literature.	3.30	.95	Moderate
19. I study English because I want to be effective in socializing like English speakers.	3.57	.98	High
20. I try my best when studying English in order to maximize my English proficiency.	4.20	.81	High
Total	3.62	.59	High

Based on the results in Table 4.7, the respondents in the treatment group possessed a high level of integrative motivation (mean = 3.62) after they had studied via blended learning. The highest mean score (4.20) is statement number 20 (I try my best when studying English in order to maximize my English proficiency). The lowest mean score (3.18) is statement number 12 (I study English because I want to understand and appreciate the culture of native English speakers).

Table 4.8

Motivational Comparison

Motivation Types	Treatment Group		
	Mean	S.D.	Motivational Level
Instrumental Motivation	3.78	.44	High
Integrative Motivation	3.62	.59	High
Overall	3.70	.51	High

Table 4.8 reveals that the research participants in the treatment group possessed the high level of the overall motivation (3.70). The participants possessed a slightly higher rate of instrumental motivation (3.78) than integrative motivation (3.62). However, when interprets the mean scores of both types of motivation, the results are ranked at high level.

4.2.3 The Results Gained from Open-ended Questions

This section highlights factors that can affect students' learning motivation, gained from open-ended questions. The results are interpreted as follow.

Table 4.9

The Results Gained from Open-ended Questions

Area of Interests	Three Highest Frequency	Frequency	Percentage
Learning Motivation Factors	Being able to listen to, talk to and communicate with foreigners	32	(69.57%)
	Getting good grades, good jobs and better future	18	(39.13%)
	Travelling abroad	7	(15.22%)

Sources of Increased Motivation	Learning interesting lessons in a fun and convenient environment	24	(52.17%)
	Using of modern technology as a preferred learning tool	8	(17.39%)
	Realization of the importance of English communication	7	(15.22%)
Other Comments	Teacher's characteristics	12	(26.09%)
	Teacher's teaching techniques	4	(8.70%)

Based on the results from Table 4.9, it can be inferred that students in the treatment group were most motivated as they wanted to be able to listen to, talk to and communicate with foreigners (69.57%). The second most motivated factor was that they wanted to get good grades, good jobs and better future (39.13%). The fact that they wanted to travel abroad was ranked as the third most motivated factor (15.22%). When asked about sources of increased motivation, the majority of students stated that their motivation increased the most when learning was easy, convenient, interesting and fun (52.17%). Besides, their learning motivation was increased because they liked to use modern technology (17.39%). Students' learning motivation was also increased because they began to realize the importance of English communication (15.22%). Additionally, students added more comments about factors that affected their learning motivation, stating that teacher's characteristics (26.09%) and teacher's teaching techniques (8.70%) played significant roles in promoting motivation.

In addition to the first source of information used to assess students' learning motivation, the second source of data was derived from students' reflection blogs that students were asked to describe their feelings towards blended learning. Their responses demonstrated that a majority of students (96.43%) enjoyed their learning experiences, particularly as a result of diverse and interesting learning activities. They also stated that they became more knowledgeable and were able to better comprehend English conversations at the end of the semester. The following excerpts provide examples of their responses.

Student D: *I really liked studying in the blended learning class, and I had a lot of fun doing class activities. I thought that class activities were very interesting, as they were not only from textbooks but from the internet as well.*

Student L: *I enjoyed being part of the blended learning study, especially when my classmates and I had to do many different activities together. I had fun searching for contents on the internet and use them for our group video productions.*

Student S: *I had such a fun experience in the blended learning class. When my classmates and I were practicing and acting for the video that we had to submit online, we really had a blast. I also thought that all the class activities were very interesting.*

As documented above, students' positive results of their learning motivation might have been caused by the effects of the blended learning implementation. Students that participated in the treatment group, collectively appeared to have a high learning motivation level at the end of the semester. In addition to assessing students' speaking ability and learning motivation, students' perceptions of blended learning practices are also a critical aspect of this research. The results of the study on this area of interest will be demonstrated in the next section.

4.3 Students' Perceptions of Blended Learning Practices

The third section responds to the third research question, concerning students' perceptions towards blended learning practices. The data obtained from students' semi-structured group interviews and students' online reflections are presented in four different themes; learning experiences, availability of technology and facilities required, success factors and readiness as presented below.

4.3.1 Learning Experiences and Academic Impact

The participating students revealed positive perceptions towards blended learning. They enjoyed the mixture of both online and offline modes that provided them with great leaning flexibilities. After having participated in blended learning environment, the majority of students expressed their favoritism towards blended learning. The following excerpts exhibit examples of their feelings.

Student A1: *I feel that blended learning was different from the traditional learning, in which we met once a week and there was nothing after that. However, in blended learning, the learning was continuous outside the classroom. In addition to doing other activities in class with my classmates, I continued to learn outside class when I performed assigned tasks such as video recordings. I also feel that it was a fun learning experience, and I got to practice English continuously outside the class.*

Student B1: *I feel that it had broaden my learning perspective. In addition to learning in class. I had to do online search, to find vocabulary and sentence structures, in order to prepare myself to produce the video tasks. I feel that blended learning made English learning easier and more interesting. I was also more motivated to learn English. I feel that it was exciting and fun at the same time.*

Student A5: *It was fun. I feel like it had broadened my learning perspective, especially the online learning part. The online learning portion had a variety of learning content. What was better than the in-class part was that it had answers for us to see right away. When I saw the content online, I could comprehend better.*

Furthermore, students felt that their learning was effective when the online teaching was incorporated into the overall learning environment. Most of them stated that their English-speaking skill improved in various degrees. The feelings about blended learning effectiveness are exhibited in the following excerpts.

Student C1: *I feel that I had improved my English. I also spoke English more than before, through the video recording activities. I feel that I   had in speaking English. I used to be afraid of speaking English to the point that I wouldn't speak at all. Now, my English-speaking ability is improved, and I feel more motivated to speak English.*

Student C2: *I feel that I had improved my English. When I heard the voice spoken in the video clips, I could reflect upon my own learning and spoke better English as a result.*

Student D5: *I have improved my vocabulary library, resulting from preparing a series of video clip presentations. I can now speak English using more vocabulary. At this time, I can speak English more fluently, using a greater set of vocabulary. I have also become more confident in expressing myself in English.*

Student D6: *I feel that I speak better as a result of having to do the video recordings. As I practiced for the video recordings, my body language has also improved.*

Additionally, a vast majority of students provided their assessment on how blended learning affected their learning in three positive aspects including offline-online time allocation, classroom interaction and learning content. For the time allocation for both in class and online learning, they thought it was appropriately distributive. While they also stated that both the classroom interaction and the learning content variety were increased. Excerpts below exhibit examples of their assessment.

Student D1: *I think time allocation was appropriate. After spending time in class, when I did online activities at home, I felt like I got to review what I have learned in class too. The online learning activities, including a series of game playing and video recording made it fun and collaborative because I performed these activities with my classmates.*

Student B2: *I feel that there was a greater variety, in terms of learning contents. When we prepared to perform the speaking tasks, we had to go online to research for information that we needed. These resulted in us finding a wider range of contents.*

Student C3: *I actually like the online element of the blended learning, and I think that the combination of both online and in class time was appropriate. It helped improve my interaction with both my classmates and the teacher. With my classmates, I got to interact with them more, comparing to the traditional classroom teaching. With the teacher, the interaction was also improved, especially when I received comments from the teacher both online and in-class.*

Student F6: *The amount of time allocated for both the online and in-class instructions was appropriate. The online portion was proven to be particularly useful for those who needed more time to do the homework assignments. For some people, having to do everything in class within two or three hours, they felt too much pressure and could not complete the tasks on time. Being able to go home and go online to do the assignments after class was very helpful for these students.*

Student B6: *It is important to note that learning purely online is not okay because in some situations we need to come to class. Sometimes, the internet was not stable and the speed was very slow. When that happen, it could be an obstacle to the online learning. I also want to note that if we learn online on our own 100%, we may not be able to figure out the right way to speak, in that case, we need to come to class to consult the teacher. If we learn only in online, there will be a lack of interaction between students and the teacher.*

In the last aspect of the first theme, they also shared their thoughts on the traditional classroom attendance requirement in which they had to be physically in class for three hours and its effects on blended learning implementation. Most students viewed it as being an obstacle to their overall learning experience in the blended environment. They wished for more flexibility in the class attendance on campus. The following excerpts exhibit examples of their thoughts.

Student D4: *I think it is a kind of boring to have to be in class three hours straight. I don't think anybody can stay focused for three hours during the class time. With that said, I would rather do some assignments online as well.*

Student A4: *I think having to come to class all the time is somewhat repetitive. I would like to come to class only every other week. Other weeks in between, I want to do the online class. I want to do half online and half in class. I think that when we were in the classroom, there were too many students in the class and some of them talked among themselves during the class. That was very distracting.*

Student A5: *I think it is very tiring to have to be in the class for three hours straight. It is also very boring. This is because the class environment has a lot of distractions, including the number of people talking on the phone, the weather and the physical conditions of students. I think if we are rotating between in class and online instructions every other week, it will be very effective. Personally, I don't like it to be purely online because I want to come to class too. That way, I can ask questions and get clarification of things I don't understand or know about.*

Student D6: *I think it will be better if we split one period into two portions. The first portion can be typical in class learning, the second portion can be online learning in which students can study at their convenience using their mobile phones and other technological tools.*

4.3.2 Availability of Technology and Facilities Required for Academically Impactful Learning Experiences

The majority of students participating in the blended learning agreed that as for the technological facilities required for blended learning implementation, they would request that the high-speed internet and more stable Wi-Fi connections were provided throughout campus. At the same time, about half of them asked for a greater number of computers provided in the labs. The following excerpts exhibit examples of their thoughts on technology and facility requirements.

Student E2: *I think we need more available Wi-Fi access with more stable speed. Some Wi-Fi spots have weak signal while some other spots have strong signal. We should also have more reliable mobile devices. Some of them are very fast, but many of them are very slow. The unreliable Wi-Fi*

access and poor performing smart phones have negative impacts on the information searching and learning effort.

Student C6: *In terms of technology required, mobile phones and internet access are needed. For the internet, mostly we depend on the Wi-Fi on campus, when we go outside in public, we can only use Facebook due to our data package limitation. However, when we try to do a Google search, it can be very slow. Therefore, it is not effective for online learning.*

Student A6: *We need English learning applications that we can use to look up vocabulary that we don't know about and we can use them to learn the correct pronunciation. Also, we need a greater number of computers provided in the labs.*

In the realm of technological facilities, a vast majority of students emphasized that the current technological facilities currently available on campus were not sufficient in supporting blended learning implementation, within their learning context. The following excerpts depict examples of their opinions.

Student C1: *The Wi-Fi coverage is somewhat limited because there are not enough Wi-Fi routers. This also results in weak Wi-Fi signals and limited bandwidth. The university should install more Wi-Fi routers to make sure that students can access Wi-Fi everywhere on campus.*

Student A2: *The current technological facilities available on campus is not sufficient. We need more access to computers, due to the limitation of the mobile phones. For example, some websites and applications, including the university's application can better be viewed and used on computers than on mobile phones. Some applications cannot even be used on mobile phones at all.*

Student F5: *The computer labs both on the main campus and at the satellite campus are not sufficient. Most of the time, the labs are very booked up and the seating assignments at the labs are not effective. Often times, the seats are reserved without being actually occupied. As a result, I cannot use the seats even though they are not occupied.*

4.3.3 Blended Learning Implementation Success Factors

Success factors of blended learning included availability of technological facilities, teachers' approachable and flexible personality, as well as teachers' and students' positive attitude towards technology. This study assesses success factors based on two sources of information, including semi-structured group interviews and students' reflection blogs. For the first source of information, namely the semi-structured group interviews, students provided their ideas on four different success factors. Regarding the first factor involving the teachers' characteristics and beliefs that contribute to the success of blended learning implementation, most students participating in the blended learning implementation research believed that teachers should be well-verse in technology and should carry an approachable personality. They also stated that teachers should believe in students' potentials and entrust them to do independent study online. The excerpts below provide examples of their responses.

> **Student B1**: *I think teachers should have positive attitude towards students. They should trust that students will have discipline in doing online assignments and in managing their own time. If teachers do not trust students and have negative attitude towards them, blended learning may not work. Teachers should do positive reinforcement. That means that instead of simply pointing out students' mistakes and making them feel bad, teachers should compassionately help students correct their errors and suggest how they can improve their English speaking. They can also reward students when they do well. This will help motivate students to speak better.*

> **Student C2**: *I think the teacher should be modern and have sufficient computer knowledge. In my experience, some teachers who do not have sufficient computer knowledge and rely entirely on the content in the textbook makes learning very boring. I want the teacher to be energetic in teaching and incorporates contents available outside the textbook into teaching and learning, in order to make it more interesting.*

Student F6: *I think the teacher should be approachable. At the same time, the teacher should have interesting teaching techniques. For example, he or she can interject different teaching tools like games and other exercises. The teacher should also interject real world example contents that are related to the contents required by the text book.*

In addition to what students thought about the teachers, they also proclaimed their opinions on students' qualifications and attitudes that they thought would help them become successful in blended learning environment. In this regard, the majority of students believed that they should be open-minded and highly responsible individuals. Examples of their thoughts are as elaborated in the excerpts below.

Student A1: *Students should be open-minded and are willing to try new things. Students should be determined. They should also not easily give up. When encountering difficulties, they should keep trying.*

Student D3: *Students also have to do proper time management and prioritize all tasks in their lives appropriately. It is also important to have a positive attitude towards the teacher.*

Student C4: *I think students have to be diligent and persevere. The students must also be focused when they are in the online class. They must not be distracted by notifications from other social media platforms.*

Student F5: *Students should also be open-minded in embracing technology to assist their learning activities.*

Furthermore, students also shared their thoughts on administrators' supports required for the successful implementation of blended learning. Most students stated that they would like administrators to provide greater supports for better and more widely available information technology infrastructure. They also wished for a flexible policy regarding the on-campus class attendance. The excerpts below demonstrate examples of the thoughts that they shared.

Student B1: *University executives should be more flexible in regards to learning location and class time that will facilitate successful blended learning.*

Student A1: *The university should be like a smart city. It should have the infrastructure that facilitate continuous learning that enables students to learn from anywhere and at any-time. That means technology and leaning should go hand in hand.*

In terms of challenges, students participating in this study elaborated challenges that they must overcome in order to succeed in a blended learning environment. A great majority of students stated that in addition to having faith on the effectiveness of the blended learning approach, they must equip themselves with proficient information technology knowledge and skills. They thought that students also need to be prepared to solve technology related issues, such as insufficient and unstable Wi-Fi, and scarce computer equipment provided on campus. The following excepts provide examples of challenges that they encountered.

Student A1: *Both university executives and students must believe that we can make blended learning works. At the same time, students should cooperate in the adoption of blended learning. They must also actively participate in the learning process.*

Student C2: *In addition to having more reliable Wi-Fi, both the teachers' and the students' abilities to use technology is also important. Some students are good at using technology, but some are not. For those who are not good at technologies, they do not do well because they think it is too difficult for them. Students who are good at technologies, there are no problems for them.*

Student D5: *I have to be very prompt in reviewing what the teacher teaches in class. If I slack off, I may not understand what the teacher just taught me. Additionally, I need to be prepared to solve technology related issues, such as insufficient and unstable Wi-Fi, and scarce computers.*

In addition to the first source of information used to assess success factors, the second source of data was derived from students' reflection blogs that students were then requested to describe aspects of blended learning that satisfied their learning needs. While their responses were somewhat diverse, the top three most mentioned aspects were various speaking activities, more chances for speaking practices, and convenient

learning setting that included submitting assignments, tracking learning progress and receiving feedback. Below are excerpts extracted from students' responses.

> **Student F**: *I have to say I have never had this much opportunities to practice speaking before. I was so happy that our teacher let us perform role-play activities and created video by ourselves, as I felt more comfortable speaking English when I was in a small group.*

> **Student O**: *I do not like too much pressure, so I was very glad that our teacher let us find information on the internet to create video at our pace and allowed us to submit our homework even in the evening. This was very convenient for me since I also had a part-time job.*

> **Student P**: *I really appreciated it that my teacher provided feedback online and continue to give me advices on how to improve my English speaking throughout the same semester. By doing that, I could actually track my progress by watching my previous videos and reading my teacher's comments, and I then I could compare my performance to the video that I posted online after that.*

Besides, the same set of students were asked to freely state dissatisfying aspects of blended learning. The top three most dissatisfying aspects of this particular blended learning implementation included instable internet Wi-Fi connections, additional workload and their inability to manage learning time effectively. The excerpts below illustrate examples of students' responses.

> **Student H**: *As much as I thought blended learning was interesting and fun, as I had to perform a lot of many different activities, I was kind of tired of doing a lot of work outside the classroom.*

> **Student M**: *I wished that Wi-Fi connections were more stable. Sometimes, I was very upset that I had to re-upload video because the internet became disconnected in the middle of the upload progress. It was very frustrating sometimes.*

> **Student S**: *This class had a lot of outside of the classroom activities. Because I normally had to work on my part-time job after class, I was really struggling to juggle between doing class activities with my classmates and working. I couldn't manage my time very well.*

Lastly, students were also requested to assert their opinions as to what would help increase blended learning effectiveness at the university. A majority of students wished for greater uses of modern technology along with computer devices and learning applications, stable Wi-Fi, more exciting teaching styles and leaning activities, and a larger pool of learning materials.

> **Student N**: *I think the university should provide more computers and larger computer labs, since most of us do not have money to buy our own computers. Although we could use our mobile phones to perform our class activities, I think computers can help us do a better job in some cases.*
>
> **Student B**: *While I enjoyed going online to search for information that we needed for our video productions, I thought that if certain information was made available on university's provided learning applications, it would speed up my search for information. Additionally, I really wished that the university provides more stable Wi-Fi connections so that my online searches could be more productive.*
>
> **Student C**: *I really enjoyed my teacher's teaching style and the learning activities that I had to do. I think for blended learning to be effective, exciting teaching styles and learning activities are very important.*

4.3.4 Readiness in Adopting Academic Changes Related to Blended Learning Methodology

In order to assess teachers' and students' readiness for blended learning implementation from the students' point of view, students' opinions were also collected from the semi-structured group interviews. The information received from all students participated in the blended learning implementation research suggested that most teachers and the vast majority of students were ready to fully embrace blended learning, although a small number of teachers were not ready yet.

In the assessment on the teachers' readiness in implementing the blended learning approach, the majority of students asserted that most lecturers, especially younger generation lecturers were ready. However, they thought that a small number of lecturers were not ready to implement blended learning. Examples of their assessment are exhibited in the excerpts below.

Student B1: *I think most teachers are ready to implement blended learning, especially the newer generation teachers. However, the older generation teachers who are not familiar with technology may not be ready to take part in blended learning, because they stick to the traditional teaching.*

Student B2: *I think teachers who I have taken classes from are ready to implement blended learning. They seemed to know technologies and were prepared well before they came to the class. They produced learning contents, using needed technologies quite well.*

Student C2: *I think some teachers are not ready. For example, there was the teacher that asked me to go into the website. When I ran into a problem and asked him for help, he could not help me. He said he would need to get a technical support person to help or to consult a manual. I think teachers should be more knowledgeable in using technologies.*

Student A6: *I think about 70% of the teachers that I have taken classes from are ready for this type of learning, 30% of them are not yet ready because they teach by reading the slides. Some of them are against technology.*

In addition to assessing teachers' readiness, students participated in the blended learning implementation research also provided their opinions on students' readiness to participate in a blended learning environment. All of the students stated that they were ready. They further asserted that because they were already using technology in their daily lives, they could easily transition from traditional classroom settings into a blended learning environment. The excerpts below provide examples of their opinions.

Student C1: *We think we are ready because we already use computer devices and technology in our daily life. Now, with blended learning, we just have to apply what we already do online for learning purposes.*

Student E2: *Most of students are ready for blended learning. They have acquired prior knowledge of technologies before coming to the university. Only a handful of students are not well familiar with technologies.*

Student C4: *We already use technology and we are ready to try something new and different.*

As shown in the outcome documented above, overall, the students' perceptions of blended learning were positive. Most students participated in blended learning stated that they flavored blended learning. As much as understanding students' perceptions was of importance, this research would not be well rounded without having insights into how teachers perceived this learning approach. Hence, the teachers' perceptions of blended learning practices were also assessed and will be elaborated in the following section.

4.4 Teachers' Perceptions of Blended Learning Practices

The fourth section also responds to the third research question, concerning teachers' perceptions towards blended learning practices. The data obtained from teachers' semi-structured group interview are presented in four different themes; including teaching management, availability of technology and facilities required, success factors, readiness. The detail of each theme is elaborated, hereafter.

4.4.1 Teaching Management and Students' Academic Outcomes

The participating teachers revealed mixed perceptions towards blended learning. While they thought it provided positive learning experiences that greatly benefited students, they considered additional workloads a burden. After having participated in blended learning environment, most teachers manifested that they had actually applied blended learning into their teaching prior to participating in this research. Only a small number of them confessed that they were exposed to blended learning for the first time during their participation in this study. The following excerpts exhibit examples of their answers.

> **Teacher A:** *I used to implement blended learning in the past. I mostly used YouTube and Google to get students to know what they had never known for their better understanding. Sometimes, I used Kahoot to check students' comprehension in lessons they had learned. I also used it for fun after teaching from the textbook. But in this semester, because of the COVID-19, my students and I had to change from studying in the classroom to completely on online learning, which was difficult at first. However, everyone is now familiar with online teaching and learning.*

Teacher B: *Yes, I used to apply blended learning into my teaching in the course of Basic English Grammar for Communication 1, for the first-year students of the 2019 semester. In the course, students had to make their own task and present it via the Google online classroom namely ELC Room (English Learning Community Room).*

Teacher C: *I have been using Microsoft Teams for education in all my classes for two consecutive semesters. The total number of the classes are eight, both major (English) and non-major classes. I would not say that all of these classes are fully blended learning because of the restrictions for teaching at our university. Still, there is some elements of blended teaching that I have applied to the major courses that I taught. For example, when I taught cross-cultural communication for business purposes, I usually uploaded reading materials (e.g., essential reading passages related to the topic to be discussed, interesting weblogs or articles) into the class team. The students had to read them before coming to the class, in order to be able to discuss the focused topic(s) with their group members. Then, when they came to the class, I would lead the lecture by asking them questions, regarding the given materials. After the group discussion and opinion sharing session, the traditional lecture would then follow.*

Teacher D: *Last semester, I used YouTube and Google classroom with my students. The classes were not so big as usual, there were only 30-35 students each. I think some videos on YouTube are useful for many classes. The students in my class (English Classroom Management) watched the educational TED Talks channel which was selected by the topic of the lesson. In the end, I found that watching TED Talks made the lesson more comprehensible. Also, Google classroom is one of the convenient tools to communicate with my students. I usually assigned my English for Science students to work through Google classroom. I often used some online learning tools to help me teach and to help me collect my students' works.*

Teacher E: *Yes, I have, by assigning students to learn and do exercises related to the contents from relevant websites. Descriptions for answers were given in class, in the case that students did not understand or misunderstood them. Additionally, online testing has been conducted in an attempt to better exploit new technology as well as encourage students to become more technologically minded in this somewhat paperless era.*

Furthermore, most teachers participated in this study felt that blended learning was effective in helping improve students' learning. After having taught in classes where online teaching and learning were incorporated, they asserted that students' English-skills improved in various degrees. Examples of their statements are exhibited by the following excerpts.

Teacher B: *I feel very impressed with the students' tasks, showing and sharing in the online classroom. This kind of classroom can help students show and share their ideas, and also know how to give comments or suggestions to others.*

Teacher C: *I love incorporating online teaching into the traditional classroom lecture. I tried to summarize the main points of every lesson, including the additional sources for more information in the class team so that students can review them whenever they need it. In terms of giving assignments and tasks, it was also convenient because students could turn in homework online without having to print them out. I could also see who turned them in late or did not submit them yet. I would say that the feedback from students was quite positive. They loved that they could review the lesson at any time and that the assignments would never get lost like the traditional submission.*

Teacher D: *I have mentioned that technology helps me a lot in my teaching. We cannot deny the effectiveness of technology in the realm of language teaching. There is a massive amount of useful information in online tools. Moreover, according to the principle of language learning in the 21st century, both teachers and students are required to use online technology in teaching and learning. My classrooms used to be quite simple and a bit*

teacher-centered (teacher's talk) classroom. After applying online technology, my classrooms were livelier and   seemed to be more active.

Teacher E: *It was more effective than merely using conventional lectures, because students were more engaged in classroom activities and they tended to like it more as long as technology was concerned. It was engaging and interactive. The instant feedback could enhance learners' motivation. Moreover, classroom boredom could be reduced and it also saved time and energy of the teacher in class.*

Teacher F: *It promoted more students' engagement to the course content because I provided more opportunities for students to participate in the class.*

Teacher G: *It was convenient and it could give us responses to our curiosity immediately. We could search for the answers of some doubts or questions immediately during the instruction period.*

A good majority of teachers also expressed positively on their assessment as to how blended learning affected their teaching. For the time allocation, both in class and online learning, they thought it was appropriately distributive. At the same time, they also stated that both the classroom interaction and the learning content variety were increased as a result of the blended learning implementation. Excerpts below exhibit examples of their assessment.

Teacher A: *As I mentioned, in this semester I had to teach online and it was quite new to me. I used the "Zoom Cloud Meetings" application to teach and let students submit assignments via Facebook messenger. In terms of time and content management, I feel that teaching online took more time than teaching in the classroom. Because some students had problems with the internet, as well as their communication tools. For me, the teacher must apply the lesson, including evaluation in accordance with online learning as well. In terms of classroom interaction, I feel that at the beginning, I was speaking alone. At first, students had no interactions but I asked them to answer all my questions because that would be considered students' participation scores. It was the effective solution as students had more interactions, but still not like teaching in the classroom. The*

number of students was another important factor for online teaching. I was lucky that the number of students per class was less than 40, so it was not difficult to control. However, online teaching was definitely not suitable for large classes.

Teacher B: *Blended learning affected my teaching the most in terms of time management because it helped me deal with a great amount of the content knowledge by sharing students the slides in the classroom stream in the Google Classroom, before the class. It also affected my teaching in terms of classroom interaction management, since my students could contact me from anywhere and at any time. When they finished the task and sent me via the internet, and I could also check, edit, grade or recheck the task more easily and effectively.*

Teacher C: *I think it enhanced the overall experience that students had in the course. In terms of time management, I don't feel any difference. For classroom interaction management, I think it increases the teacher-students engagement as we have more accessible channels, to communicate with each other (via post reply, group chat and private chat). They loved that they, especially shy students, could send messages to the teacher in case they wanted some clarifications on something. As for the teacher's teaching content management, I don't see any significant difference between the traditional method and blended learning.*

Teacher D: *This semester I had three online classes and I was quite new with this, so I sometimes had problems with time management. I feel like teaching through online media was time-consuming. In the traditional class, I used to spend six hours teaching the lesson, but seven to nine hours for online courses. For classroom interaction, I think it depends on the number of students in the class. My summer courses were varied, there were six students per class, 14 students per class, and 63 students per class. So, I could say that I didn't have any difficulties interacting with students in the first two classes. However, it was more difficult for the third class. Finally, for content management, I used online technology to manage the content. I could easily post my class materials, videos, and assignments*

through my google classroom. Also, students could hand in class works, download materials and watch videos conveniently.

Teacher E: *Regarding time management, it was less time-consuming in class, but preparations in advance were required from the teacher. Teachers have to be more dedicated and creative in preparing online classroom activities. For classroom management, students were more engaged, so the class was more orderly and fun. Students were more focused when they were required to carry out learning activities online. For content management, it greatly facilitated the coverage of course contents in case of holidays. Learning activities could be posted online for students to learn and study by themselves, so it did not matter much when the class fell on a public holiday.*

Teacher F: *It was time-consuming in preparing lessons and monitoring students' contribution to their online learning. However, it was convenient for me and my students to meet anywhere and at any time. The online content could also be updated throughout the class time.*

In the last aspect of the first theme, most teachers shared negative views on the traditional classroom attendance requirement in which everyone must be physically in class for three hours. They viewed it as being an obstacle to blended learning and wished for more flexibility in this regard. The following excerpts exhibits examples of their thoughts.

Teacher A: *I think it affected my teaching because online teaching was spending the same time with the schedule like the traditional classroom. If students had much responsibility, there would be no problems at all. Moreover, it was more comfortable than studying in class.*

Teacher C: *If blended learning allows students to access the content regardless of time and place, then I do not think it is well implemented in my course since there is a restriction about students' attendance. To make sure they attend the class more than 80%, teachers tend to give 10% of the overall scores for attendance and participation. Since we only meet students once a week for each class, I need to make sure they are able can grasp the content. Therefore, face-to-face teaching, physical group activity*

and discussion, and presentation are still crucial for my teaching as well as the online content.

Teacher D: *I think the traditional classroom attendance requirement affects blended learning implementation much, as it is blended, it should be flexible. Students should have time for their own, to manage their learning time.*

Teacher G: *If the university policy still required three-hour lecture-based learning in the physical classroom and students needed to learn more online lessons after/outside class, this would cause more workloads for the teacher which might be the hindrance of blended learning. It could make the teacher and students feel overwhelmed of learning and teaching. There should be the clear portion of classroom and online learning. However, if blended learning means the mixture of technology and traditional lecture in the physical classroom, it means students are required to be present in the classroom and teachers manage their lessons and activities in the class by using some online technology. That kind of instruction doesn't change anything much.*

4.4.2 Availability of Technology and Facilities Required for Academically Impactful Learning Experiences

A majority of teachers participated in the blended learning agreed with students that as for the technological facilities required for blended learning implementation, they would request that the high-speed internet and more stable Wi-Fi connections were provided throughout the campus. At the same time, about half of them asked for a greater number of computers provided in the labs. The following excerpts exhibit examples of their thoughts on technology and facility requirements.

Teacher A: *For me, internet access and communication devices are the most important elements. From my online teaching experience, students didn't show up in my online class because they were unable to connect to the internet.*

Teacher B: *The internet access, smart phones or personal computers, and some learning applications are necessary facilities for blended learning implementation.*

Teacher C: *Access to the internet, good-quality smartphones, tablets, and laptops, or computers. However, not every student is privileged to such things. You would be surprised with the fact that many students do not own a laptop. They have to come to the university to use provided computers in the IT lab.*

Teacher D: *I think the internet, online teaching applications, online devices, and database are all important technological facilities for blended learning implementation.*

Teacher E: *A stable internet network is the most important requirement for online learning activities.*

Teacher F: *Internet connectivity speed, personal computers, laptops, smartphones, technological equipment, and well-trained technicians.*

Teacher G: *Computers, laptops, smartphones, internet access and real-time technical support are important aspects of blended learning implementation.*

However, similar to students' opinions, a vast majority of teachers also emphasized that the current technological facilities currently available on campus were not sufficient in supporting blended learning implementation, within their learning context. The following excerpts depict examples of their opinions.

Teacher A: *I feel so ashamed to say that my university does not have anything that is sufficient and suitable for online teaching. For example, I have to use the free version application with some limitations. I hope that my university will purchase and provide these applications to all lecturers, in order to make online teaching more effective.*

Teacher B: *Most of the current technological facilities are sufficient for my teaching context, to support blended learning implementation. Anyway, more interesting learning applications can make blended learning implementation more effective.*

Teacher C: *At the university where I am currently teaching, there are computer rooms and IT labs, but the number of theses rooms is quite limited. There are also free students accounts for G-mail and Office 365, which they can register for free. However, there is no other supports such as laptops or tablets for students in need, making it not so practical for students who have no access to those learning gadgets.*

Teacher D: *I don't think the facilities are sufficient enough for blended learning in my university. The first and most important thing is the internet. It is sometimes blown by the wind. Besides, the computer in each classroom is out of date, many of them cannot even access to Google.*

Teacher F: *Free Wi-Fi connectivity provided at the university is not good enough for students to get connected with the class. There is also the lack of technological supports from the university when online lessons are breaking down because of some technical problems.*

Teacher G: *Not at all. The internet access is not sufficient and effective enough. The technological skills of both teachers and students, especially the teachers' part needs to be practiced. Most teachers need to be trained how to utilize technology for education.*

4.4.3 Blended Learning Implementation Success Factors

The teacher participants provided their ideas on four different success factors. Regarding the first factor involving the teachers' characteristics and beliefs that contribute to the success of blended learning implementation, similar to student's opinions, most teachers participating in the blended learning implementation research believed that teachers should be well-verse in technology and should carry an approachable personality. They also stated that teachers should believe in students' potentials and entrust them to do independent study online. The excerpts below provide examples of their responses.

Teacher A: *I believe that teachers have to always be ready to learn new things. In order for blended learning implementation to be successful, teachers should   be able to apply the appropriate technology in teaching especially in the era where online teaching plays a very significant role.*

Teacher B: *Technological skills, classroom management skills, and communicative skills are important teachers' characteristics of blended learning implementation.*

Teacher C: *Teachers should be open-minded to new technology and the feedback from students. They should not stick to the same old traditional teaching but should always learn new useful techniques that can be implemented in the classroom. As for the teacher's characteristics, I think tech-savvy teachers are able to adapt themselves for blended learning better than the ones who are not familiar with new technology and gadgets. You might have to invest both your time and money to familiarize yourself with the latest teaching tools and methods but that can be difficult for many teachers.*

Teacher D: *In my opinion, being open-minded is a very important aspect in implementing blended learning. The teachers should first realize that not all students are equipped with good online devices and some students are not familiar with this teaching approach. So, students should have choices to mix up their own blended learning, in appropriate portions.*

Teacher E: *They have to be computer literate and adventurous in applying new technology in class. Furthermore, they have to be creative in creating online learning activities.*

Teacher F: *They should be positive to the use of technology in education and be ready to integrate new technology into their teaching with the belief that it has affordances for students' learning.*

Teacher G: *Teachers who have open-mined character and flexible mindset. They should love learning new things and are not afraid of taking risks or challenges.*

In addition to what teachers thought about themselves, they also asserted their opinions on students' qualifications and attitudes that they thought would help them become successful in blended learning environment. In this regard, most teachers believed that students should be open-minded and highly responsible individuals. Examples of their thoughts are as elaborated in the excerpts below.

Teacher A: *Students who will succeed in blended learning environment should be a self-motivated, hardworking and high responsibility person.*

Teacher B: *Students with technological knowledge competence, skills to deal with some of written content knowledge, and adaptive learning styles.*

Teacher D: *Students themselves should be enthusiastic learners. They should keep in mind that knowledge is already both in class and on the internet.*

Teacher E: *They have to be open to new ways of learning, inquisitive, responsible for their own learning, and autonomous in searching for new knowledge.*

Teacher F: *Students should own technological devices that they believe make their lives easier, so that they can transfer positive attitudes to the use of technology in supporting their learning.*

Teacher G: *Students who have self-regulation and self-direction.*

Furthermore, teachers also shared their thoughts on administrators' supports required for the successful implementation of blended learning. Many teachers stated that they would like administrators to provide greater supports for better and more widely available information technology infrastructure, as well as flexible on-campus class attendance. The excerpts below demonstrate examples of the thoughts that they shared.

Teacher A: *Well, this is a very sensitive point, although we have tried to ask for upgraded computers and teaching materials, nowadays we still have to use outdated computers. Administrators should provide the Pro-version application for teachers, in order to benefit students in the future.*

Teacher B: *The administrators' awareness of the importance of implementation of blended learning. They should also encourage instructors to use the blended learning as well.*

Teacher D: *I think the university should provide experts in each online application, online teaching courses, high-speed internet access, and online devices.*

Teacher E: *Administrators are required to possess a technologically oriented mentality that learning does not have to take place in*

conventional classrooms. Knowledge can be acquired online as well. More investment on technological facilities should be the main focus in order to facilitate online or blended learning.

Teacher F: *The university should establish a supporting center for online learning so that teachers will not be concerned about online instructional design and technological problems they may face during the class.*

Teacher G: *Enough technological supports and staff, training, effective and efficient internet access.*

Furthermore, teachers participating in this study elaborated challenges that they must overcome in order to succeed in the blended learning environment. A great majority of teachers stated that in addition to having faith on the effectiveness of the blended learning approach, they must equip themselves with proficient technological knowledge and skills. They must also be prepared to solve technology related issues, such as insufficient and unstable Wi-Fi, and scarce computer equipment provided on campus. The following excepts provide examples of challenges that they encountered.

Teacher A: *For a low-tech teacher like me, solving pop-up problems in each online teaching is very challenging. Because the teaching is like a live broadcast. There are many problems that can occur while teaching. In addition, the teacher must use teaching methods that make students understand easily, because it's different from teaching in class. Students also have to prepare their devices very well if they want to succeed in blended learning.*

Teacher B: *Well-organized activities provided for students to learn when implementing the blended learning must be one of the challenges to overcome for blended learning.*

Teacher C: *One of the challenges would be the technological or digital inclusiveness.*

Teacher D: *Teachers' dedication and students' participation are challenges that can lead to a successful blended learning class. In the class, teachers need to work very hard even harder than the traditional class to get students into the lesson.*

Teacher E: *Ongoing supports from administrators, stable and efficient internet networks, a change in attitude of teachers, and readiness of students for a new type of learning approach that requires them to be more self-reliant and autonomous learners.*

Teacher F: *The belief of the university administers that online learning can lead to the success in mastering the subject matters so that they can provide sufficient supports to teachers, in developing their online courses.*

Teacher G: *The starting points that lead to successful blended learning are the beliefs of teachers and the support from administrators.*

4.4.4 Readiness in Adopting Academic Changes Related to Blended Learning Methodology

In terms of readiness, even though a vast majority of teachers thought their students were ready to fully embrace blended learning, only a portion of teachers shared the same enthusiasm as their students. However, other teachers needed additional time to learn and adapt. In the assessment on the teachers' readiness in implementing the blended learning approach, a vast majority of lecturers asserted that they were forced to be ready, while a small number of them was not ready to implement blended learning yet. Examples of findings are manifested in the following excerpts.

Teacher A: *Formerly, I seldom used blended learning in my classroom. But, the situation in this semester makes me ready to learn and use blended learning incredibly. I think in the future teaching and learning will absolutely be a big change.*

Teacher B: *As a lecturer in the fast-changing environment and new technology era, I have to be ready and well-prepared for the implementation of blended learning.*

Teacher C: *Since we are facing the COVID-19 situation for the new semester, I think all teachers must brace online teaching, including blended learning. For me, I think I will try to apply blended learning more in my class such as recording my lecture and upload it online. I am not sure how it will turn out but now I hope for the best.*

Teacher D: *I am quite new to this method. However, I think that readiness comes when frequent exposure occurs. I cannot say that I am ready for blended learning now, but in the next two months, I will.*

Teacher E: *I have already been implementing the approach in my classroom for quite some time, and I will continue to do so in the future.*

Teacher F: *Not quite. It is because of the heavy workload that the university has assigned me. I have to do extra works on preparing my online lessons which are new to me without any guidance and technological supports.*

Teacher G: *About 60%. There are some burdens such as the limitation of my technological knowledge and skills, the self-regulated learning skills of students, and the insufficient university's internet access.*

In addition to assessing teachers' readiness, the teachers participated in the blended learning implementation research also provided their opinions on students' readiness to participate in a blended learning environment. Most of the teachers stated that students were ready, as they were already using technology in their daily lives. The excerpts below provide examples of their responses.

Teacher A: *Actually, my students are ready to participate in blended learning. However, some students may not have the tools or devices available for online learning, such as the internet and personal computer notebooks.*

Teacher B: *As a learner in the era of fast-developing technologies, I think my students are very ready to participate in the blended learning environment which is exciting and fun to learn.*

Teacher C: *For this question, I think it depends on the teacher. If the teacher has a way to lead the class interestingly, the result should not be too bad, regardless of the students' readiness. Understanding teachers will understand students' problems and limitations and help students fix them. Despite all the obstacles and difficulties of online teaching and learning, we will slowly learn from each other and hopefully, it will be fine.*

Teacher D: *I think my students are ready for blended learning classroom if they have appropriate online devices and tools.*

Teacher E: *Some are ready, while others are not. The former is those who can afford the internet at home and are ready to and responsible for their own learning. The latter are those who cannot afford the internet of their own and may not be ready to depart from the conventional classroom contexts.*

Teacher F: *They could be ready for it because they are pretty tech-savvy. They would love to learn with new teaching methods.*

Teacher G: *About 80%. However, they need to understand the principles and learning skills needed while attending this kind of learning.*

The study results on the teachers' perceptions of blended learning demonstrated mixed perceptions amongst teachers participated in this research. Although some teachers did not perceive blended learning very well, most teachers appeared to have perceived blended learning positively. The results of this study including students' speaking ability, students' learning motivation and students' perceptions, along with teachers' perceptions of blended learning will be discussed in greater detail hereafter.

4.5 Discussions of Results

4.5.1 Students' Speaking Ability

The analysis of the students' pre- and post-speaking tests, documented in section 4.1, indicates that there was a significant difference in students' speaking scores between the control group and the treatment group. The mean difference on the pre-test scores of these two groups, as depicted in table 4.1 is .085. This suggests that their speaking ability was very similar, prior to the blended learning implementation on the treatment group. However, the mean difference on the post-test scores of these two groups, as shown in the same table is .873. This serves as evidence that the speaking ability of these two groups was very different. As seen in table 4.1, the mean of the post-score at 3.11, belonging to the control group is much lower than the mean of the post-test score of the treatment group, standing at 3.98. It can, therefore, be inferred that blended learning helped improve the speaking ability of students in the treatment group quite significantly. These results align with the assertion of Stein and Graham (2014),

which states that blended learning yields better results than using just a purely face to face learning method or an online learning activity alone.

Based on the statistical results cited above, one possible factor contributing to such improvement amongst students in the treatment group involves a noticeable fact about blended learning. That is, blended learning, implemented in this research, gave students greater opportunities to expand the range of their speaking practices than those in the control group. As indicated by Ur (1998), in order for a meaningful conversation to occur among parties, there must be a display of the high-level of talking amongst learners. In a successful speaking activity, learners should dictate most of the talking during the learning activity, instead of having the instructor do all the talking like in the lecturer-centered teaching style. In this research, while students in the treatment group had opportunities to speak English both in onsite class periods and in online sessions, their peers in the control group limited their speaking exercises to the onsite class periods only. Hence, it is reasonable to imply that the additional speaking activities might have helped students in the treatment use a wider range of vocabulary, grammatical forms and controlled phonological features. Additionally, they also had more practices of verbal exchange. As a result, the speaking ability of students in the treatment group was improved noticeably, comparing to that of the students in the control group. On the contrary, it can also be inferred that the reason that the speaking ability of students in the control group did not improve as much might have been due to their limited chances to practice speaking. Therefore, they could only use a small set of vocabulary, grammatical forms and controlled phonological features at the end of the semester since they only had minimal practices of verbal exchange. As a result, the additional speaking activities were deprived of them. The research results are congruent with the statement of Stein and Graham (2014), which points out that implementing blended learning can be advantageous to students in a couple of ways. First, it grants students more learning access than otherwise, as students are required to attend not only regular classes but also online learning activities. At the same time, the online learning exercises also allow for adaptable and productive learning experience. This is due to the fact that students can access all learning materials or course contents at the comfort of their fingertips anytime and anywhere the internet access is available. As a

consequence, blended learning, thus, contributes to students' speaking skill improvement.

Another probable factor, contributing to the improved English-speaking skill amongst students in the treatment group is that blended learning provided additional chances for the teacher to give immediate feedbacks. These feedbacks included both during the face-to-face interactions and in the online engagement. Additionally, the teacher was also able to regularly track their speaking skill development. Therefore, it can reasonably be inferred that students' speaking ability improved, as a result of their incorporation of the teacher's feedbacks, given during their previous assignments into their next speaking opportunities. As mentioned by Stein and Graham (2014), utilizing the ability to track students' learning is one of the benefits that this teaching model offers. These two scholars further point out that another advantage of this kind of assessment is that it enhances the assessment frequency which results in the higher value of validity and reliability. During the research activities, through the implementation of systematic process used for progress tracking and reporting of skill development, the teacher was able to provide feedbacks to students throughout the course. During this process, students' time spending on their online tasks was more visible to the teacher, comparing to that of their peers in the control class. This is because the teacher could track every step of students' progress in the online learning platform. By using this approach, the teacher was able to see where each student stood and could, therefore, cater appropriate instructions to each student's learning behaviors. The teacher could then analyze students' performance based on their assignment scores and made suitable improvement suggestions to individual students. In addition to offering extra face-to-face sessions to all students during the onsite class time, the teacher also provided personalized instructions to each student in the online platform. It can evidently be concluded the combination of these activities helped improve students' speaking ability, as a result. The study results of this research are in alignment with those of Bataineh, (2017), Hubackova and Semradova, (2016), Kintu, Zhu and Kagambe, (2017), Kosar, (2016), and Soler, (2017). As documented in section 2.6, the statistical data provided by these researchers indicate that blended learning implementation significantly yield positive results in improving student's skills.

4.5.2 Students' Learning Motivation

One of the research questions outlined in section 1.10 seeks to find the answer as to how blended learning affects Thai university students' learning motivation. The research results suggest that the learning motivation of students participated in the blended learning was at high level. According to the data presented in Table 4.8, the mean of instrumental motivation is at 3.78, while the mean of the integrative motivation is at 3.62. These statistical data suggest that students' motivation levels appeared high on both the instrumental motivation and the integrative motivation, after receiving the blended learning treatment. This information indicates that students possessed higher instrumental motivation than integrative motivation. This can be explained by the factors shown in Table 4.6. First, these students were generally motivated by the drive to accomplish learning goals. Secondly, they would like to, be able to listen to and communicate with foreigners. Third, they would like to get good grades, good jobs and better future. Lastly, they would like to travel abroad. It is also logical that their integrative motivation was slightly lower than the instrumental motivation. This is because these students were non-English major students who did not have the desire to be a part of the English-speaking community. Gardner (1985) suggest that learners with the instrumental motivation operation learn through external outcomes or rewards. They learn things from extraneous stimulations, requirements, social roles and even from environmental influences. The result of this research is aligned with the research result of Kachru (1992), which indicates that the instrumental motivation plays a more crucial role in helping students succeed in second language learning, in comparison to the integrative motivation. Similarly, the study of Gardner (1985) also suggests that the instrumental motivation is an important indicator in helping students to succeed in learning a second language in various contexts.

Overall, students' high degree of leaning motivation might have been a product of their high level of social interactions in the blended learning environment. As stated by Stein and Graham (2014), blended learning approach helps students become more interactive and more motivated in learning, as it gives them chances to spend additional studying time outside of the classroom confinement. This present study appears to confirm such claim. Per the data provided in Table 4.9, students' high

degree of social interactions resulted from three important aspects. The first aspect was the fun learning environment including group activities for the speaking tasks outside the classroom. Another aspect was the face-to-face interactions during the on-site class periods. The third aspect was the use of technology and social media, such as Facebook where they must upload their group video assignments. In this last aspect, their classmates were able to comment on their work, while the teacher was able to also give feedbacks resulting in even more interactions. These social interactions, both offline and online formats, helped promote learning engagement, amongst students in the treatment group. Such high level of interactions resulted in greater collaborations between the teacher and students, as well as amongst their classmates, leading to the high learning motivation level as a result.

Moreover, it can also be inferred that a wide variety of learning formats and contents used in this blended learning implementation might have helped enrich students' satisfactions, and such satisfactions then led to their high learning motivation level. As already described, blended learning interjects different learning formats, for example, lectures, role play presentations, rotation models implementation, contents from both inside and outside of textbooks, video productions and online presentations, as well as online learning reflections. As a result, students participating in this learning environments appeared very satisfied. Furthermore, due to the fact that these students were digital natives who disliked the stagnation of hour-long lectures and preferred to use various and dynamic ways of learning, they perceived that blended learning matched their learning styles and preferences. Such learning satisfactions amongst students participating in the blended learning helped increase their learning motivation. This outcome also correlates with Gardner's (1985) research conclusion, which indicates that the positive attitude contributes to the enhancement of learning motivation and the success of language learning. It can thus be concluded that the learning motivation amongst students participating in blended learning was at high level, as a result of extensive social interactions, as well as the use of a wide variety of learning formats that satisfied their learning goals, learning styles and preferences.

4.5.3 Students' and Teachers' Perceptions

Students and teachers' perceptions can have direct impacts on the achievement of learning and teaching. Therefore, it is important to explore how they perceive blended learning. In this study, the overall qualitative results, based on semi-structure group interviews, demonstrate that the majority of research participants perceived blended learning positively, although a small number of them displayed negative perceptions. In the broad sense, the first probable indicator of the positive perceptions amongst the research participants is the high degree of blended learning adoption. The majority of participants claimed that because they had already used technology and social media regularly in their daily lives, they could easily adopt the online aspect of blended learning. These research participants also stated that the online portion of blended learning made their learning easier and more convenient. As a result, they were willing to embrace it. This outcome corresponds to the research results conducted by Capo and Orellana (2011) which points out that the ease of use of social media have direct positive impacts on participants' willingness to use them.

Another possible indicator of the participants' positive perception is their realization of the blended leaning effectiveness. When social media platforms were integrated into the traditional classroom teaching during this study, interactions between the teacher and students were increased. The increase in such interactions resulted in better knowledge and skill acquisitions than otherwise. This is in line with the study of Capo and Orellana (2011), which indicated that higher chances of interactions resulted in participants' positive perceptions. In addition to the increased interactions, the majority of participants also elaborated that the use of technology could facilitate both learning and teaching processes. Consequently, it further helped improve their learning and teaching effectiveness. The study by Tamim (2013) confirms this claim by asserting that when students and teachers realized that blended leaning helped improve learning and teaching, they perceived it positively.

However, the use of technology in this research also sparked negative perceptions amongst some teacher participants. The probable reason might have been caused by the difficulty in using it. The teachers' positive perceptions emerged when they witnessed that the use of online tools could help their students understand teaching

materials more easily while also increasing their learning motivation. In contrast, some teacher participants displayed negative perceptions towards blended learning. These participants appeared to have difficulties using technology. This was evident in the teachers semi-structured group interview which demonstrated that when they faced technical problems, they felt uncomfortable to continue the use of technology. Such discomfort contributed to their negative perceptions towards technology, along with blended learning, as a consequence. This research result is in line with the study by Tamim (2013) in which he suggests that some teachers had negative perceptions on technology such as YouTube when they faced challenges, pertaining to certain contents and technical problems, while using it. Narrowing the scope of the study down, the combination of both students' and teachers' perceptions can be discussed into four different themes including learning and teaching experiences, availability of technology and facilities required, success factors, and students' and teachers' readiness. Each of these themes are discussed in greater detail, hereafter.

1. Learning and Teaching Experiences

The first theme derived from the research qualitative results is learning and teaching experiences. It discusses two aspects including students' learning experiences and the teaching management of the teachers. As for the students participating in this study, according to the interview results documented in section 4.3, collectively, students revealed positive perceptions towards blended learning. The main reason for their positive perceptions might have been caused by the fact that they enjoyed the mixed application of both online and offline learning modes in which the researcher provided them with great learning flexibility. It correlates with the statement of Stein and Graham (2014) which illustrates that blended learning occurs both in the confinement of a physical location and in the virtual world, allowing for productive and adaptable learning activities. During the course of the study, the researcher provided students with learning flexibilities in many areas.

The first area was the freedom of using any content of their choice for the given topic in their video production. Secondly, they were free to conduct their search for the content and then produce the video clips anywhere on campus, without having to be confined to the classroom. Another area of flexibility involves their freewill to choose roles that they wanted to play in the video presentation amongst themselves,

without the researcher's interference. This matches with one of the effective ways of teaching speaking skills that Brown (2001) mentions that it should be in the form of interpersonal speaking. Unlike the transmission of facts and information, this kind of speaking instruction is more authentic, as students perform oral activities in the form of social interactions. The fourth area of flexibility is the deadline that they must upload their video in the Facebook group. Instead of requiring students to upload their video in a fixed schedule, the researcher gave them the flexibility of uploading the video until the end of the day. This flexibility allowed time for each group of students to learn about the content for the roles that they must play, to practice the role-play and to finish their final video production at their own pace, without feeling too much pressure. The fifth area of flexibility is the freedom to view and comment on the videos that their peers produced and posted online at their own leisure. Additionally, when the researcher commented on their works, they were given flexibility to decide whether and when to respond, based on their level of comforts and whenever they were ready to do so. All of these learning flexibilities that they received in the blended learning environment appeared to have suited their learning styles and preferences very well, since students of this generation enjoy the ability to freely express themselves, to have freedom of making choices on their own, and to have access to learning both inside and outside of the classroom confinement. This is in line with the assertion made by Stein and Graham (2014) which indicates that the use of blended learning provides more flexibility and more freedom, comparing to the traditional way of teaching and learning.

In addition to discussing the students' learning aspect, it is also imperative to discuss the teaching management angle of the teachers. Based on the qualitative research results through the semi-structured group interview documented in section 4.4, the participating teachers revealed mixed perceptions towards blended learning. While they thought it provided positive learning experiences that greatly benefited students, they considered additional workloads a burden. The teachers participated in this study stated a few reasons that they believed blended learning could enhance students' learning. These reasons can be grouped into three common aspects. The first aspect that they thought to have promoted more enjoyable learning experiences amongst students was a wide variety of learning contents. This was due to the fact that students participating in the blended learning did not only sit through lectures based on the

textbook materials, but they also performed online search to acquire additional contents on the internet to supplement their in-class learning activities. Allan (2007) emphasizes that in order for a blended learning program to succeed, it needs to contain a healthy balance of different types of learning activities. These activities should be comprehensive enough to assist learners in exploring fresh ideas and developing knowledge and abilities in a safe learning environment. She provides a list of examples of such learning activities that include but not limited to brainstorming, group discussions, reflective practices and role play activities.

Additionally, their needs to search for online contents led to another aspect that these teachers believed to have enhanced students' learning; that was the use of technology to aid their learning outside of the classroom. These teachers had already been aware of the fact that students of this generation favored the use of different kinds of technology. Having been able to use technology to aid their learning enabled these students to learn in their comfort zones. Additionally, teachers participating in this research believed that students enjoyed studying in blended learning because it offered them chances to learn in a more dynamic environment rather than sitting through lecture statically for two to three hours at a time. This is in accordance with the statement of Smith (2006) which illustrates that this kind of learning model is independent of physical space limitation, since everybody can access learning materials any time they need as long as they have access to the internet. As a result, learning is more dynamic.

As much as there were positive aspects that these teachers thought were beneficial to students, they had certain reservation towards the blended learning approach, however. They cited a few reasons that would hold them back from adopting blended learning. These reasons can also be grouped into four common aspects. The first thing that caused these teachers to be reluctant to embrace this learning approach was their difficulty using technology, as they felt uncomfortable using them. This is similar to the assertion made by Capo and Orellana (2001) which suggests that the ease of use of social media have direct impact on teachers' willingness to use them. Secondly, they did not believe that the current set of university facility was yet appropriate and sufficient for blended learning implementation. Furthermore, while they thought blended learning provided positive learning experiences that greatly benefited students, they considered additional workloads a burden. In addition to the

previously mentioned three aspects, the most important aspect was that these teachers still believed that the traditional teaching approach was already effective; they did not think that it was necessary to change their teaching approach for students' learning to be effective.

These positive teaching experiences and reservation that teachers participating in blended learning had might probably be caused by two main factors. One factor could be the hard-formed personal beliefs that had been set stone in their belief systems, prior to participating in this research. As a general observation to the human nature, people tend to have formed a personal belief system based on their diverse backgrounds including but not limited to family, education, religion and other forms of social affiliations. Once this belief system is set in on people, although it is not impossible for them to change their mindsets, it is very difficult for them to do so, especially during a semester long implementation. Another factor contributing to these positive experiences and reservation towards blended learning might as well be the references to their past learning and teaching experiences. As people are growing from adolescent to adulthood, they typically go through both formal and informal education that led them to their current career of choice. The more successful people are in their career, the more they believe that the way they have received their education was the effective approach. It is not uncommon for teachers to formulate their teaching approach by referencing back to their education background, and this is no exception for teachers participating in this study. They might have as well applied their past learning approach to both their past and current teaching techniques. Hanushek (2010) elaborates that years of teaching experience and ways at which teachers obtain teaching positions, either it be through a traditional teaching degree or by means of receiving alternative teaching certificates influence their teaching perceptions. Additionally, those who have seen their past students graduated and became successful in their careers might further have believed that their past teaching method was already effective. It can thus be concluded that these teachers let their teaching belief, their past learning and teaching experiences affect their perceptions towards blended learning.

2. Availability of Technology and Facilities Required

The second theme, derived from the research qualitative results concerns the availability of technology and facilities required for blended learning implementation. The research results suggest that students and teachers had similar views on this aspect. Both students and teachers participating in this research stated that the technology and facilities available for them were not sufficient. The reason that both students and teachers thought this way was probably due to their direct experiences when the use of technology was incorporated into teaching and learning; they witnessed that it would require a greater set of technology and facilities than what were currently available on their campus.

Furthermore, blended learning requires access to different learning applications both for content variety and for online situational simulations for practical learning exercises. Students and teachers who thought that the current technology and facilities available on campus were not yet sufficient for blended learning implementation elaborated details on a few areas of concerns. Their first concern is related to both the number of computers available in the computer labs and the quality of the existing systems. They stated that not only the number of computers were insufficient, the existing systems also carried both outdated hardware platforms and outdated software programs. Another area of concern involves the insufficient number of learning applications required for learning courses. Because the Faculty of English offers a wide variety of courses to all students on campus both non-English major classes and English major classes, a number of content rich classes required learning applications to properly support and enhance students' learning. As far as teachers were concerned, they did not believe that the current set of learning applications available to students were sufficient, if they were to embrace the blended learning approach.

The last concern points to the speed of the internet and Wi-Fi coverage currently available on campus. Both students and teachers thought that the current internet speed was not as fast as it should be, and that the Wi-Fi coverage was quite limited to certain areas on campus. They stated that if the English Department would like to fully implement blended learning to all students taking English classes, the university would have to boost up the internet speed by acquiring and implementing modern internet infrastructure like fiber optics. Additionally, these participants thought

that the university should install Wi-Fi routers in all classrooms and throughout the open areas on campus to ensure that students could be connected to hi-speed internet anywhere on campus. This would allow for their learning activities both inside and outside of the classroom confinement to be as productive as possible. In short, according to their teaching and learning experiences, both students and teachers believed that the current technology and facilities would need to be improved both in terms of quantity and quality in order to properly facilitate a full implementation of the blended learning.

3. Success Factors

The third theme that was derived from the research qualitative results involves success factors of the blended learning implementation. Both students and teachers participating in this study commonly stated three indicators that would lead to successful learning in this approach. The first factor that they deemed important for the blended learning implementation was availability of technological facilities to aid students' learning activities. The facilities should include high speed internet, expansive Wi-Fi coverage and stable network connections, sufficient numbers of computer equipment, smart phones, computer labs, as well as university provided websites and applications. The rationale behind this thinking was quite clear in itself. Both students and teachers had been through traditional learning models that relied mostly on classroom lectures delivering contents that were limited to what textbooks provided, prior to participating in this study. They realized that without properly available technology facilities to assist learning, it would be impossible for blended learning to be a success. This is in accordance with the assertion made by Allan (2007), which conveys that it is critical to take sufficient amount of time and effort during the design and development life cycle, as only proper designs that include necessary infrastructure for blended learning programs and students' needs will appeal to learners. That is, because this learning model usually relies heavily on technology to deliver all online teaching and learning.

Another success factor that both students and teachers participating in the research considered critical was the teacher's personality. Chingos, Whitehurst, and Lindquist (2014) point out that certain characteristics of teachers are the most significant factor that influence students' accomplishment. Both students and teachers

participating in this study mutually agreed that for blended learning to be delivered successfully and to be well-received by students, teachers must be approachable and flexible. Reasons that they believed that this type of personality is significant for a successful blended learning implementation was due to the dynamic nature of both the students and the learning models interjected into the blended learning. It is a defacto knowledge that students of this generation prefer to get exposure to a wide variety of learning contents and to learn through different learning methods and channels. Furthermore, they perceive traditional classroom lecture as ineffective. Hence, in order for teachers to facilitate these students' learning preferences, they must be quite dynamic. Their dynamic nature, hence, effectively capture students' energy and cultivate such energy to help make learning meaningful for their students. In addition to having a dynamic personality, both students and teachers participating in this study also realized that teachers wishing to implement blended learning must be very flexible. It has been quite obvious to the society at large for a while that students of this generation can easily become tired of repetitive learning activities and teaching styles. Therefore, the more flexible the teachers are, and the more able they are to adapt to students' learning preferences, the more successful the blended learning implementation can be. In short, since both students and teachers had been through traditional teaching and learning methods prior to participating in this study, and they could clearly perceive through their past experiences that only teachers carrying dynamic and flexible personality would excel in implementing this learning approach.

In addition to the previously stated two success factors, the last factor essential for a blended learning implementation to be successful is the positive attitude towards technology amongst both students and teachers. As mentioned earlier that a wide range of technology was a critical element in the blended learning environment, due to the dynamic learning protocol, resulting from the adoption of rotation learning models, as well as a great content variety used to facilitate students' learning activities. The reason for both students and teachers to have thought this way was mostly drawn from their past learning and teaching experiences. Since both students and teachers had been involved in the traditional learning approach where technology played very little role, they witnessed a stark contrast in blended learning, which required an extensive use of different types of technology during their participation in this study. Hence, they

came to the realization that a positive attitude towards technology played a very significant role in the blended learning. As a result, they believed that the more receptive of technology both students and teachers were, the more likely the implementation of blended learning would be successful. In brief, it can be concluded that three important factors that contribute to the success of blended learning implementations are availability of technological facilities, teachers' approachable and flexible personality, along with the teachers' and students' positive attitude towards technology. This conclusion correlates with the proposed suggestion made by Dupuis (2003), which points out that in order for researchers to successfully incorporate technology into teaching, they need to embrace important elements, such as learners' age, affiliation, culture, interests, educational needs, technological skills, motivation and attitude of involving stakeholders, as well as the internet access into considerations.

4. Students' and Teachers' Readiness

Following their participation in this study, all students and most teachers expressed similar views. For students who participated in the blended learning implementation, all of them stated that they were ready to fully embrace this teaching approach. There are four reasons that could explain as to why they were ready for blended learning implementation. The first and most important reason is the fact that they are internet and technology native, since there were all born into the era of internet and technological advancement. As a result, they grew up being familiar with the internet and technology and used them in their every day's life. Therefore, there is only little learning curve for them to adopt required technology, used as part of any blended learning implementation. Another reason that might explain why they were ready to participate in blended learning is probably their preference to the use of technology, not only in their daily activities but also for learning purposes. Students nowadays appear to be naturally inclined to search for information and conduct research on the internet, instead of going to the library in order to gather the data of their interests. For them, doing online search for information, either for their personal use or for academic purposes, can be conveniently done at the comfort of their fingertips. In addition to the previous two reasons, students of this generation also enjoy a wide variety of learning environments, including both online and offline. As it is generally known that these young students can easily shift their focuses from one thing to another, they feel bored

of having to sit through traditional classroom lectures. Since blended learning implementations normally incorporate different rotation learning models and interjects both online and offline activities that can frequently be done either inside and outside of the classroom confinement, students probably enjoy the dynamic nature of learning approach. It is quite obvious that the blended learning environment matches their collective personality and learning styles very well. The last and very important reason that students thought they were ready to fully embrace blended learning was the flexibility they had in setting their own learning pace, given to them in this learning approach. This is aligned with the statement of Dupuis (2003), which mentions that this kind of instruction encourages independent learning. Furthermore, it is important to note that university students typically come from different academic backgrounds. Some of them attended more reputable high school and were better trained for university learning than others. Therefore, students participated in this research appreciated the ability to set their own learning paces. Students that were more knowledgeable than their classmates were free to move faster in completing their assignments. On the other hand, individuals with some levels of learning difficulties appreciated the comfort of being allowed to finish their homework at their own pace without feeling much pressure. Stein and Graham (2014), express their viewpoint asserting that by focusing on students' individuality, blended learning helps promote autonomy amongst students. Within this kind of learning environment, students are allowed to manage their own learning that helps promote their learning ownership. Hence, when students are able to set their own learning goals and take charge of their own learning, it allows them to be a more responsible and a more self-driven person.

Similar to their students' view, a vast majority of teachers participating in this research stated that they were also ready to implement blended learning. Like their students, these teachers are internet and technology savvy. Reasons these teachers confirmed that they were ready to implement blended learning may be similar to those of their students. The technology required for blended learning simply is an extension of what they already use in their daily life. Furthermore, these teachers also have the personality that are friendly and approachable to students. These teachers are naturally dynamic and favor the adoption of blended learning's integrated features that allow them to switch between the online and offline modes of learning. Additionally, these

teachers believe that it is important to be mindful of individual learning ability. They think that students should somewhat be allowed to set their own learning paces that are comfortable for them, instead of being condemned to be on the same learning pace of their peers. Therefore, students that require a higher learning curve than their classmates can feel more at ease in their endeavor in the blended learning approach, in comparison to the traditional learning method.

In contrast to most of their peers, a small set of teachers stated that they were not quite ready to implement blended learning, however. Their reasons for having reservation towards this learning approach may be as legitimate as those of their peers who are receptive of it. One of the reasons that they thought they were not ready to embrace blended learning might have been caused by their lack of the complete understanding of this learning approach, as well as advantages and disadvantages of implementing it. According to the research results, they asserted that they needed time to carefully learn about the blended learning approach. They also needed to fully comprehend how it might either or both positively and negatively impact students' learning effectiveness. Furthermore, they stated that using social media for personal pleasure was one thing; however, using a large set of different social media platform, along with other technological tools was another thing, as they were quite alien to them. To be precise, they were not certain whether they could acquire knowledge and skills in using required technology to properly aid their students' learning effectively. Additionally, these teachers did not think that the existing university facilities could appropriately facilitate blended learning. In terms of students' and teachers' readiness, it can be concluded that there are differences in the readiness to embrace blended learning, amongst various stakeholders. For students, they are ready to participate in blended learning, because they are internet and technology native who prefer the use of technology to assist learning. They also enjoy a variety of learning environments that include both online and offline, as well as appreciating the ability to set their own learning paces. However, not all teachers share the same enthusiasm. While some teachers are not yet ready to embrace it, most of the teachers participating in this study are ready to implement blended learning.

In summary, this chapter has meticulously presented the research results in four sections. These sections include effects of blended learning on students' speaking ability, effects of blended learning on learning motivation, students' perceptions of blended learning practices, and, lastly, teachers' perceptions of blended learning practices. It has also discussed these study results in three categories. These categories cover students' speaking ability, students' learning motivation, and students' and teachers' perceptions. Furthermore, students' and teachers' perceptions category has been broken down into four different themes for detailed discussions. These four themes include learning and teaching experiences, availability of technology and facilities required, success factors, and, finally, students' and teachers' readiness. The conclusion of this study, along with pedagogical implications, limitations of the study, as well as recommendations for future research will be further elaborated in greater details in the next chapter.

CHAPTER 5
CONCLUSIONS AND RECOMMENDATIONS

This chapter draws the conclusions of this research study. In addition, the pedagogical implications, limitations of the study as well as recommendations for future research are also discussed in detail.

5.1 Summary of the Study

The demand for effective English-speaking skills amongst professionals in many industries is eminent in today's world. The birth of the internet, along with the rise of globalization and social media have created a global marketplace where people from around the world can trade and exchange goods and services without or with little physical boundaries. The economic growth, resulting from the globalization phenomenon has also led to the surge in tourisms around the world. In such connected world of global trading and travelling, a vast majority of people relies on English as their mediating language when speaking to their associates from other countries, and people in Thailand are no exception.

As the demand for English speaking professionals in Thailand is rising rapidly, but the current education practices have been proven ineffective in producing a sufficient number of capable English-speaking graduates to meet the job market demands, Thai educators have now realized that changes in English teaching and learning must occur. It is even more so due to the current pandemic that forces educators to incorporate technology into their teaching. They are now in search of new teaching and learning methods that can effectively train university students to become proficient in English speaking upon their graduation. One promising method of English learning that has been studied by educators around the world, albeit still being somewhat a foreign topic in Thailand, is blended learning. This research aims to find out its effectiveness and practicality in using it in a Thai university educational environment, by trying to answer three questions. These questions concern students' English-speaking skill improvement, their motivation to speak English and both students' and teachers' perceptions towards blended learning.

The outcome of the research including both qualitative and quantitative angles has provided meaningful answers to the above three questions, as will be elaborated one by one hereafter. The answer for the first research question to assess whether or not students have improved their English-speaking skill, following the completion of their participation in the blended learning treatment is affirmative. A great majority of students who received the blended learning treatment shown a statistically significant improvement in their English speaking proficient in comparison to students in the control group. As for the second research question, concerning students' motivational level, students who received the blended learning treatment possessed high level of motivation. The last of three question to assess is the perception of both students and teachers towards blended learning. The research results demonstrated a strongly positive perceptions towards blended learning amongst students who received the treatment. Similarly, the study outcome suggested teachers' positive perceptions towards blended learning although not as strong as the students' perceptions. Based on this research, it can be inferred that blended learning can be used to help improved English-speaking skill as well as generated a high level of learning motivation amongst students. Additionally, both students and teachers also perceived blended learning positively.

5.2 Pedagogical Implications

In regards to pedagogical implications, this study can be beneficial to all related stakeholders including students, practitioners and administrators. For students, blended learning can help them improve their English-speaking proficiency as well as their learning motivation. It can also benefit practitioners who wish to implement this teaching technique into their teaching contexts. Furthermore, the findings can provide administrators guidelines for future educational management, such as budget planning, learning material preparation, along with technology and facilities required to support blended learning implementation.

1. Students' Benefits and the Importance of Self-disciplines and Ethics

When discussing students' benefits and the importance of self-disciplines and ethics, both students and teachers participated in blended learning must take certain accountabilities. As far as students are concerned, studying within the confinement of blended learning can benefit students in many ways. The first benefit that they can anticipate is that blended learning can help improve their leaning effectiveness as well as their learning motivation. Additionally, as presented in the research results, the improvement in students' learning, specifically the speaking skill, was derived from the fact that they had enjoyable learning experiences. It can be inferred that learning via blended learning is fun for students as the learning formats are interesting and flexible. Participating in this kind of learning atmosphere, students' learning attributes can be improved as they feel comfortable doing and practicing language tasks as a consequence of the use of their preferred learning formats. In blended learning, as there are various speaking activities, it results in more chances of speaking practices. As a result, students can have the better comprehension and become more fluent in speaking English. Moreover, in terms of learning flexibility, blended learning offers students convenient learning as they can do a lot of leaning activities online, such as studying learning contents, submitting assignments, tracking their learning progress and receiving feedbacks. As a consequence, students can become more developed and more confident in using and speaking English. In terms of learning motivation, apart from the learning enjoyment and learning flexibility, being able to use modern technology as their preferred learning tool also leads to students' high learning motivational level.

However, in order for students to realize full benefits of this learning approach, they need to have solid self-disciplines and ethics. For the self-discipline aspect, unlike the traditional classroom learning where the teacher provides face-to-face classroom instruction and interactions all of the times, blended learning utilizes a combination of the traditional classroom learning and online learning outside of the classroom confinement. Furthermore, the blended learning approach also interjects different rotation models, imposing dynamic learning environments to all students. Thus, this learning approach requires that each student exercises a strong self-discipline and be responsible for both individual and group learning, both in the face-to-face interaction inside of the classroom and during online sessions. This implies that students

with strong self-discipline can perform very well, while those in the opposite end who possesses little self-discipline can fall behind their peers.

When discussing student's self-discipline, it is important to emphasize that the discussion is on individual's ability to prioritize their learning activities, along with their daily life routines. As many students, nowadays, hold part-time jobs and have a great variety of social events to attend, their abilities to make learning their first priority is critical to their learning effectiveness in blended learning. This suggests that students who set their blended learning assignments their first priority may have a great chance of success. On the contrary, those who do otherwise may perform less optimally, relative to the priority in which they assign to learning activities required in this learning approach. Students, on the opposite end, who give learning their lowest priority can fail to perform as expected in blended learning.

Although self-discipline has to do more with individual student's personality traits, it does not imply that teachers are free of any accountability when it concerns students' class performance in blended learning. While individual student may have different levels of self-disciplines, it is still critical that the educator implementing a peer review process to encourage students who lack or have little self-disciplines to become more studious in the in the online group activities. This can be as simply as the teacher requesting all students in the group to rate each of their peer's contribution at the completion of each online group assignment. The contribution rating may include only three degrees of contribution, such as below expectation, meet expectation and above expectation. The teacher can assign a score to each of degree such as one, three and five respectively and use the values as inputs in a weight-average score card to derive students' degrees of contribution. For students that receive weight-average score of less than three, the teacher can then interfere by working closely with such student to encourage improvement in self-discipline gradually, assignment by assignment, throughout the semester.

In addition to students' self-disciplines, another equally important aspect of blended learning implementation is students' ethics. For students participating in blended learning, it is important that they strictly abide by the university's written code of conducts in which they have signed during the admission process. Additionally, they must allow obey the ethical learning principle that their teachers implement for

individual classes. While ethics is a critical aspect for students to uphold, it is probably one of the most difficult parts of blended learning implementation that practitioners have to deal with. Because the role of the teacher in the blended learning environment is to facilitate students' learning and must avoid policing participating students at all costs, there is little the teacher can do to ensure that students uphold the expected ethical standards, both at the university level and the individual class level. It is recommended that the teacher encourages ethics amongst students in the most diplomatic way. One possible approach is by writing an ethical learning principle and request all students participating in the class to agree to live by this principle by signing their names on a hard copy of the written principle. In addition to obtaining their signatures on the paper, if it is possible, students should be required to write a statement included in their online task submission that they have abided by the ethical learning principle in completing their assignments. While this approach may not prevent all students from engaging in unethical behaviors, it should encourage good ethics amongst a number of students.

2. Teaching Effectiveness and the Importance of Preparation and Technology

In terms of educators, as the research results imply that applying blended learning into teaching can help improve the teaching effectiveness. However, such teaching effectiveness will only be as a result of good preparation on the part of the teacher, along with the reliability of technology used to support blended learning. As far as the teacher's preparation is concerned, interjecting the blended learning implementation requires a carefully planned model in the part of practitioners as there are many context-specific factors that predict the success of this teaching model. Having full understanding of the practicality of the models used in each particular teaching context is very crucial. The chosen model should be practical and appropriate with the teaching and learning conditions. In addition, teachers should be well-prepared for blended learning instruction as this teaching approach may increase additional workload on the part of the teacher. Besides, the results gained from students' learning reflections revealed that teachers' characteristics and their teaching techniques also played crucial roles in enhancing the success of blended learning. These attributes directly affected students' learning performances as well as their learning motivation. In addition, this teaching approach can be beneficial for the current teaching situation

in which there may be some occasions that the teaching and learning must be operated in the online platform.

Another aspect that teachers must take into consideration and find ways to mitigate is the technological reliability. The lack of reliable technology can somewhat compromise the overall effectiveness blended learning and may defeat the purposes of its online portion of blended learning. During this present research, due to unstable internet technology that was not yet publicly available throughout Thailand, many students participated in this research had to rely the limited internet provided through Wi-Fi spots on campus. Furthermore, students without proper smart phones needed to also utilize the limited number of computers available at the computer lab to perform their online assignments. In order to work around these technological limitations, it is recommended that educators who wish to implement blended learning consider options that will be elaborated hereafter.

One of possible options that the teacher may do to ensure that most if not all students have access to the internet at all times during their participation in the study is by working with telecommunication service provider to enter into an agreement to provide an affordable group pricing for unlimited use of mobile data at the maximum internet speed. It may also be worthwhile the attempt to request a sponsorship from a service provider through their corporate social responsibility (CSR) program so that both the teacher and students may receive free mobile data packages for the class. Similarly, the teacher may also be able to find a sponsor to allow students who lack proper smart phones borrow qualified devices from a corporate's old inventory or purchase them at affordable prices via installment loans. In fact, the teacher may also attempt to seek such sponsorship from the university, an agency within the minister of education or from a not-for-profit organization in the global community whose interest is to provide educational funding. Additionally, the teacher may work with their departments or universities to request additional computers to be installed in the computer lab ahead of their blended learning implementation.

However, if all the above options are not possible at all, the teacher may need to perform careful analysis on the conditions of both the teacher and students, relevant to their learning contexts. After that, they may think of possible scenarios for their study and consider using blended learning methodology, framework and models that are suitable for their circumstances. According to Stein and Graham (2014), in order to implement a blended learning course, there are many variables that need to be considered. The course designer has to take variables such as modes of interactions, learning time spent and selection of appropriate technologies into account when deciding to create the blended course. Alternatively, these options may be considered all together to facilitate the blended learning process and ultimately, to ensure the teaching effectiveness.

3. Blended Learning Success and the Importance of University Policy

The third recommendation for practitioners and university administrators wishing to implement blended learning touches upon the educational institution's policy. Educators can use the research results of this study to convince the university administrative body to create and implement the policy that can help promote the success and effectiveness of blended learning implementations. As proven by this research results, blended learning can yield certain advantages. One of the most convincing advantages is that it can help improve students' learning qualities which, in turn, benefit the institution in a broader perspective. As students' performances improve, it results in higher educational standards for the curriculum, faculty and institution to uphold and further improve upon. Therefore, the blended learning implementation can offer the institution benefits in terms of enhancing the standard on the teaching and learning management for the institution. Another convincing reason for university to consider embracing blended learning is that it can directly impact the institutions' administrative function, because of the learning costs and on-campus time reduction, resulting from blended learning implementation. Stein and Graham (2014) state that by implementing the blended learning model tactically, learning costs and time can be reduced. As blended learning offers flexibility in teaching and learning, some learning costs and time spent on campus can possibly be deducted. Therefore, blended learning can help the institution save costs, as well as providing the institution alternative learning solutions to students when on-campus teaching and learning cannot

normally be operated. This is similar to Dupuis's (2003) viewpoint as she indicates that the use of technology helps maximize limited resources and support distance learning. In short, practitioners who are interested in implementing blended learning can use this information to convince the university board to support blended learning implementation.

As for administrators, they can provide support, preferably by initiating the implementation of blended learning to begin with, since it can greatly benefit the institution. In this study, the research results indicated that a strong support from the university's administrator would be required for blended learning to be most effective. For any university that plans to implement blended learning, either as a pilot program or a campus wide roll out, its administrators should use this information to help organize and optimize the institution's educational management for blended learning effectiveness, including but not limited to proper budget planning, comprehensive learning material preparation, appropriate technological implementation and required facility enhancement to support blended learning. In terms of the budget planning, the administrators should allocate sufficient fund to ensure proper blended learning implementation. As for the learning material preparation, the administrators need to consider revising and, if necessary, developing class materials that are catered specifically for the chosen blended learning model that will be implemented at the university. Furthermore, the administrators should upgrade technological elements required for effective blended learning implementation. The administrators may consult outside experts in the technological and work with related government agencies to design and implementation, rather than depending on the university's internal information technology support organization alone. The research results of this study also suggested that both teachers and students needed more stable internet Wi-Fi, modern technology, sufficient and up to date electronic devices and more learning applications. Additionally, the administrators can launch a policy that allows teachers and students to have more flexibility in designing their teaching and learning activities, including classroom attendance requirements amongst other things. As revealed in the research results of the present study, blended learning implementation could be more effective if the classroom attendance policy was more flexible.

5.3 Limitations of the Study

Similar to most research, this study also has its limitations. The limitations encountered during this particular research on blended learning can be categorized into three major limitations. These limitations include course management, technological reliability and university policy. These limitations are elaborated in detail, hereafter.

1. Course Management

As mentioned above, the first research limitation for this blended learning implementation study is the course management. This limitation can be further explained in three aspects including class size, students' self-discipline, and students' ethics outside of the classroom confinement. In the first area of the course management limitation is the number of student enrollment of 56 students for the treatment class. This number is considered too high and too difficult for the instructor to manage. Ideally, for any research on learning effectiveness to be optimally effective, there should be around 20-30 students per class.

Another limitation concerning the management of blended learning implementation involves students' self-discipline. As mentioned previously, the blended learning approach requires that all participating students exercise a strong self-discipline and be responsible for both individual and group learning, both in the face-to-face interaction inside of the classroom and during online sessions. Therefore, students with strong self-discipline can do all learning tasks and activities well, while those who lack self-discipline may fall behind their peers. This is because blended learning utilizes a combination of the traditional classroom learning and online learning outside of the classroom confinement. In the virtual sessions, it requires that all students perform like autonomous learners as they are free to do all learning tasks and activities on their own and with their own pace.

In addition to the two areas of course management limitation already mentioned, the last aspect concerns individual student's learning ethics. This area of concern is particularly critical for the outside of classroom learning activities that require students to work independent of the teacher's supervision. Learning outside of the classroom in blended learning entails both offline and online activities. The offline learning activities dictated by certain learning rotation models require them to work in

groups. Such group learning activities assume that all students do their fair share on completing assigned tasks. Students who act as free riders doing little to none contribution to a certain task assignment can negatively impact the overall team morale and the quality of the final product submitted for the teacher's evaluation. On the other hand, for any group of students where everyone possesses high learning ethics can have effective collaboration and team morale. Essentially, such team may outperform other groups that lack optimal ethical standards.

Furthermore, ethical standards become of greater importance when it concerns individual student's online learning activities. Students with strong sense of learning ethics will have integrity in all their learning, conducting both in private and in public. These students take pride in completing online learning assignments with the utmost honesty. However, students who lack and have less than desirable learning ethics may not be as honest and may even commit learning crimes. Some of them may steal others' work and submit it to the teacher as if it is their own work, while some may take portions of their peers and integrate them into the submitted assignments. In the worst-case scenario, students who lack ethics may hire anyone to do their works and submit them to the teacher without anyone's knowledge. Hence, ethics is the aspect that is critical to the validity and the success of the research on blended learning implementation.

2. Technological Reliability

As much as the limitation on the course management is as of great concern, another limitation of this research that is also of importance involves the technological reliability. This technological limitation involves the availability and stability of the internet technology and computer equipment. Not only there are only a small number of computers available at the computer lab, the internet is also limited and inconsistent. Consequently, it directly affects the effectiveness of the blended learning implementation. Since Thailand does not yet have a nation-wide free public internet access, residents of Thailand must purchase either or both mobile data package and home broadband; otherwise, they must depend on free internet available at their educational institutes, dormitories or public libraries. Since most of students registered in the class during this research have limited financial resources, they had no personal mobile data package or home broadband. At the same times, some of them do not have

personal computers or smartphones that are optimally qualified for online learning. Therefore, a vast majority of these students either had to use the internet when they were at the university or when they were at their dormitories, while a few of them struggled to compete for limited computers available at the computer lab to perform their online activities. As a result, the time that they could be on the internet to perform online class activities was limited to these environments. Consequentially, the effectiveness of the blended learning study was somewhat compromised.

Such compromised blended learning effectiveness affected by limited internet access creates negative impacts to the blended learning ideal. Ideally, the teacher and students should be able to interact online anywhere and anytime they wish to, for the online learning portion. This technological limitation limits meaningful and productive interactions between students and teacher, as a result. Furthermore, the situation gets worse, due to the fact that the internet speed at the university is also not optimal, resulting from the limited bandwidth and the lack of comprehensive Wi-Fi coverage throughout the campus. The available bandwidth provided by a limited number of Wi-Fi routers must be shared amongst several hundred students during the class time, resulting in the weak signals, as a consequence. Hence, both the teacher and students, participating in this study were under additional constraints due to the limited and unstable internet technology.

3. University Policy

The last but also significant limitation is the university policy. In this research, the university policy is proven to be a major obstacle that prevents the researcher from achieving its ideal. Ideally, blended learning should allow students to learn outside of the classroom, at least half of the time. However, the university policy dictates that both the lecturer and students must be present at the classroom or on the university campus for all designated hours throughout the semester. As a result, many online activities had to be conducted within the confinement of the physical classroom, and that only a small number of online activities, such as students' and teacher's online interactions and students' online reflection blog writing could be done outside campus. This contradicts the ideal online learning in which most of online assignments may be completed anywhere the internet is available, for blended learning to be optimal. Hence,

this obstacle does not promote effective blended learning implementation and even defeats the blended learning ideal.

In summary, there are three major limitations to this blended learning implementation study, including course management, technological reliability and university policy. For the first limitation, namely the course management limitation involves the overcrowded classroom, different degrees of students' self-discipline, and lack of students' ethical reinforcement outside of the classroom confinement. The second limitation concerns technological constraints including the lack of personal computers or ideal qualified smart phones for blended learning, and limited high-speed internet access. The last research limitation is the university policy concerning class attendance, which demands that students must fully attend classes during the designated hours on campus for the entire semester. Therefore, the data collected during this research could not be as legitimate for data analysis purposes as it could be. However, if these three major limitations, including the course management, technological reliability and the university policy could be eliminated or significantly minimized, the collected data would be more legitimate for data analysis. It is important to also note that this research involves many context-specific factors; therefore, the research results cannot be simply generalized to other research contexts.

5.4 Recommendations for Future Research

Although this research contains limitations, the researcher believes that the methodology, framework and various rotation models used in this study, along with its outcome can be beneficial. It may be used as a baseline for future research on blended learning implementation in different educational environments, such as vocational schools, secondary schools, primary schools and other educational institutions. As highlighted in the previous section, this current research encountered three major limitations including the course management, technological reliability and the university policy. Having had direct experience of implementing blended learning, the researcher has learned a great deal about these limitations and would like to make recommendations for future research so that some of these limitations may be eliminated or minimized.

1. Course Management

The first limitation, namely the course management involving three aspects including the class size, students' self-discipline and students' ethics. All of three aspects, the class size may be the most obvious and least difficult to handle. The number of student enrollment for this current research stood at 56 students for the treatment class. This is considered too crowded for the research to be effective. It is recommended that the ideal class enrollment should be 20-30 students. The smaller and more appropriate the class size, the better the chance that the researcher will be able to manage students' learning aspects.

With regards to the students' self-discipline, it is at all possible, the student participant candidate selection process should factor in self-discipline. However, it does not mean that all students participating in the study should be highly discipline. The researcher would rather like to suggest that future researchers intentionally select different degrees of self-discipline amongst student research participants and formulate a research methodology to further validate whether students' self-discipline has a strong correlation with students' success in a blended learning environment.

In terms of students' learning ethics, the researcher of the present study finds it to be the most difficult aspect to deal with, because the role of the teacher in blended learning is a facilitator, not an enforcer of the university's code of ethics. Therefore, the researcher would like to make two recommendations for future researcher to consider. The first recommendation is for the future researcher to include ethics as one of the criteria used during the student participant candidate selection process. If possible, all student participants should have proven to live a high ethical learning standard. The second recommendation that the researcher would like to suggest future researchers to implement is to create the research participation ethical guideline and require all student participants to sign a hard copy of the guideline. Additionally, for each online assignment that students submit online, they should include a statement that they have strictly observed and been in compliant with the research participation ethical guideline.

2. Technological Reliability

During the course of this present research, the researcher encountered several technological issues and was not well prepared enough to mitigate them, in his own study context. The effectiveness of the implementation of blended learning in this study was compromised to a certain degree, as a result. As stated in the previously section, the researcher and participating students had to attempt to resolve technological limitations, including the lack of proper smart phones and personal internet access, the limited number of computers in the university's computer lab, the lack of Wi-Fi coverage at certain areas on campus and the weak and unstable Wi-Fi signals in the classroom and its proximity, as well as insufficient educational software programs made available to students for research purposes.

Having had a lesson learned from this study, the researcher would like to recommend that future researchers perform a preliminary assessment on the availability and reliability of required technology to support the online portion of a blended learning implementation in the researchers' particular context, including but not limited to countries and regions where the study will be conducted, along with participating students' access to required technological devices and their familiarity with technology. Based on the findings, future researchers should then proactively derive mitigation plans to cope with foreseeable limitations and plan for any unplanned technological difficulties, ahead of the blended learning implementation as much as possible. The better the future researcher cope with uncovered technological limitations, prior to the actual blended learning implementation, the more effective the research can be.

3. University Policy

As the researcher of this present study conducted the research at a traditional Thai university, the university's class attendance policy was still quite conservative and was not well-position to support fully effective blended learning implementation. During the course of the study, the research discovered that all of the participating students were strictly required to attend classes on campus or risked having their class attendance scores deducted. Additionally, most of the students had to travel for more than one hour from their residences to attend the classes on campus. Such long commute to classes exhausted them to the point that it compromised their

ability to focus on their studies, and the effectiveness of this particular blended learning implementation was diminished as a consequence.

Because of the agile nature of blended learning, especially the online part, both the future researchers and their participating students need to adapt appropriately to learning situations demanded by the course designs and the rotation models chosen for their specific blended learning implementation. Therefore, it is critical that the university's policy where the research is conducted be flexible enough to support effective blended learning. As such, the researcher would like to recommend future researchers to carefully study the university's policy in their own research settings and assess its compatibility of their blended learning course designs and models. For any university's policy pertaining to class attendance, for example, that deem inflexible and unable to properly support the researchers' blended learning implementation, the researchers should attempt to collaborate with their department chair persons and the university's administrators to adjust the university's policy to support effective blended learning research. If the university's administrators are unable to adjust policy in time prior to the research, the researchers should try to request for an exempt to the current policy only for their particular research requirements. It may be necessary for the researchers to present benefits of blended learning to their department chair persons and the university's administrators and meet with them more than once, in order to convince them to either adjust the policy or make an exemption to the policy to support the research. The researcher would like to recommend future researchers to allow themselves at least one year ahead of the research timeline to understand limitations on university's policies that are specific to their study context and to work with their department chair persons and the university's administrators to mitigate policy related issues and derive detailed plans to cope with limitations. The better the researchers can cope with the university's policy limitations the more effective their blended learning research can become.

On the last note, as blended learning approach has already proven to be effective in improving students' speaking skill, it is recommended that further research be conducted to understand the different applications of the blended learning phenomenon. Future studies may be conducted to assess whether blended learning can be used to help improve other language learning skills other than the speaking skill.

Furthermore, it may be interesting to understand whether blended learning can increase learning effectiveness of other liberal arts related subjects, applied mathematics and even other science related fields. Additionally, due to the increased availability of the internet and its improved speed, it may even be possible for blended learning to be used in other educational levels in which online learning activities can substitute on-site training, in order to increase the learning effectiveness and coverage.

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APPENDICES

APPENDIX A

Pre-test and Post-test Role-play Presentations

Pre-test Role-play Presentation

Directions: Perform a 3-5 minute role-play presentation, according to the situation and the roles assigned. You have 15 minutes for preparation. The role-play presentation will be evaluated, based on these following criteria;

- Grammar and vocabulary
- Pronunciation
- Interactive communication

Situation: After a long vacation, you and your close friend are meeting each other for the first time. You two are very excited to see each other and can't wait to talk about the activities that both of you did during the past long holidays.

Student A: You went to the mountain. Tell your close friend the activities you did there.

Student B: You went to the sea. Tell your friend about this trip.

Post-test Role-play Presentation

Directions: Perform a 3-5 minute role-play presentation, according to the situation and the roles assigned. You have 15 minutes for preparation. The role-play presentation will be evaluated, based on these following criteria;

- Grammar and vocabulary
- Pronunciation
- Interactive communication

Situation: Having had bad eating habits for a long time, you and your close friend become overweight. So, the two of you begin to talk about ways to get healthier.

Student A: You have heard that eating habits are very important in losing weights. Therefore, you try to suggest healthy eating habits to your friend.

Student B: You think that exercise is the most effective way to stay healthy. So, you introduce your close friend some useful exercise activities.

APPENDIX B

IOC of Pre-test and Post-test Role-play Presentations

Expert's name: _____

Instruction: Please rate the following elements of the role-play presentation, according to the degree of index of item-objective congruence.

-1 = incongruent   0 = questionable or unclear   1 = congruent

Role-play Presentation	IOC Values			Comments
	-1	0	1	
1. The role-play presentation is appropriate for measuring students' speaking ability.				
2. The contents and situations in the role-play are authentic and relevant to the course description.				
3. The pre- and post-test role play presentation are parallel.				
4. The scoring rubric is appropriate for measuring students' speaking ability.				
5. The descriptors are clear and the detailed descriptions are sufficiently provided in each descriptor.				

APPENDIX C

Learning Motivation Questionnaires

แบบสอบถามแรงจูงใจในการเรียน

คำชี้แจง: แบบสอบถามแรงจูงใจในการเรียนนี้ ดัดแปลงมาจาก Gardner's 1985 Attitude/Motivation Test Battery ขอความกรุณานักศึกษานึกถึงประสบการณ์การเรียนภาษาอังกฤษที่ผ่านมา และทำเครื่องหมาย / ลงในช่องที่ตรงกับประสบการณ์การเรียนภาษาอังกฤษของนักศึกษามากที่สุด

1 หมายถึง **ไม่เห็นด้วยอย่างมาก**

2 หมายถึง **ไม่เห็นด้วย**

3 หมายถึง **เฉยๆ**

4 หมายถึง **เห็นด้วย**

5 หมายถึง **เห็นด้วยอย่างมาก**

หมายเหตุ: แบบสอบถามนี้ไม่มีข้อใดผิดหรือข้อใดถูก และไม่มีผลต่อคะแนนในวิชาภาษาอังกฤษเพื่อการสื่อสารในชีวิตประจำวัน (GEN 1102)

1: ข้อมูลผู้ตอบแบบสอบถาม

ชื่อ_____ นามสกุล_____

รหัสนักศึกษา_____ เพศ_____ อายุ _____

2: แบบสอบถามแรงจูงใจในการเรียน

ข้อความ	5	4	3	2	1
Instrumental Motivation					
1. I use English only for class assignments and tests. (ฉันใช้ภาษาอังกฤษเฉพาะเพื่อทำงานที่ได้รับมอบหมายและในการสอบ)					
2. I simply quote what textbooks say instead of formulating my own speech or writing. (ฉันคัดลอกภาษาจากในหนังสือโดยไม่ได้ปรับเป็นคำพูดของตนเองเวลาที่พูดหรือเขียนภาษาอังกฤษ)					
3. I read only English textbooks required for educational purposes but not for daily life.					

(ฉันอ่านหนังสือภาษาอังกฤษเฉพาะเพื่อวัตถุประสงค์ทางการศึกษาเท่านั้น ไม่ใช่เพื่อการใช้ชีวิตประจำวัน)				
4. I study English to earn a university degree and to succeed in my future career, instead of improving my English skills in general. (ฉันเรียนภาษาอังกฤษเพื่อให้ได้คุณวุฒิทางการศึกษาและเพื่อให้ประสบความสำเร็จในหน้าที่การงานในอนาคต ไม่ใช่เพื่อการพัฒนาทักษะภาษาอังฤษโดยทั่วไป)				
5. I study English to pursue a higher education, instead of improving my English skills in general. (ฉันเรียนภาษาอังกฤษเพื่อวัตถุประสงค์ในการศึกษาต่อในระดับที่สูงขึ้น ไม่ใช่เพื่อการพัฒนาทักษะภาษาอังฤษโดยทั่วไป)				
6. English skills are essential for overseas travelling. (ทักษะทางภาษาอังกฤษมีความจำเป็นต่อการเดินทางไปต่างประเทศ)				
7. Learning English can help me to be a knowledgeable and skillful person. (การเรียนภาษาอังกฤษช่วยให้ฉันเป็นคนที่มีความรู้ความสามารถ)				
8. English proficiency can make me appear more educated. (ความสามารถทางภาษาอังกฤษทำให้ฉันดูเป็นบุคคลที่มีการศึกษา)				
9. English skills can help a person to become more successful both in professional career and in personal life. (ทักษะทางภาษาอังกฤษช่วยให้คนประสบความสำเร็จมากขึ้นทั้งในด้านการงานอาชีพและด้านชีวิตส่วนตัว)				
10. People tend to respect those who are proficient in English. (ผู้คนมักจะให้การยอมรับนับถือคนที่เก่งภาษาอังกฤษ)				
Integrative Motivation				
11. I study English because I want to understand English books, movies, music and other English media. (ฉันเรียนภาษาอังกฤษเพราะต้องการเข้าใจหนังสือ ภาพยนตร์ เพลง หรือสื่ออื่นๆ ที่เป็นภาษาอังกฤษ)				
12. I study English because I want to understand and appreciate the culture of native English speakers. (ฉันเรียนภาษาอังกฤษเพราะต้องการเข้าใจและซาบซึ้งในวัฒนธรรมของเจ้าของภาษา)				
13. I study English to keep contact with my foreign friends and colleagues.				

(ฉันเรียนภาษาอังกฤษเพื่อติดต่อกับเพื่อนหรือเพื่อนร่วมงานชาวต่างชาติ)					
14. I study English because I want to use it as a means for global communication. (ฉันเรียนภาษาอังกฤษเพราะต้องการใช้เป็นสื่อกลางในการสื่อสารในระดับโลก)					
15. I study English for knowledge transfer purposes. (ฉันเรียนภาษาอังกฤษเพื่อวัตถุประสงค์ในการถ่ายทอดองค์ความรู้)					
16. I study English because I want to be able to participate in academic, social, and professional activities with people from around the world in any setting. (ฉันเรียนภาษาอังกฤษเพราะอยากที่จะสามารถร่วมกิจกรรมทางวิชาการ กิจกรรมทางสังคม และกิจกรรมทางสายอาชีพกับผู้คนทั่วโลกในบริบทต่างๆ)					
17. I study English because I want to sound like native speakers when speaking English. (ฉันเรียนภาษาอังกฤษเพราะต้องการฟังดูเหมือนเจ้าของภาษาในขณะที่พูดภาษาอังฤษ)					
18. I study English because I want to enjoy English arts and literature. (ฉันเรียนภาษาอังกฤษเพราะต้องการสนุกกับศิลปะและวรรณกรรมภาษาอังกฤษ)					
19. I study English because I want to be effective in socializing like English speakers. (ฉันเรียนภาษาอังกฤษเพราะต้องการเข้าสังคมได้อย่างมีประสิทธิภาพเหมือนเจ้าของภาษา)					
20. I try my best when studying English in order to maximize my English proficiency. (ฉันพยายามอย่างเต็มที่ในขณะที่เรียนภาษาอังกฤษเพื่อพัฒนาความสามารถภาษาอังกฤษของฉันให้ได้มากที่สุด)					

3: คำถามปลายเปิด

3.1 What are the factors that motivate you to study English?

(นักศึกษาคิดว่าปัจจัยใดบ้างที่กระตุ้นให้ตนเองอยากเรียนภาษาอังกฤษ)

_____

_____

_____

3.2 Do you think your learning motivation is increased or decreased after studying via blended learning? Why is it so?

(นักศึกษาคิดว่าตนเองมีแรงจูงใจในการเรียนภาษาอังกฤษที่เพิ่มขึ้นหรือลดลง หลังจากการเรียนแบบผสมผสาน และเพราะเหตุใดจึงเป็นเช่นนั้น)

_____

_____

_____

4: ข้อคิดเห็นเพิ่มเติม

_____

_____

_____

<div align="center">ขอบคุณในความร่วมมือ</div>

APPENDIX D

IOC of Learning Motivation Questionnaires

Expert's name: _____

Instruction: Please rate the following elements of the learning motivation questionnaire, according to the degree of index of item-objective congruence.

-1 = incongruent   0 = questionable or unclear   1 = congruent

Instrumental Motivation Measurement	IOC Values			Comments
	-1	0	1	
1. I use English only for class assignments and tests. (ฉันใช้ภาษาอังกฤษเฉพาะเพื่อทำงานที่ได้รับมอบหมายและในการสอบ)				
2. I simply quote what textbooks say instead of formulating my own speech or written texts. (ฉันคัดลอกภาษาจากในหนังสือโดยไม่ได้ปรับเป็นคำพูดของตนเองเวลาที่พูดหรือเขียนภาษาอังกฤษ)				
3. I read only English textbooks required for educational purposes but not for daily life. (ฉันอ่านหนังสือภาษาอังกฤษเฉพาะเพื่อวัตถุประสงค์ทางการศึกษาเท่านั้นไม่ใช่เพื่อการใช้ชีวิตประจำวัน)				
4. I study English to earn a university degree and to succeed in my future career, instead of improving my English skills in general. (ฉันเรียนภาษาอังกฤษเพื่อให้ได้คุณวุฒิทางการศึกษาและเพื่อให้ประสบความสำเร็จในหน้าที่การงานในอนาคต ไม่ใช่เพื่อการพัฒนาทักษะภาษาอังฤษโดยทั่วไป)				
5. I study English to pursue a higher education, instead of improving my English skills in general. (ฉันเรียนภาษาอังกฤษเพื่อวัตถุประสงค์ในการศึกษาต่อในระดับที่สูงขึ้น ไม่ใช่เพื่อการพัฒนาทักษะภาษาอังฤษโดยทั่วไป)				
6. English skills are essential for overseas travelling. (ทักษะทางภาษาอังกฤษมีความจำเป็นต่อการเดินทางไปต่างประเทศ)				
7. Learning English can help me to be a knowledgeable and skillful person. (การเรียนภาษาอังกฤษช่วยให้ฉันเป็นคนที่มีความรู้ความสามารถ)				

	IOC Values			Comments

8. English proficiency can make me appear more educated.
(ความสามารถทางภาษาอังกฤษทำให้ฉันดูเป็นบุคคลที่มีการศึกษา)

9. English skills can help a person to become more successful both in professional career and in personal life.
(ทักษะทางภาษาอังกฤษช่วยให้คนประสบความสำเร็จมากขึ้นทั้งในด้านการงานอาชีพและด้านชีวิตส่วนตัว)

10. People tend to respect those who are proficient in English.
(ผู้คนมักจะให้การยอมรับนับถือคนที่เก่งภาษาอังกฤษ)

Integrative Motivation Measurement	**IOC Values**			**Comments**
	-1	0	1	
11. I study English because I want to understand English books, movies, music and other English media. (ฉันเรียนภาษาอังกฤษเพราะต้องการเข้าใจหนังสือ ภาพยนตร์ เพลง หรือสื่ออื่นๆที่เป็นภาษาอังกฤษ)				
12. I study English because I want to understand and appreciate the culture of native English speakers. (ฉันเรียนภาษาอังกฤษเพราะต้องการเข้าใจและซาบซึ้งในวัฒนธรรมของเจ้าของภาษา)				
13. I study English to keep contact with my foreign friends and colleagues. (ฉันเรียนภาษาอังกฤษเพื่อติดต่อกับเพื่อนหรือเพื่อนร่วมงานชาวต่างชาติ)				
14. I study English because I want to use it as a means for global communication. (ฉันเรียนภาษาอังกฤษเพราะต้องการใช้เป็นสื่อกลางในการสื่อสารในระดับโลก)				
15. I study English for knowledge transfer purposes. (ฉันเรียนภาษาอังกฤษเพื่อวัตถุประสงค์ในการถ่ายทอดองค์ความรู้)				
16. I study English because I want to be able to participate in academic, social, and professional activities with people from around the world in any setting. (ฉันเรียนภาษาอังกฤษเพราะอยากสามารถที่จะร่วมกิจกรรมทางวิชาการ ทางสังคม และทางสายอาชีพกับผู้คนทั่วโลกในบริบทต่างๆ)				
17. I study English because I want to sound like native speakers when speaking English. (ฉันเรียนภาษาอังกฤษเพราะต้องการฟังดูเหมือนเจ้าของภาษาในขณะที่พูดภาษาอังกฤษ)				
18. I study English because I want to enjoy English arts and literature. (ฉันเรียนภาษาอังกฤษเพราะต้องการสนุกกับศิลปะและวรรณกรรมภาษาอังกฤษ)				

19. I study English because I want to be effective in socializing like English speakers. (ฉันเรียนภาษาอังกฤษเพราะต้องการเข้าสังคมได้อย่างมีประสิทธิภาพเหมือนเจ้าของภาษา)				
20. I try my best when studying English in order to maximize my English proficiency. (ฉันพยายามอย่างเต็มที่ในขณะที่เรียนภาษาอังกฤษเพื่อพัฒนาความสามารถภาษาอังกฤษของฉันให้ได้มากที่สุด)				

Open-ended Questions	**IOC Values**			**Comments**
	-1	0	1	
1. What are the factors that motivate you to study English? (นักศึกษาคิดว่าปัจจัยใดบ้างที่ส่งผลให้ตนเองอยากเรียนภาษาอังกฤษ)				
2. Do you think your learning motivation is increased or decreased after studying via blended learning? Why is it so? (นักศึกษาคิดว่าตนเองมีแรงจูงใจในการเรียนภาษาอังกฤษที่เพิ่มขึ้นหรือลดลงหลังจากการเรียนแบบผสมผสาน และเพราะเหตุใดจึงเป็นเช่นนั้น)				

Overall Questionnaire	**IOC Values**			**Comments**
	-1	0	1	
1. The overall questionnaire format is appropriate.				
2. The language used and the questionnaire's direction are clear.				
3. The total number of the statements (20 statements) and open-ended questions (2 questions) are appropriate and sufficient to measure students' learning motivation.				
4. All statements and open-ended questions are appropriate and sufficient to answer the second research question; "How does blended learning affect Thai university students' learning motivation?"				
5. The statements and questions do not encompass issues of complex questions, double-barreled questions and questions with jargons or technical languages.				

APPENDIX E

Questions for Students' Semi-structured Group Interviews
Students' Perceptions towards Blended Learning Practices

Learning experiences

1. How do you feel about your overall learning experiences after having participated in blended learning environment? (นักศึกษารู้สึกอย่างไรเกี่ยวกับประสบการณ์การเรียนหลังจากที่ได้ร่วมชั้นเรียนแบบผสมผสาน)

2. How do you feel about the effectiveness of your learning when the use of online teaching and learning is incorporated into your class? (นักศึกษารู้สึกอย่างไรเกี่ยวกับประสิทธิผลของการเรียนเมื่อมีการนำการเรียนการสอนแบบออนไลน์มาใช้ในชั้นเรียน)

3. How do you think blended learning affects your learning, in terms of time allocation for both in class and online learning, classroom interaction and learning content variety? (นักศึกษาคิดว่าการเรียนการสอนแบบผสมผสานส่งผลอย่างไรต่อการเรียน ในแง่ของเวลาที่ใช้ในการเรียนปกติและในการเรียนออนไลน์ การปฏิสัมพันธ์ในชั้นเรียน และความหลากหลายของเนื้อหาที่ใช้ในการเรียน)

4. How do you think the traditional classroom attendance requirement affects blended learning implementation? (นักศึกษาคิดว่าความจำเป็นในการเข้าชั้นเรียนมีผลอย่างไรต่อการจัดการเรียนการสอนแบบผสมผสาน)

Availability of technology and facilities required

1. In your opinion, what are technological facilities required for blended learning implementation? (นักศึกษาคิดว่าสิ่งอำนวยความสะดวกทางเทคโนโลยีอะไรบ้างที่มีความจำเป็นต่อการจัดการเรียนการสอนแบบผสมผสาน)

2.   In your learning context, how sufficient is the current technological facilities in supporting blended learning implementation? (นักศึกษาคิดว่าในบริบทการเรียนของตน ณ ขณะนี้ มีสิ่งอำนวยความสะดวกทางเทคโนโลยีที่เพียงพอหรือไม่อย่างไรในจัดการเรียนการสอนแบบผสมผสาน)

Success factors

1. What are teachers' characteristics and beliefs that you think will contribute to the success of blended learning implementation? (นักศึกษาคิดว่าอาจารย์ควรมีลักษณะและความเชื่อในการสอนอย่างไรจึงจะนำไปสู่ความสำเร็จของการเรียนการสอนแบบผสมผสาน)

2. What are students' qualifications and attitudes that you think will succeed in blended learning environment? (นักศึกษาคิดว่านักศึกษาควรมีคุณสมบัติและทัศนคติในการเรียนอย่างไรจึงจะประสบความสำเร็จในการเรียนแบบผสมผสาน)

3. What are administrators' supports required for the successful implementation of blended learning? (นักศึกษาคิดว่าผู้บริหารควรให้การสนับสนุนอะไรบ้าง เพื่อให้การเรียนการสอนแบบผสมผสาน ประสบความสำเร็จ)

4. What challenges that must be overcome to succeed in blended learning environment? (นักศึกษาคิดว่าอะไรคือปัญหาหรือความท้าทายที่ต้องเอาชนะในการจัดการเรียนการสอนแบบผสมผสาน)

Teachers' and students' readiness

1. How ready do you think most lecturers are to implement blended learning approach? (นักศึกษาคิดว่าอาจารย์ส่วนใหญ่มีความพร้อมในการสอนแบบผสมผสานแค่ไหนอย่างไร)

2. How ready do you think most students are to participate in blended learning environment? (นักศึกษาคิดว่านักศึกษาส่วนใหญ่มีความพร้อมในการเรียนแบบผสมผสานแค่ไหน อย่างไร)

APPENDIX F

IOC of Questions for Students' Semi-structured Group Interviews

Expert's name: _____

Instruction: Please rate the following elements of the students' semi-structured group interview, according to the degree of index of item-objective congruence.

-1 = incongruent   0 = questionable or unclear   1 = congruent

Learning Experiences	IOC Values			Comments
	-1	0	1	
1. How do you feel about your overall learning experiences after having participated in blended learning environment? (นักศึกษารู้สึกอย่างไรเกี่ยวกับประสบการณ์การเรียนหลังจากที่ได้ร่วมชั้นเรียนแบบผสมผสาน)				
2. How do you feel about the effectiveness of your learning when the use of online teaching and learning is incorporated into your class? (นักศึกษารู้สึกอย่างไรเกี่ยวกับประสิทธิผลของการเรียนเมื่อมีการนำการเรียนการสอนแบบออนไลน์มาใช้ในชั้นเรียน)				
3. How do you think blended learning affects your learning, in terms of time allocation for both in class and online learning, classroom interaction and learning content variety? (นักศึกษาคิดว่าการเรียนการสอนแบบผสมผสานส่งผลอย่างไรต่อการเรียน ในแง่ของเวลาที่ใช้ในการเรียนปกติและในการเรียนออนไลน์ การปฏิสัมพันธ์ในชั้นเรียน และความหลากหลายของเนื้อหาที่ใช้ในการเรียน)				
4. How do you think the traditional classroom attendance requirement affects blended learning implementation? (นักศึกษาคิดว่าความจำเป็นในการเข้าชั้นเรียนมีผลอย่างไรต่อการจัดการเรียนการสอนแบบผสมผสาน)				

Availability of Technology and Facilities Required	IOC Values			Comments
	-1	0	1	
1. In your opinion, what are technological facilities required for blended learning implementation? (นักศึกษาคิดว่าสิ่งอำนวยความสะดวกทางเทคโนโลยีอะไรบ้างที่มีความจำเป็นต่อการจัดการเรียนการสอนแบบผสมผสาน)				
2. In your learning context, how sufficient is the current technological facilities in supporting blended learning implementation? (นักศึกษาคิดว่าในบริบทการเรียนของตน ณ ขณะนี้ มีสิ่งอำนวยความสะดวกทางเทคโนโลยีที่เพียงพอหรือไม่อย่างไรในจัดการเรียนการสอนแบบผสมผสาน)				

Success Factors	IOC Values			Comments
	1-	0	1	
1. What are teachers' characteristics and beliefs that you think will contribute to the success of blended learning implementation? (นักศึกษาคิดว่าอาจารย์ควรมีลักษณะและความเชื่อในการสอนอย่างไรจึงจะนำไปสู่ความสำเร็จของการเรียนการสอนแบบผสมผสาน)				
2. What are students' qualifications and attitudes that you think will succeed in blended learning environment? (นักศึกษาคิดว่านักศึกษาควรมีคุณสมบัติและทัศนคติในการเรียนอย่างไรจึงจะประสบความสำเร็จในการเรียนแบบผสมผสาน)				
3. What are administrators' supports required for the successful implementation of blended learning? (นักศึกษาคิดว่าผู้บริหารควรให้การสนับสนุนอะไรบ้าง เพื่อให้การเรียนการสอนแบบผสมผสาน ประสบความสำเร็จ)				

4. What challenges that must be overcome to succeed in blended learning environment? (นักศึกษาคิดว่าอะไรคือปัญหาหรือความท้าทายที่ต้องเอาชนะในการจัดการเรียนการสอนแบบผสมผสาน)				
Teachers' and Students' Readiness	**IOC Values**			**Comments**
	-1	0	1	
1. How ready do you think most lecturers are to implement blended learning approach? (นักศึกษาคิดว่าอาจารย์ส่วนใหญ่มีความพร้อมในการสอนแบบผสมผสานแค่ไหนอย่างไร)				
2. How ready do you think most students are to participate in blended learning environment? (นักศึกษาคิดว่านักศึกษาส่วนใหญ่มีความพร้อมในการเรียนแบบผสมผสานแค่ไหนอย่างไร)				
Overall Interview	**IOC Values**			**Comments**
	-1	0	1	
1. The interview questions are appropriate and sufficient to answer the third research question; "What are students' perceptions towards blended learning practices?"				
2. The interview questions are appropriate and sufficient to answer the fourth research question; "What are factors that lead to the success of blended learning?"				
3. The four main topics of the interview which are learning experiences, availability of technology and facilities required, success factors and teachers' and students' readiness cover all important aspects about students' perceptions of blended learning.				
4. The interview questions do not encompass issues of leading questions and complex questions.				
5. The total number of the interview questions (12 questions) is appropriate for an interview session of 60 minutes.				

APPENDIX G

Questions for Teachers' Semi-structured Group Interviews
Teachers' Perceptions towards Blended Learning Practices

Teaching and learning management

1. Have you ever applied blended learning into your teaching? If so, how?

2. How do you feel about the effectiveness of your teaching when incorporating the use of online teaching and learning into your traditional classroom lecture?

3. How do you think blended learning affects your teaching, in terms of time management, classroom interaction management and teaching content management?

4. How do you think the traditional classroom attendance requirement affects blended learning implementation?

Availability of technology and facilities required

1. In your opinion, what are technological facilities required for blended learning implementation?

2. In your teaching context, how sufficient is the current technological facilities in supporting blended learning implementation?

Success factors

1. What are teachers' characteristics and beliefs that you think will contribute to the success of blended learning implementation?

2. What are students' qualifications and attitudes that you think will succeed in the blended learning environment?

3. What are administrators' supports required for the successful implementation of blended learning?

4. What challenges that must be overcome to ensure the successful implementation of blended learning?

Teachers' and students' readiness

1. How ready do you think you are to implement blended learning approach into your teaching?

2. How ready do you think your students are to participate in blended learning environment?

APPENDIX H

IOC of Questions for Teachers' Semi-structured Group Interviews

Expert's name: _____

Instruction: Please rate the following elements of the teachers' semi-structured group interview, according to the degree of index of item-objective congruence.

-1 = incongruent   0 = questionable or unclear   1 = congruent

Teaching and Learning Management	IOC Values			Comments
	-1	0	1	
1. Have you ever applied blended learning into your teaching? If so, how?				
2. How do you feel about the effectiveness of your teaching when incorporating the use of online teaching and learning into your traditional classroom lecture?				
3. How do you think blended learning affects your teaching, in terms of time management, classroom interaction management and teaching content management?				
4. How do you think the traditional classroom attendance requirement affects blended learning implementation?				
Availability of Technology and Facilities Required	**IOC Values**			**Comments**
	-1	0	1	
1. In your opinion, what are technological facilities required for blended learning implementation?				
2. In your teaching context, how sufficient is the current technological facilities in supporting blended learning implementation?				

Success Factors	IOC Values			Comments
	1-	0	1	
1. What are teachers' characteristics and beliefs that you think will contribute to the success of blended learning implementation?				
2. What are students' qualifications and attitudes that you think will succeed in the blended learning environment?				
3. What are administrators' supports required for the successful implementation of blended learning?				
4. What challenges that must be overcome to ensure the successful implementation of blended learning?				
Teachers' and Students' Readiness	**IOC Values**			**Comments**
	-1	0	1	
1. How ready do you think you are to implement blended learning approach into your teaching?				
2. How ready do you think your students are to participate in blended learning environment?				
Overall Interview	**IOC Values**			**Comments**
	-1	0	1	
1. The interview questions are appropriate and sufficient to answer the third research question; "What are teachers' perceptions towards blended learning practices?"				
2. The interview questions are appropriate and sufficient to answer the fourth research question; "What are factors that lead to the success of blended learning?"				
3. The four main topics of the interview which are teaching and learning management, availability of technology and facilities required, success factors and teachers' and students' readiness cover all important aspects about teachers' perceptions of blended learning.				
4. The interview questions do not encompass issues of leading questions and complex questions.				

5. The total number of the interview questions (12 questions) is appropriate for an interview session of 60 minutes.				

APPENDIX I

Students' Online Reflection Blogs

Welcome to My Blog!
Topic: My Learning Reflection
1. How do you feel about learning via blended learning approach?
(คุณรู้สึกอย่างไรเกี่ยวกับการเรียนการสอนแบบผสมผสาน)

_____
_____
_____
_____

2. What do you like or dislike about blended learning?
(อะไรที่คุณชอบหรือไม่ชอบเกี่ยวกับการเรียนการสอนแบบผสมผสาน)

_____
_____
_____
_____

3. In your opinion, what makes blended learning more effective?
(ตามความเห็นของคุณ คุณคิดว่าปัจจัยใดบ้างที่จะทำให้การเรียนการสอนแบบผสมผสาน
มีประสิทธิภาพมากขึ้น)

_____
_____
_____
_____

4. Do you have other comments on learning via blended learning
approach?
(คุณมีความคิดเห็นอื่นๆเกี่ยวกับการเรียนการสอนแบบผสมผสานหรือไม่)

_____
_____
_____
_____

APPENDIX J

IOC of Students' Online Reflection Blogs

Expert's name: _____ _____

Instruction: Please rate the following elements of the students' online reflection blog, according to the degree of index of item-objective congruence.

-1 = incongruent   0 = questionable or unclear   1 = congruent

Questions	IOC Values			Comments
	-1	0	1	
1. The first question; "How do you feel about learning via blended learning approach?" is appropriate for answering the third research question; "What are students' perceptions towards blended learning practices?"				
2. The second question; "What do you like or dislike about blended learning?" is appropriate for answering the second research question; "How does blended learning affect Thai university students' learning motivation?"				
3. The third question; "In your opinion, what makes blended learning more effective?" is appropriate for answering the fourth research question; "What are factors that lead to the success of blended learning?"				
4. The fourth question; "Do you have other comments on learning via blended learning approach?" gives students the opportunity to reflect on other aspects of blended learning instruction.				
5. All questions do not encompass issues of leading questions, complex questions, double-barreled questions and questions with jargons or technical languages.				
6. The total number of questions (four questions) is appropriate for reflection blog writing.				

APPENDIX K

Blended Learning Lesson Plans

Blended Learning Lesson Plan 1 (Speaking)

Subject: English for Daily Communication

Level: First year students

Unit 1: How was your vacation?

Time: One period

Objectives:

    1. Students should be able to describe vacations and activities.

    2. Students should understand how to agree and disagree with others.

Time	Activities	Aims	Procedures	Materials	Evaluation
30 min.	**Warm-up**	1. Recall knowledge of prior vacations 2. Learn related vocabulary 3. Interject an online activity for blended learning purposes	1. The teacher (T) greeted students (Ss) and informed them of the objectives. 2. T introduced the topic to Ss by asking questions about activities that they usually do on holidays. 2.1 T randomly chose five Ss to verbally described their last vacation and activities that they participated in, during the vacation. 2.2 T and the rest of Ss actively listened to and took note of the said vacation and its associated activities as inputs for the next activity (2.3). The vacation activities were, for example, playing sports, travelling to other countries or visiting family.	1. Power Point presentation 2. Online video clips	-

			2.3 Once all Ss finish describing their vacations and associated activities, T instructed Ss to group vacations and associated activities into different categories, based on inputs from the previous activity (2.2).		
			2.4 T summarized themes, derived from the previous activity on the screen and worked with Ss to select only three major categories for the next activity, in order to set an appropriate number of vocabularies that Ss could effectively acquire and memorize within one period.		
			2.5 Based on the three major categories selected from the previous activity (2.4), T, then, highlighted the vocabulary and asked Ss to memorize the vocabulary by relating them to Ss' past experiences.		
			3. T helped Ss become more familiar with the topic, aroused their interests and readied them to use their background knowledge for the upcoming stage, by presenting short video clips about vacation activities.		
			3.1 T preformed online search on YouTube web-browser to find related videos of the three chosen themes.		

			3.2 T instructed Ss to actively watch and listen to these videos and imagined as if they were part of those vacations.		
60 min. (pre-tests) 30 min. (instruction)	**Pre-speaking**	1. Assess Ss' current speaking ability 2. Prepare Ss' for the up-coming speaking task 3. Introduce and implement **first and second station rotation models**	1. Ss took the pre- speaking test which appeared in the form of the role-play presentation. 1.1 Ss performed the role-play presentation, based on the situation and the role assigned in the role card. The theme of the role-play was about vacation activities. 2. T, then evaluated Ss' speaking ability, based on the speaking scoring rubric and records the results to be used for comparison with the post-test evaluation. 3. For the role-play presentation (1.1), Ss were required to describe vacations and activities. Also, they had to express that they agreed or disagreed with their partner. At this point, the first station rotation model was implemented. 3.1 In the first station, T conducted a review of some vocabulary and language use, necessary for Ss to perform the role-play presentation under the topic of "What did you do on vacation?" The vocabulary relating to vacation activities were once again, be introduced to Ss. Additionally, the language	1. Power Point presentation 2. Role card 3. Speaking scoring rubric 4. Book 5. Web-pages 6.Technological tools	1. Pre-test

			use of agreeing and disagreeing was also presented in this station. 3.2 In the second station, through the use of available online resources, Ss were required to further study necessary language elements and created the content for the three to five-minute role-play presentation. In this second station, the available technological tools that were linked to web-pages, containing the contents relevant to Ss' speaking task were utilized. 3.3 Ss prepared to do the task by formulating their speech that they must integrated language rules, speaking patterns and vocabulary into the acquired content.		
60 min.	**While-speaking**	1. Encourage Ss to speak both in-class and online 2. Record Ss' live performances and post them online 3. Implement **third station rotation model**	1. The third station required Ss to illustrate their speaking ability. 1.1 Ss delivered a three to five-minute live performance. 1.2 Ss recorded the live performances and post them online in the class's Closed-Facebook Group, where T could then provide personalized coaching to each S. 2. During this activity, T also encouraged and provided supports to all Ss both in-class and online format, while they attempted to communicate their messages	1. Closed-Facebook group	-

			in the target language. Additionally, T gave Ss assistance as needed.		
45 min.	**Post-speaking**	1. Evaluate Ss' speaking ability 2. Provide personalized coaching via the **individual rotation model**	1. In the individual rotation model, T evaluated Ss' performances and gave feedbacks to Ss. 1.1 Following each group's live performance, T recorded Ss' speaking scores, according to the speaking rubric set. 2. After class, in the online platform, T implemented the individual rotation model, in order to provide personalized coaching to all individual S. 2.1 T left comments and suggestions, under the posted videos of all Ss in the closed-Facebook group. 2.2 Ss might seek further clarification from T by asking questions related to comments and suggestions provided by T. 2.3 T provided further clarification to Ss as appropriate, where applicable.	1. Speaking scoring rubric 2. Closed-Facebook group	1. Role-play presentation
10 min.	**Wrap-up**	1. Reflect on leaning 2. Prepare for the next learning period via the **flipped rotation model**	1. At a set time, in the online platform, T conducted the live-chat session about the learning summary. Ss were encouraged to ask questions or comment on any aspect as they were comfortable doing so. T would then, answer Ss' questions accordingly. 2. T followed the flipped rotation model by assigning the next learning topic in the link posted in Facebook group. Ss were	1. Closed-Facebook group 2. Live-chat 3. Web links	-

			required to study the link and be prepared to speak in the upcoming class. 3. T monitored and tracked Ss' online participations through the "seen by", "like" and "comment" section.		
End of Lesson					

Blended Learning Lesson Plan 2 (Speaking)

Subject: English for Daily Communication

Level: First year students

Unit 2: I think it's exciting!

Time: One period

Objectives:

1. Students should be able to state opinions about the movies they like and dislike.

2. Students should understand how to use *-ing/ -ed* adjectives in expressing their opinions.

Time	Activities	Aims	Procedures	Materials	Evaluation
30 min.	**Warm-up**	1. Recall memories of movies 2. Learn related vocabulary 3. Interject an online activity for blended learning purposes	1. The teacher (T) greeted students (Ss) and informed them of the objectives. 2. T introduced the topic to Ss by asking questions about movies that they had ever watched, either recently or in the past. 2.1 T randomly chose five Ss (excluding those that were already chosen in the previous lesson) to verbally describe movies that they had ever watched. 2.2 T and the rest of Ss actively listened to and took note of the movie names and brief descriptions, as inputs for the next activity (2.3). 2.3 Once all Ss finished describing the movies that they had watched, T instructed Ss to group movies into different genres, such as drama, action,	1. Power Point presentation 2. Online movie reviews	-

			comedy, science-fiction, animation, horror, based on inputs from the previous activity (2.2).		
			2.4 T summarized genres, derived from the previous activity on the screen and worked with Ss to select only three genres for the next activity, in order to set an appropriate number of vocabularies that Ss could effectively acquire and memorize within one period.		
			2.5 Based on the three major genres selected from the previous activity (2.4), T, then, highlighted the vocabulary and asked Ss to memorize the vocabulary by relating them to Ss' past experiences.		
			3. T helped Ss become more familiar with the topic, aroused their interests and readied them to use their background knowledge for the upcoming stage, by presenting movie trailers.		
			3.1 T preformed online search on YouTube web-browser to find related movie trailers of the three chosen genres.		
			3.2 T instructed Ss to actively watch and listen to these movie trailers and feel whether or not they liked each movie.		

| 30 min. | **Pre-speaking** | 1. Prepare Ss' for up-coming speaking task 2. Introduce and implement **first and second station rotation models** | 1. Ss were prepared by T for the up-coming speaking task, appearing in the form of a small group discussion. T led the discussion by asking Ss questions about the movies they liked and disliked and encouraged Ss to express their opinions. At this point, the first station rotation model was implemented. 1.1 In the first station, T conducted a review of some vocabulary and language use, necessary for Ss to perform the small group discussion under the topic of "You and the movies!" The vocabulary relating to movies would, once again, be introduced to Ss. Additionally, the language use of *-ing/ -ed* adjectives would also be presented in this station. 1.2 In the second station, through the use of available online resources, Ss were required to further study necessary language elements and create the content for the three to five-minute small group discussion. In this second station, the available technological tools that were linked to web-pages, containing the contents relevant to Ss' speaking task were utilized. 1.3 Ss prepared to do the task by formulating their speech that they must integrated language rules, speaking patterns and vocabulary into the acquired content. | 1. Power Point presentation 2. Book 3. Web-pages 4.Technological tools | - |

| 60 min. | **While-speaking** | 1. Encourage Ss to speak both in-class and online

2. Record Ss' live performances and post them online

3. Implement **third station rotation model** | 1. The third station required Ss to illustrate their speaking ability.

    1.1 Ss delivered a three to five-minute small group discussion.

    1.2 Ss recorded the live performances and post them online in the class's Closed-Facebook Group, where T could then, provide personalized coaching to each S.

2. During this activity, T also encouraged and provided supports to all Ss both in-class and online format, while they attempted to communicate their messages in the target language. Additionally, T gave Ss assistance as needed. | 1. Closed-Facebook group | - |
| 45 min. | **Post-speaking** | 1. Evaluate Ss' speaking ability

2. Provide personalized coaching via the **individual rotation model** | 1. In the individual rotation model, T evaluated Ss' performances and gave feedbacks to Ss.

    1.1 Following each group's discussion, T recorded Ss' speaking scores, according to the speaking rubric set.

2. After class, in the online platform, T implemented the individual rotation model, in order to provide personalized coaching to all individual S.

    2.1 T left comments and suggestions, under the posted videos of all Ss in the closed-Facebook group.

    2.2 Ss might seek further clarification from T by asking questions related to comments and suggestions provided by T. | 1. Speaking scoring rubric

2. Closed-Facebook group | 1. Small group discussion |

			2.3 T provided further clarification to Ss as appropriate, where applicable.		
10 min.	**Wrap-up**	1. Reflect on leaning 2. Prepare for the next learning period via the **flipped rotation model**	1. At a set time, in the online platform, T conducted the live-chat session about the learning summary. Ss were encouraged to ask questions or comment on any aspect as they were comfortable doing so. T would then, answer Ss' questions accordingly. 2. T followed the flipped rotation model by assigning the next learning topic in the link posted in Facebook group. Ss were required to study the link and be prepared to speak in the upcoming class. 3. T monitored and tracked Ss' online participations through the "seen by", "like" and "comment" section.	1. Closed-Facebook group 2. Live-chat 3. Web links	**-**
End of Lesson					

Blended Learning Lesson Plan 3 (Speaking)

Subject: English for Daily Communication

Level: First year students

Unit 3: Do it before you're 30!

Time: One period

Objectives:

1. Students should be able to talk about personal experiences.

2. Students should understand how to use the present perfect, in order to talk about what they have already done.

Time	Activities	Aims	Procedures	Materials	Evaluation
30 min.	**Warm-up**	1. Think about favorite activities 2. Learn related vocabulary 3. Interject an online activity for blended learning purposes	1. The teacher (T) greeted students (Ss) and informed them of the objectives. 2. T introduced the topic to Ss by asking questions about favorite activities that they had done or would like to do before turning thirty. 2.1 T randomly chose five Ss (excluding those that were already chosen in the previous lesson) to verbally state their favorite activities. 2.2 T and the rest of Ss actively listened to and wrote down the complete list of mentioned favorite activities, as inputs for the next activity (2.3). 2.3 Once all Ss finish telling their favorite activities, T instructed Ss to group favorite activities into different categories, such as extreme sports, marathon running, outdoor activities,	1. Power Point presentation 2. Online video clips	-

indoor activities, travelling, sight-seeing, etc., based on inputs from the previous activity (2.2).

2.4 T summarized favorite activity categories derived from the previous activity on the screen and worked with Ss to select only three categories for the next activity, in order to set an appropriate number of vocabularies that Ss could effectively acquire and memorize within one period.

2.5 Based on the three major categories selected from the previous activity (2.4), T then, highlighted the vocabulary and asked Ss to memorize the vocabulary by relating them to Ss' past experiences.

3. T helped Ss become more familiar with the topic, aroused their interests and readied them to use their background knowledge for the upcoming stage, by presenting video clips related to activities in the three chosen categories.

3.1 T preformed online search on YouTube web-browser to find video clips related to activities in the three chosen categories.

3.2 T instructed Ss to actively watch and listen to these video clips and mentally imagine that they were the ones doing those activities.

| 30 min. | **Pre-speaking** | 1. Prepare Ss' for up-coming speaking task

2. Introduce and implement **first and second station rotation models** | 1. Ss were prepared by T for the up-coming speaking task, appearing in the form of a small talk. Ss were required to take turn asking and answering questions about their personal experiences. At this point, the first station rotation model was implemented.

1.1 In the first station, T conducted a review of some vocabulary and language use, necessary for Ss to perform the small talk under the topic of "Your personal experiences!" The vocabulary relating to favorite activities would, once again, be introduced to Ss. Additionally, the language use of the present perfect would also be presented in this station.

1.2 In the second station, through the use of available online resources, Ss were required to further study necessary language elements and create the content for the three to five-minute small talk. In this second station, the available technological tools that were linked to web-pages, containing the contents relevant to Ss' speaking task were utilized.

1.3 Ss prepared to do the task by formulating their speech that they must integrated language rules, speaking patterns and vocabulary into the acquired content. | 1. Power Point presentation

2. Book

3. Web-pages

4. Technological tools | - |

60 min.	**While-speaking**	1. Encourage Ss to speak both in-class and online 2. Record Ss' live performances and post them online 3. Implement **third station rotation model**	1. The third station required Ss to illustrate their speaking ability. 1.1 Ss delivered a three to five-minute small talk. 1.2 Ss recorded the live performances and post them online in the class's Closed-Facebook Group, where T could then, provide personalized coaching to each S. 2. During this activity, T also encouraged and provided supports to all Ss both in-class and online format, while they attempted to communicate their messages in the target language. Additionally, T gave Ss assistance as needed.	1. Closed-Facebook group	-
45 min.	**Post-speaking**	1. Evaluate Ss' speaking ability 2. Provide personalized coaching via the **individual rotation model**	1. In the individual rotation model, T evaluated Ss' performances and gave feedbacks to Ss. 1.1 Following each group's discussion, T recorded Ss' speaking scores, according to the speaking rubric set. 2. After class, in the online platform, T implemented the individual rotation model, in order to provide personalized coaching to all individual S. 2.1 T left comments and suggestions, under the posted videos of all Ss in the closed-Facebook group. 2.2 Ss might seek further clarification from T by asking questions related to comments and suggestions provided by T.	1. Speaking scoring rubric 2. Closed-Facebook group	1. Small group discussion

			2.3 T provided further clarification to Ss as appropriate, where applicable.		
10 min.	**Wrap-up**	1. Reflect on leaning 2. Prepare for the next learning period via the **flipped rotation model**	1. At a set time, in the online platform, T conducted the live-chat session about the learning summary. Ss were encouraged to ask questions or comment on any aspect as they were comfortable doing so. T would then, answer Ss' questions accordingly. 2. T followed the flipped rotation model by assigning the next learning topic in the link posted in Facebook group. Ss were required to study the link and be prepared to speak in the upcoming class. 3. T monitored and tracked Ss' online participations through the "seen by", "like" and "comment" section.	1. Closed-Facebook group 2. Live-chat 3. Web links	**-**
End of Lesson					

Blended Learning Lesson Plan 4 (Speaking)

Subject: English for Daily Communication

Level: First year students

Unit 4: The best place in the world!

Time: One period

Objectives:

1. Students should be able to describe geography and places.

2. Students should understand how to use comparative and superlative adjectives.

Time	Activities	Aims	Procedures	Materials	Evaluation
30 min.	**Warm-up**	1. Recall memories of places 2. Learn related vocabulary 3. Interject an online activity for blended learning purposes	1. The teacher (T) greeted students (Ss) and informed them of the objectives. 2. T introduced the topic to Ss by asking questions about places that they had seen in movies or series, or had actually been to. 2.1 T randomly chose five Ss (excluding those that were already chosen in the previous lesson) to verbally describe places that they had seen movies or series, or had actually been to. 2.2 T and the rest of Ss actively listened to and took note of the names of those places and their brief descriptions, as inputs for the next activity (2.3). 2.3 Once all Ss finished describing the places, T instructed Ss to group those places into different categories, such as countries, cities, mountains, forests, etc., based on inputs from the previous activity (2.2).	1. Power Point presentation 2. Online video clips	-

| | | | 2.4 T summarized categories of places, derived from the previous activity on the screen and worked with Ss to select only three categories for the next activity, in order to set an appropriate number of vocabularies that Ss could effectively acquire and memorize within one period.

2.5 Based on the three major categories selected from the previous activity (2.4), T then, highlighted the vocabulary and asked Ss to memorize the vocabulary by relating them to Ss' past experiences.

3. T helped Ss become more familiar with the topic, aroused their interests and readied them to use their background knowledge for the upcoming stage, by presenting video clips.

3.1 T preformed online search on YouTube web-browser to find related video clips of the three chosen categories.

3.2 T instructed Ss to actively watch and listen to these video clips and try to mentally identify superlative places, objects or creatures appeared or mentioned in the videos. | | |
| 30 min. | **Pre-speaking** | 1. Prepare Ss' for up-coming speaking task
2. Introduce and implement **first and second station** | 1. Ss were prepared by T for the up-coming speaking task, appearing in the form of the geography quiz show. Ss, in pairs, had to perform the show by having one S took a role as a game host and another S took a role as a participant. At this point, the first station rotation model was implemented. | 1. Power Point presentation
2. Book
3. Web-pages
4.Technological tools | - |

		rotation models	1.1 In the first station, T conducted a review of some vocabulary and language use, necessary for Ss to perform the geography quiz show under the topic of "The Superlative Earth!" The vocabulary relating to geography and places would, once again, be introduced to Ss. Additionally, the language use of superlative adjectives would also be presented in this station. 1.2 In the second station, through the use of available online resources, Ss were required to further study necessary language elements and create the content for the three to five-minute geography quiz show. In this second station, the available technological tools that were linked to web-pages, containing the contents relevant to Ss' speaking task were utilized. 1.3 Ss prepared to do the task by formulating their speech that they must integrated language rules, speaking patterns and vocabulary into the acquired content.		
60 min.	**While-speaking**	1. Encourage Ss to speak both in-class and online 2. Record Ss' live performances	1. The third station required Ss to illustrate their speaking ability. 1.1 Ss delivered a three to five-minute geography quiz. 1.2 Ss recorded the live performances and post them online in the class's Closed-Facebook Group, where T	1. Closed-Facebook group	-

		and post them online 3. Implement **third station rotation model**	could then, provide personalized coaching to each S. 2. During this activity, T also encouraged and provided supports to all Ss both in-class and online format, while they attempted to communicate their messages in the target language. Additionally, T gave Ss assistance as needed.		

45 min.	**Post-speaking**	1. Evaluate Ss' speaking ability
		
		2. Provide personalized coaching via the **individual rotation model**
			1. In the individual rotation model, T evaluated Ss' performances and gave feedbacks to Ss.
			
			    1.1 Following each pair's geography quiz show, T recorded Ss' speaking scores, according to the speaking rubric set.
			
			2. After class, in the online platform, T implemented the individual rotation model, in order to provide personalized coaching to all individual S.
			
			    2.1 T left comments and suggestions, under the posted videos of all Ss in the closed-Facebook group.
			
			    2.2 Ss might seek further clarification from T by asking questions related to comments and suggestions provided by T.
			
			    2.3 T provided further clarification to Ss as appropriate, where applicable.
				1. Speaking scoring rubric
				
				2. Closed-Facebook group
					1.Geography quiz show

10 min.	**Wrap-up**	1. Reflect on leaning 2. Prepare for the next	1. At a set time, in the online platform, T conducted the live-chat session about the learning summary. Ss were encouraged to ask questions or comment on any aspect as they	1. Closed-Facebook group 2. Live-chat	-

		learning period via the **flipped rotation model**	were comfortable doing so. T would then, answer Ss' questions accordingly. 2. T followed the flipped rotation model by assigning the next learning topic in the link posted in Facebook group. Ss were required to study the link and be prepared to speak in the upcoming class. 3. T monitored and tracked Ss' online participations through the "seen by", "like" and "comment" section.	3. Web links	
End of Lesson					

Blended Learning Lesson Plan 5 (Speaking)

Subject: English for Daily Communication

Level: First year students

Unit 5: Where's the party?

Time: One period

Objectives:

1. Students should be able to describe special cultural events and be able to understand different traditions.

2. Students should understand how to use clauses with *before, after* and *when*.

Time	Activities	Aims	Procedures	Materials	Evaluation
30 min.	**Warm-up**	1. Think of favorite months and reasons for liking them 2. Learn related vocabulary 3. Interject an online activity for blended learning purposes	1. The teacher (T) greeted students (Ss) and informed them of the objectives. 2. T introduced the topic to Ss by asking them to think about their favorite months and reasons for liking them, such as festivals, recreational activities, sports or agricultural activities, natural beauties, etc. 2.1 T randomly chose five Ss (excluding those that were already chosen in the previous lesson) to verbally state their favorite month and explain why it was so. 2.2 T and the rest of Ss actively listened to and took note of the favorite month and the reasons that it was so, as inputs for the next activity (2.3).	1. Power Point presentation 2. Online video clips of festivals in particular months	-

			2.3 Once all Ss finish telling their favorite months and why they liked it, T instructed Ss to group their favorite months into different seasons such as winter, summer and raining seasons, based on inputs from the previous activity (2.2). 2.4 T summarized all favorite months and their associated reasons, derived from the previous activity on the screen and worked with Ss to select only one month per season, for the total of three months, for the next activity, in order to set an appropriate number of vocabulary that Ss could effectively acquire and memorize within one period. 2.5 Based on the three months selected from the previous activity (2.4), T, then, highlighted the vocabulary and asked Ss to memorize the vocabulary by relating them to Ss' past experiences. 3. T helped Ss become more familiar with the topic, aroused their interests and readied them to use their background knowledge for the upcoming stage, by presenting online video clips. 3.1 T preformed online search on YouTube web-browser to find		

			related video clips of the three chosen months. 3.2 T instructed Ss to actively watch and listen to these video clips and imagine that they were ones of the people involved in the activities shown in the video clips.		
30 min.	**Pre-speaking**	1. Prepare Ss' for up-coming speaking task 2. Introduce and implement **first and second station rotation models**	1. Ss were prepared by T for the up-coming speaking task, appearing in the form of a small talk. Ss were required to take turn asking and answering questions about the months they liked and reasons for liking them. At this point, the first station rotation model was implemented. 1.1 In the first station, T conducted a review of some vocabulary and language use, necessary for Ss to perform the small talk under the topic of "My favorite months!" The vocabulary relating to movies would, once again, be introduced to Ss. Additionally, the language use of *before, after* and *when.* would also be presented in this station. 1.2 In the second station, through the use of available online resources, Ss were required to further study necessary language elements and create the content for the three to five-minute small	1. Power Point presentation 2. Book 3. Web-pages 4.Technological tools	**-**

			talk. In this second station, the available technological tools that were linked to web-pages, containing the contents relevant to Ss' speaking task were utilized. 1.3 Ss prepared to do the task by formulating their speech that they must integrated language rules, speaking patterns and vocabulary into the acquired content.		

60 min.	**While-speaking**	1. Encourage Ss to speak both in-class and online
		2. Record Ss' live performances and post them online
		3. Implement **third station rotation model**
			1. The third station required Ss to illustrate their speaking ability.
			    1.1 Ss delivered a three to five-minute small talk.
			    1.2 Ss recorded the live performances and post them online in the class's Closed-Facebook Group, where T could then, provide personalized coaching to each S.
			2. During this activity, T also encouraged and provided support to all Ss both in-class and online format, while they attempted to communicate their messages in the target language. Additionally, T gave Ss assistance as needed.
				1. Closed-Facebook group	-

45 min	**Post-speaking**	1. Evaluate Ss' speaking ability 2. Provide personalized coaching via the	1. In the individual rotation model, T evaluated Ss' performances and gave feedbacks to Ss. 1.1 Following each group's small talk, T recorded Ss' speaking	1. Speaking scoring rubric 2. Closed-Facebook group	1. Small talk

			scores, according to the speaking rubric set.		
		individual rotation model	2. After class, in the online platform, T implemented the individual rotation model, in order to provide personalized coaching to all individual S.		
			2.1 T left comments and suggestions, under the posted videos of all Ss in the closed-Facebook group.		
			2.2 Ss might seek further clarification from T by asking questions related to comments and suggestions provided by T.		
			2.3 T provided further clarification to Ss as appropriate, where applicable.		
10 min	**Wrap-up**	1. Reflect on leaning 2. Prepare for the next learning period via the **flipped rotation model**	1. At a set time, in the online platform, T conducted the live-chat session about the learning summary. Ss were encouraged to ask questions or comment on any aspect as they were comfortable doing so. T would then, answer Ss' questions accordingly. 2. T followed the flipped rotation model by assigning the next learning topic in the link posted in Facebook group. Ss were required to study the link and be prepared to speak in the upcoming class.	1. Closed-Facebook group 2. Live-chat 3. Web links	-

			3. T monitored and tracked Ss' online participations through the "seen by", "like" and "comment" section.		
End of Lesson					

Blended Learning Lesson Plan 6 (Speaking)

Subject: English for Daily Communication

Level: First year students

Unit 6: You should try it!

Time: One period

Objectives:

1. Students should be able to talk about suggestions and obligations.

2. Students should understand how to use *should* and *have to*.

Time	Activities	Aims	Procedures	Materials	Evaluation
30 min.	**Warm-up**	1. Talk about life styles 2. Learn related vocabulary 3. Interject an online activity for blended learning purposes	1. The teacher (T) greeted students (Ss) and informed them of the objectives. 2. T introduced the topic to Ss by asking questions about their current life styles whether they were healthy or unhealthy. 2.1 T randomly chose five Ss (excluding those that were already chosen in the previous lesson) to verbally described their life styles and their associated activities. 2.2 T and the rest of Ss actively listened to and took note of the life styles and their related activities, as inputs for the next activity (2.3). 2.3 Once all Ss finished describing their current life styles, T instructed Ss to group	1. Power Point presentation 2. Online video clips	-

| | | | associated activities to each life style options into different categories, such as weight training, cardiovascular exercise, sports, nutrition, relaxation, rejuvenation, resting, habits (either good or bad) etc., based on inputs from the previous activity (2.2).

2.4 T summarized activity groups derived from the previous activity on the screen and worked with Ss to select only three groups for the next activity, in order to set an appropriate number of vocabularies that Ss could effectively acquire and memorize within one period.

2.5 Based on the three major activity groups selected from the previous activity (2.4), T, then, highlighted the vocabulary and asked Ss to memorize the vocabulary by relating them to Ss' past experiences.

3. T helped Ss become more familiar with the topic, aroused their interests and readied them to use their background knowledge for the upcoming stage, by presenting online video clips.

3.1 T preformed online search on YouTube web-browser to find | | |

			related video clips of the three chosen activity groups. 3.2 T instructed Ss to actively watch and listen to these video clips and assess whether activities shown in the clips were related to them or not.		

60 min. (post-tests)
 	
30 min. (instruction)
	Pre-speaking	1. Assess Ss' current speaking ability
		
		2. Prepare Ss' for the up-coming speaking task
		
		3. Introduce and implement **first and second station rotation models**
			1. Ss took the post- speaking test which appeared in the form of the role-play presentation.
			
			    1.1 Ss performed the role-play presentation, based on the situation and the role assigned in the role card. The theme of the role-play was about health.
			
			2. T, then evaluated Ss' speaking ability, based on the speaking scoring rubric and recorded the results to be used for comparison with the pre-test evaluation.
			
			3. For the role-play presentation (1.1), Ss were required to suggest their friends about ways to get healthier. Also, they had to express that they agreed or disagreed with their partner. At this point, the first station rotation model was implemented.
			
			    3.1 In the first station, T conducted a review of some vocabulary and language use, necessary for Ss to perform the role-play presentation under the topic of "Living a healthy lifestyle!" The vocabulary
				1. Power Point presentation
				
				2. Role card
				
				3. Speaking scoring rubric
				
				4. Book
				
				5. Web-pages
				
				6.Technological tools
					1. Post-tests

			relating to life styles and associated activities would, once again, be introduced to Ss. Additionally, the language use of *should* and *have to* would also be presented in this station. 3.2 In the second station, through the use of available online resources, Ss were required to further study necessary language elements and create the content for the three to five-minute role-play presentation. In this second station, the available technological tools that were linked to web-pages, containing the contents relevant to Ss' speaking task were utilized. 3.3 Ss prepared to do the task by formulating their speech that they must integrated language rules, speaking patterns and vocabulary into the acquired content.		
60 min.	**While-speaking**	1. Encourage Ss to speak both in-class and online 2. Record Ss' live performances and post them online	1. The third station required Ss to illustrate their speaking ability. 1.1 Ss delivered a three to five-minute live performance. 1.2 Ss recorded the live performances and post them online in the class's Closed-Facebook Group, where T could	1. Closed-Facebook group	-

		3. Implement **third station rotation model**	then, provide personalized coaching to each S. 2. During this activity, T also encouraged and provided supports to all Ss both in-class and online format, while they attempted to communicate their messages in the target language. Additionally, T gave Ss assistance as needed.		

45 min	**Post-speaking**	1. Evaluate Ss' speaking ability
		
		2. Provide personalized coaching via the **individual rotation model**
			1. In the individual rotation model, T evaluated Ss' performances and gave feedbacks to Ss.
			
			    1.1 Following each group's discussion, T recorded Ss' speaking scores, according to the speaking rubric set.
			
			2. After class, in the online platform, T implemented the individual rotation model, in order to provide personalized coaching to all individual S.
			
			    2.1 T left comments and suggestions, under the posted videos of all Ss in the closed-Facebook group.
			
			    2.2 Ss might seek further clarification from T by asking questions related to comments and suggestions provided by T.
			
			    2.3 T provided further clarification to Ss as appropriate, where applicable.
				1. Speaking scoring rubric
				
				2. Closed-Facebook group
					1.Role-play presentation

10 min	**Wrap-up**	1. Reflect on leaning 2. Measure Ss' learning motivation and their perceptions of blended learning	1. At a set time, in the online platform, T conducted the live-chat session about the learning summary. Ss were encouraged to ask questions or comment on any aspect as they were comfortable doing so. T would then, answer Ss' questions accordingly. 2. T measured Ss' learning motivation and their perceptions of blended learning by assigning Ss to write the reflection blog, fill in questionnaire items and answer interview questions.	1. Online reflection blog 2.Learning motivation questionnaire 3. Interview questions	**-**
End of Lesson					

APPENDIX L

IOC of Blended Learning Lesson Plans

Expert's name: _____

Instruction: Please rate the following elements of the blended learning lesson plan, according to the degree of the index of item-objective congruence.

-1 = incongruent   0 = questionable or unclear   1 = congruent

Lesson Plan Format	IOC Values			Comments
	-1	0	1	
1.1 The overall format of the lesson plan contains sufficient elements of teaching.				
1.2 The objectives of the lesson plan reflect the unit's learning outcomes and are clearly stated.				
Teaching Procedures	**IOC Values**			**Comments**
	-1	0	1	
2.1 The warm-up procedure helps students become familiar with the topic, arouses their interests and readies them to use their background knowledge for learning.				
2.2 The pre-speaking procedure allows students to prepare themselves for the tasks to be performed through the blended learning station rotation model.				
2.3 The while-speaking procedure allows students to perform the assigned tasks within the blended learning environment.				
2.4 The post-speaking procedure allows the teacher to give feedbacks to students and provides students personalized coaching via the blended learning individual rotation model.				
2.5 The wrap-up procedure gives teacher and students the opportunity to clarify unclear aspects, provide additional				

comments and prepare for the next learning period via the blended learning flipped rotation model.				
2.6 The teaching materials are appropriate and sufficient.				
2.7 The overall contents and activities of the lesson plan are appropriate for the teaching time allocated.				
Evaluation	**IOC Values**			**Comments**
	-1	0	1	
3.1 The evaluation methods are appropriate and coherent with the unit objectives.				

APPENDIX M

Consent Form for Students

ใบยินยอมเข้าร่วมการวิจัย

หัวข้อวิจัย: ผลของการใช้วิธีการสอนแบบผสมผสานที่มีต่อความสามารถทางการพูดภาษาอังกฤษ แรงจูงใจในการเรียน และแนวคิดของนักศึกษาและอาจารย์ที่มีต่อวิธีการสอนแบบผสมผสาน

วันที่........เดือน..........................พ.ศ...................

รายละเอียดงานวิจัย

งานวิจัยนี้มีวัตถุประสงค์เพื่อ 1) ศึกษาประสิทธิผลของวิธีการสอนแบบผสมผสานที่มีต่อการปรับปรุงความสามารถในการพูดของนักศึกษา 2) ศึกษาผลของวิธีการสอนแบบผสมผสานที่มีต่อแรงจูงใจในการเรียนของนักศึกษา 3) สำรวจแนวคิดของนักศึกษาและอาจารย์ที่มีต่อวิธีการสอนแบบผสมผสาน โดยผลจาก การวิจัยครั้งนี้ จะเป็นประโยชน์ต่อ 1) การปรับปรุงความสามารถในการพูดของนักศึกษา 2) การจัดการเรียนการสอนแบบผสมผสาน และ 3) การบริหารจัดการการศึกษาที่เน้นการใช้เทคโนโลยี ต่อไป

เมื่อนักศึกษาสมัครใจเข้าร่วมโครงการวิจัยและลงนามในใบยินยอมแล้ว ผู้วิจัยจะดำเนินการเก็บข้อมูลจากนักศึกษาเป็นเวลา ๑ ภาคการศึกษา การเข้าร่วมการวิจัยของนักศึกษาเป็นไปโดยความสมัครใจ และสามารถปฏิเสธที่จะเข้าร่วมการวิจัยได้ทุกขณะ โดยไม่มีผลต่อคะแนนหรือเกรดในรายวิชานี้ ผู้วิจัยรับรองว่าข้อมูลต่างๆของนักศึกษาจะถูกเก็บรักษาเป็นความลับและจะไม่เปิดเผยข้อมูลเหล่านี้แก่สาธารณชนโดยไม่ได้รับอนุญาต สำหรับการตีพิมพ์ผลการวิจัย ข้อมูลส่วนบุคคลของนักศึกษาจะยังคงเก็บรักษาเป็นความลับและเปลี่ยนชื่อจริงเป็นนามสมมุติหากจำเป็นต้องใช้ในการรายงานผลการวิจัย

นักศึกษาได้อ่านข้อความข้างต้นแล้วและได้รับการอธิบายจากผู้วิจัยถึงรายละเอียดงานวิจัยโดยมีความเข้าใจดีแล้ว และได้ลงนามในใบยินยอมเข้าร่วมการวิจัยนี้ ด้วยความสมัครใจ

ลงนาม...ผู้ยินยอม

(...)

ลงนาม...พยาน

(...)

ลงนาม...ผู้ทำวิจัย

(...)

APPENDIX N

Consent Form for Teachers

Research Title: A Study of Blended Learning: Its Effects on Thai EFL University Students' Speaking Ability, Learning Motivation, and Perceptions

Date........Month.....................Year..........

Research Detail

This research aims to 1) investigate the effectiveness of blended learning in improving Thai university students' speaking ability 2) examine the effect of blended learning on Thai university students' learning motivation 3) explore students' and teachers' perceptions towards blended learning practices. The research results will be beneficial to 1) students, in terms of helping them to improve their English-speaking proficiency 2) practitioners, who wish to implement this teaching technique into their teaching contexts 3) educational administrators, on ways to manage technology-based education.

When the participant participates in this research and signs this consent form, the researcher will collect the data via the semi-structured group interview. The participant can freely provide comments, concerning the blended learning practices and factors that lead to the success of blended learning. The participant will be informed that he/she will not be academically and professionally affected by given their responses. All participants can decline to join this research without having any effect on his/her career. The researcher will ensure that all information obtained will be kept confidentially. There will be the use of pseudonyms whenever the participant is mentioned, so that their anonymity is protected and assured.

The participant has already read all research detail mentioned above and has a clear understanding of the research. The participant is informed that the participation is totally voluntary.

Signature...Participant

(...)

Signature...Researcher

(...)

APPENDIX O

List of Experts

1. Asst. Prof. Dr. Chalermchai Chaichompoo   Chiang Mai Rajabhat University

2. Asst. Prof. Dr. Nutreutai Arunsirot   Chiang Mai Rajabhat University

3. Asst. Prof. Kanlaya Promwatcharanon   Chiang Mai Rajabhat University

BIOGRAPHY

Name	Piyapan Kantisa
Date of Birth	January 25, 1989
Educational Attainment	Bachelor of Arts in English, Chiang Mai University
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Work Experiences	Full-time lecturer (2013-present), Chiang Mai Rajabhat University