



**APPLICATION OF A BLENDED LEARNING MODEL FOR THE
CHINESE LISTENING SKILLS FOR MATHAYOM SUKSA FOUR
THAI STUDENTS: A MIXED-METHODS INVESTIGATION**

BY

WANYAN ZHOU

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Abstract

This study aimed to investigate the effectiveness of blended learning lessons on developing Thai Mathayom four students' Chinese listening skills as well as their satisfaction towards blended learning (BL). The study adopted a mixed methods approach, with questionnaires, semi-structured interviews and a pre-test and a posttest as the research instruments. The samples consisted of 31 students of Mathayom four students at a Thai high school. The results of the pre-test and posttest scores were 32.39 and 36.16, respectively. The pair sample T-test showed that there was a significant value of 0.0001 ($p < 0.005$), confirming the effectiveness of BL approach. Additionally, the results of the questionnaire and the semi-structured interviews revealed that the students were satisfied with blended learning. Apart from improving the students' listening skills, blended learning also developed their 21st century skills, such as self-directed learning skills and problem-solving skills. Based on the results of the study, the researchers recommended that teachers who wish to enrich the teaching and learning process create an effective learning environment, improve their students' self-directed learning abilities as well as develop student achievement levels through blended learning.

(Total 167 pages)

Keywords: Blending learning, Chinese listening skills, Thai students, Chinese as a Foreign Language

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Abbreviations

Symbol	Meaning
IOC	Item Objective Congruence
SD	Standard Deviation
BL	Blended learning
PS	Photoshop



CHAPTER 1

INTRODUCTION

This chapter provides the background of the study, statement of the problem, research objectives, research questions, research hypotheses, research significance, research scope and the study's conceptual framework, limitations of the study, and definitions of key terms.

1.1 Background of the Context

In recent years, with stronger Chinese economy, interchange between China and the World is becoming more and more intense (Zeng, 2015). Exchanges in various formats such as tourism activities and trades occur (Fang, 2015). With reference to news released by Hanban, recently established as the Office of Chinese Promotion by the Ministry of Education of China (2000), more than 30,000 primary and secondary schools worldwide offered Chinese classes, and more than 4,000 universities set up the Chinese Department. As a result, the number of people studying Chinese in the world exceeded 25 million in November 2019. In addition, there are 541 Confucius Institutes and 1,170 Confucius Classrooms in 162 countries (regions) around the world by 2020. More than this, according to the statistics of the Ministry of Education of the People's Republic of China, as of 2019, the number of international students in China has reached 440,000. It follows that people's enthusiasm for Chinese is very high.

Especially in Thailand, with the implementation of the One Belt One Road Policy, Thailand's Chinese education has continued to deepen (Fan, 2020). Chinese has become a popular course for them (Zhang, 2017). According to Hanban of Thailand, Thailand's Confucius Institutes and Confucius Classrooms have developed rapidly. In the year 2019, 16 Confucius Institutes and 11 Confucius Classrooms were established in Thailand. The

number of Confucius Institutes and Confucius Classrooms is ranked first in Asia (Da, 2020). Driven by the establishment of the Confucius Institutes, the number of Chinese learners in Thailand has increased significantly. According to Xinhua News, in the year 2019, nearly 2,000 schools have offered Chinese courses in Thailand, this number including Thai high schools and primary schools, resulting in the number of students studying Chinese at school in Thailand exceeding one million (Xinhua New, 2019). Chinese has become Thailand's second-largest foreign language after English (Zhang, 2018). Thus, the development of Chinese in Thailand is continuously on the rise. In brief, the Chinese are becoming more and more important in Thailand (Wu, 2017)

Mostly, with the development of Information and Communication Technology, “Internet+” becomes a trend (China Government Report, 2015). With “Internet+ Education”, more and more emerging information technology has been adopted to make education innovative and quicken the process of education. In the current era of education information, schools are advised to be responsive to the needs of the students (Murati & Ceka, 2017). Thus, the school’s teaching philosophy, teaching model, teaching objectives, and many other aspects have faced great challenges and inevitable changes, especially the changes in teaching methodology that have attracted much attention (Nessipbayeva, 2019).

In recent years, the teaching models of E-learning, MOOC, flipped classroom and blended learning are shaking the position of the trusted traditional teaching model (Chu & Ma, 2017). Although E-learning, MOOC, distance education, and other online education make education realize network and break the time and space constraints on teaching, after verification. However, reporter from the World Economic Forum (2020) indicated that people believe that the teaching effect of pure online teaching or online learning is poor, the new blended learning model is required. The blended learning model, with its flexibility, accessibility, and features of integration with emerging multimedia technologies, meets the demand of education for networks in the 21st century, and also solves people’s concerns about pure online teaching (Lim, Morris & Kupritz, 2019). It has become a trend in the area

of education (Al-Rouji, 2020). As a new learning mode, the blended learning model is playing an important role in the stage of educational informatization. Feng, Sun, and Cao (2019) stated that in the context of “Internet + education”, the development of a creative person and the reform of education call for blended learning again.

Friesen (2012) and Horn and Staker (2014) explained that blended learning is a new kind of learning model, which incorporates face-to-face teaching and is based on technological mediation learning. It emphasizes student-centered learning and teaching assisted (Nazarova, 2020). This model has brought more convenience and advantages to teaching and learning and affords students more flexibility in their learning (Zaka, 2013; Shand & Farrelly, 2018; Ibiloye, 2021). Students can control learning time, place, and pace by themselves, and have opportunities to learn beyond school time (Linder, 2017; Ibiloye, 2021). It allows teachers to offer more new learning materials, give more life to courses (Koenig, 2018). It allows teachers and students to communicate easily (Hadisaputra, Ihsan, Gunawan & Ramdani, 2020).

According to a 2015 survey from the Online Education Consortium (OLC) of the United States, various blended courses have the highest learning positive attitude toward blended learning and believe that blended learning is conducive to the deep integration of education and information technology. It is the inevitable development direction of “Technology Upgrading Education” the best choice to effectively solve teaching problems (Li, Yan, & Zhu, 2019). After compared the traditional learning model and blended learning model. Murray (2018) stated that blended learning is the most suitable teaching model or learning model currently. He (2004) pointed out that blended learning is a new development of educational technology, which has a profound impact on the combination of information technology and curriculum. Li and Zhao (2004) also expressed similar views. Furthermore, Bonk and Graham (2006) have mentioned in their book “The Handbook of Blended learning: global perspectives local designs” that in the future, all courses will be blended courses, the technology and learning content will be integrated better, and better. The

continuous development of blended learning will also support the globalization and internationalization of education.

According to the Horizon Report of 2020, released by the New Media Consortium of America, the future of education will continue to focus on online education. Online education here refers to teachers' teaching must be conducted in a mix of online and face-to-face (Brown, McCormack, Reeves, Brooks & Grajek, 2020). Digital education will be integrated into learning, and it will move to a blended model (Husain, 2021). Therefore, it indicates that blended learning surely becomes the mainstream of future school curriculum implementation. Zhu (2019) claimed that blended learning that combines traditional classrooms and online learning will become the school of the future and the main way of a teaching organization. It is a choice and an attempt to introduce the blended learning model into Chinese as a Foreign language.

This is why this study aimed to investigate the effectiveness of blended learning in teaching Chinese as a foreign language in a particular context of Thailand, where Chinese is becoming popular.

1.2 Statement of the Problem

While Chinese has become more and more popular, it is undeniable that there are still many problems in Teaching Chinese as a Foreign language (Wang & Geng, 2019; Li, Huang & Ma, 2020). Through the investigation and analysis of the current situation of Chinese as a Foreign language, it is found that several common problems exist around the world and in Thailand.

Firstly, a shortage of Chinese teachers. Especially in primary and secondary schools of Thailand (Sea-Jia, 2015). From the data of Confucius Institutes (2019), every year about 1,100 Chinese volunteer teachers teach Chinese in Thailand, but the number is still not enough. Secondly, Chinese textbooks are outdated and badly connected, while the content does not fit the actual situation. It is said most of the Chinese textbooks used by

Chinese schools come from China, and there are not many that really fit the reality of Chinese teaching abroad (Li et al., 2020; Xia, 2020). The content of the textbooks is mostly not well-known to students. Even the textbooks were in continuity, it was not good for students to set up a complete Chinese learning system (Zhou, 2014). Furthermore, the government of Thailand stipulated that the teaching hours of Chinese are 5-10 class hours per week, and each class is 40 to 50 minutes. However, there are more extra-curricular activities in Thai schools, the students have very little time to learn Chinese. As a result, the students lack interest in learning Chinese (Su, 2016). Therefore, it is necessary to increase students' Chinese learning time.

In addition to these problems, there are also some special problems in Thailand by several researchers:

1) Due to the lack of multimedia classrooms, Chinese teachers rarely used multimedia courseware (Wang, 2019).

2) As the adopted teaching methods are not catching up with the trend, most schools use the oldest and most traditional Grammar translation method. According to the Annual Report on Overseas Chinese Study (2019), classroom teaching usually involves reading the text several times with the students, listening to the teacher explaining the meaning in Thai before asking the students to recite and recite the dialogue. The practice method is often copying the text, new words, etc. which often reduces the students' interest in learning Chinese (Wang, 2019). The teacher's blindly scrambling teaching does not meet the requirements of cultivating individual students (Zhou, 2018).

3) There is no unified Chinese syllabus. It is commonly accepted that the syllabus plays a guiding role in subject teaching. The syllabus is the basis for the selection of teaching materials, teaching tasks and requirements, teaching hours, and teaching plans (Zhong, 2005). Although Chinese teaching in Thailand has spread from kindergarten to university level, there is no unified operating system for Chinese education in either formal school education or tutorial institutions. The Chinese teaching material, Chinese curriculum, and the setting of Chinese class hours are unreasonable (Zhou, 2019).

Listening is one of the essential skills in any language learning. Listening teaching occupies a very important position in foreign language teaching (Kannan, 2019). Because listening is a complex process, teachers find listening classes very difficult to teach (Utomo, Kusmaryati & Sulistyowati, 2019). Therefore, more and more people pay attention to listening teaching, and more and more researches are conducted on listening teaching. There are studies on the theory of listening teaching, the study of listening teaching methods, and the study of listening teaching models. However, there are still some problems in the actual teaching of listening (Hwaider, 2017). For example, the instructional method is a stereotype, insufficient listening training time, lacking listening materials, and lacking attention to listening classes. All these factors affect the smooth progress of listening teaching.

In this research, this investigated Chinese school in Thailand. Chinese language class occupies an important position in the school curriculum. Through the investigation and analysis, it is found that Chinese listening classes still have some problems shown as follows:

1) Shortage of Listening materials

Listening textbooks are compiled by the school, which are adapting and modifying from the Chinese conversation book “Chinese spoken 301 sentences”.

2) Stereotypical teaching model

It is observed that the process of listening class consists of:

Step 1: Students read aloud to review at the beginning of class.

Step 2: Learning and explaining the new words.

Step 3: Teach students to read the text.

Step 4: Students read aloud by themselves and the teachers correct the pronunciation.

Step 5: Students listen to the text recording

Step 6: Students practice reading, and perform the conversation in the class.

This teaching process is biased in favor of the traditional model, emphasizing the

teachers leadership and ignoring the autonomy of students so that learning is in a passive state (Zhang, 2017). Students feel bored and tired of learning in class (Rost & Wilson, 2013).

3) Insufficient listening practice time

In the schedule, each class has two listening classes per week and each class is 45 minutes long. In addition, the listening part occupies ten minutes. According to Yang (1992), in a Chinese class, the best percentage of listening training time should be 60 percent. Therefore, most classes do not give enough time to train listening competency.

Evidently, many problems have risen in listening classes. After the HSK Test of 2019, the school analyzed the test papers and found that many students lost a lot of points in their listening comprehension part. Especially in Chinese synonyms and inference questions, students made the most mistakes when students did Listening tests (Li, 2014).

Thus, in the practice of actual listening teaching, how to improve students' Chinese listening skills and listening comprehension ability is very important (Cai, 2019). How to strengthen the training of listening skills, especially in synonyms and inference ability is still a research focus (Cai & Kang, 2020). At the same time, it is necessary to improve Chinese teaching materials, update and innovate teaching methods. Looking for a new teaching method and learning model to solve these problems has undoubtedly become a challenge for teachers of Chinese as a Foreign language (Ma, 2020). At this moment, innovative teaching models are necessary.

Blended learning combines the benefits of online learning and face-to-face learning. Before class, students through the way of independent learning complete the basic knowledge of learning. In class, students deepen their own learning with the teacher's supplementary class materials. This model fully mobilizes the students' independent learning (Banditvilai, 2016). The blended learning model has completed some learning tasks before class and more free time can be reserved in the classroom for practical exercises to some extent optimizing learning efficiency (Deng, 2018). Therefore, the emergence of blended learning provides the researcher with a new perspective. This is the reason why

lessons designed based on a blended learning model were investigated in this study.

Some scholars have found a number of benefits of the application model of blended learning in an actual class (Kusmaryati & Amertaningrum, 2017; Cai, 2019; Al-Rouji, 2020; Chen, 2020; Al-Obaydi, 2021;). However, there are little researches about teaching Chinese as a foreign language Listening Class based on the blended learning model.

This is why this study was an attempt to investigate the effectiveness of a listening class based on blended learning to enhance student learning achievement and to move away from old techniques that are commonly believed to be ineffective. This study was worth conducting as the findings from it will shed some light on whether a blended learning Chinese listening class could benefit students.

1.3 Research Objectives

There are mainly two objectives of this study:

- 1) To find out the effectiveness of the blended learning model in relation to students' Chinese listening skills
- 2) To investigate the satisfaction of Mathayom Suksa Four students toward the blended learning Chinese listening class

1.4 Research Hypotheses

- 1) On average, the students' Chinese listening skill score after the intervention by the blended learning will be higher than that of before at $p = 0.05$.
- 2) On average, the students participating in the blended learning Chinese listening class will be satisfied with their listening classes at $p = 0.05$.

1.5 Research Questions

The questions of the study are formulated as follows:

- 1) Can a Blended learning model improve students' Chinese Listening skills of Mathayom Suksa Four Thai students?
- 2) Are students satisfied with Chinese listening classes by using blended learning?

1.6 Research Significance

The following parties were be benefited from the study.

- 1) Teachers can learn from the findings of this study, and choose positive elements in a Chinese listening class to use in their classrooms.
- 2) Educators and researchers can use the finding to investigate further uncovered areas of blended teaching in teaching Chinese as a Foreign language.
- 3) Students can help students to not only improve their Chinese listening skills but also raise awareness of student learning ownership in the process of studying. In addition to this, blended learning can promote the ability of self-learning, the ability of problem-solving, critical thinking skills, and working in groups.

1.7 Scope of the Study

The scope of this study consists of the location of the study, time frame as well as a conceptual framework.

1.7.1 The Location of the Study

The location of this study is a private Chinese school in Thailand. There are 2,279 students and 90 teachers (26 Chinses teachers among them). It is a school that offers nursery education to senior high school education. Chinese courses are also offered from nursery to senior high school. In addition, there is only one class for each level from Mathayom 4 to Mathayom 6. This study focused on the Mathayom 4 students.

1.7.2 Time Frame

This study started from July 2020 to October 2021. The following Table 1.1 shows the timeline of this study.

Table 1.1 Timeframe of the study

Activity	July-November 2020	December 2020	January-July 2021	August -September 2021	October 2021
Research proposal preparation					
Research proposal defense					
Data collection					
Data analysis and Findings					
Thesis defense					

1.7.3 Conceptual Framework

The main important concept of this study is whether Blended learning was effective in a Chinese listening class. Blended learning was expected to lead to achievement and the teaching approach of blended learning was expected to satisfy students. Figure 1.1 below shows the conceptual framework.

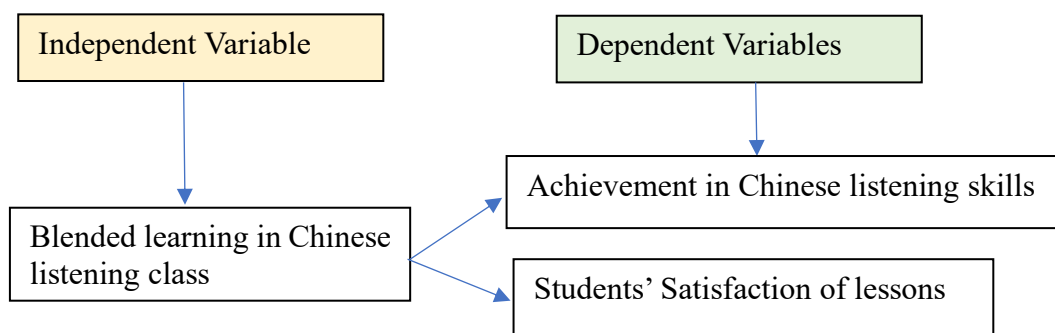


Figure 1.1 Conceptual framework

1.8 Limitations of the Study

This study has two obvious limitations.

1) The sample selected for this study were students in a private Chinese high school in Thailand.

2) This study was conducted with only one of Mathayom Suksa Four students who studied Chinese at the research site school.

Therefore, the findings of the study could not be generalized to other high school students in the different context in Thailand.

1.9 Definitions of Key Terms

Five key terms in this study consist of a blended learning model, Chinese as a foreign language, teaching listening, Mathayom Suksa Four students, and satisfaction.

A Blended Learning Model

A blended learning model in this study consisted of 3 steps: 1) Online self-learning; 2) Offline discussion learning; 3) Evaluation. Before the class, the students do self-study on the online learning materials provided by the teachers and complete the self-learning tasks and record the problems when they have encountered. In the offline classroom, they discuss the problems that they have met in small groups and then choose a group representative to present the results of the group's discussion and learning. Finally, the teacher commented and added knowledge highlights.

Chinese as a Foreign Language

Chinese as a Foreign Language in this study means teaching the learner of Thailand who learns Chinese and speak Chinese only in the classroom. They do not use Chinese communicate with others in daily life outside the classroom.

Teaching Listening

Listening teaching in this study refer to teaching listening focus on listening for test. Training students' listening comprehension skills, practice students how get the main points, learn how to make predictions, how to summarizing and paraphrasing, as well as improve ability of inferences. In this study, summarizing and inferencing the main point of the article is mainly focusing.

Mathayom Suksa Four students

Mathayom Suksa Four students refer to the full-time students at the private Chinese senior high school in Thailand, aged between 15 to 16, who just finished junior high school study and were enrolled to the senior high school to study in Mathayom Suksa Four.

Satisfaction

In this study, satisfaction refers to students' pleasure during the blended learning and when they do something and achieve something. Satisfaction with teaching quality, learning resource, learning environment, listening skills and learning experiences, assessment and feedback and overall satisfaction. A five-point Likert scale is used to evaluate student satisfaction level range from 1 to 5 with strongly dissatisfied, dissatisfied, moderate, satisfied, strongly satisfied.

CHAPTER 2

LITERATURE REVIEW

This chapter starts with a review of blended learning serving as the center of this study. This section includes the definitions, the development, the benefits, the models, and the influential factors of blended learning as well as aspects of the students' satisfaction of blended learning. The next part discusses four learning theories and introduces the characteristics and the principle of Chinese as a Foreign language as well as the nature of listening and processing of messages heard. Lastly, the strategies of teaching listening and types of listening are reviewed in this chapter.

2.1 Blended Learning

This section describes the development of blended learning, its definition and benefits, the blended learning models in use, the factors that influence its implementation, and student satisfaction with blended learning.

2.1.1 The Development of Blended Learning

Blended learning is not a new concept. It has been constantly re-recognized by researchers (Shivam & Singh, 2015). Blended learning emerges from E-learning (Zhu & Lei, 2018). The term “blended learning” first appears in a News release of the education training center in 1999, a company that has about 220 online courses offered with the blended learning method (Güzera & Canera, 2013). After that, in order to integrate the diverse requirements of the training targets for training time and location, companies began to combine online training with traditional training in a training course, and gradually formed classroom teaching, group discussions, online seminars, and online distance teaching training methods (Li, 2019).

In the 21st century, with the development and popularization of educational information technology, blended learning first appeared in the field of corporate training (Tan, 2019; Murati et al., 2017; Zhao & Yan, 2021). After that, blended learning slowly appeared in the international education technology circle and was recognized by educators (He, 2004; Zhu et al., 2018). And then, it was introduced into school education. The term blended learning is being used with increased frequency in both academic and training agencies (Graham, 2006). In 2003, the American Society for Training and Development lists blended learning as one of the top 10 trends in the knowledge delivery industry.

In China, the concept of “blended learning” was introduced at “The 7th Global Chinese Computer education application conference” in 2003. After that, more and more Chinese scholars pay attention to developing blended learning models and suggested blended learning models reform education (Li & Zhao, 2004; He, 2004; Zhu et al., 2018).

In summary, blended learning is not a novel model; it has been studied and used by researchers for a long time, and blended learning was first used in the training industry before it appeared in education.

2.1.2 Definitions of Blended Learning

Since the emergence of blended learning, there are many definitions of blended learning. Different definitions from a number of scholars are shown below (See Table 2.1).

Table 2.1 Different definitions from different scholars of Blended learning

Scholar	Year	Definition
Singh & Reed	2001	Blended learning is based on learners' characteristics and needs, providing them with a suitable learning environment, learning content, and designing learning processes that meet their teaching goals to achieve teaching goals
Driscoll	2003	Blended learning is a combination of any teaching techniques, teaching methods, and work tasks to achieve learning goals or teaching goals
Allen, Seaman & Garrett	2007	Blended learning as a course with a blended course being one where 30–79% of the content is delivered online alongside face-to-face sessions

Table 2.1 Different definitions from different scholars of Blended learning (Cont.)

Scholar	Year	Definition
Watson & Murin	2014	Blended learning combines the best features of traditional schooling with the advantages of online learning to instruction and supervision to maximize their learning and to best meet their own needs
Li	2016	Blended teaching means teaching and learning through the application of appropriate media technology, resources, and activities that are compatible with the appropriate learning environment to maximize the effectiveness of teaching and learning
Lalima & Lata-Dangwal	2017	Blended learning is direct teaching, indirect teaching, cooperative teaching, and personal computer-assisted learning
Hofmann	2018	Blended learning is a series of content blocks sequenced to create learning experiences so as to achieve the best learning effect
Rao	2019	Blended learning is an approach that provides innovative educational solutions through an effective mix of traditional classroom teaching with mobile learning and online activities for teachers, trainers, and students
Cronje	2020	Blended learning is an appropriate use of a mix of theories, methods, and technologies to optimize learning in a given context
Zhang	2020	In special periods, blended learning should highlight the online face-to-face and online autonomous learning mode, and emphasize the active knowledge construction with students as the main center

Based on the definitions from Table 2.1, blended learning can be summed up as a learning strategy and teaching method which combines both traditional face-to-face and online learning supported by multimedia based on the concept of the learner as the center of learning in order to achieve the objectives of learning and teaching. Although the definitions vary in detail, the main concept of blended learning is the use of a combination of online and face-to-face learning. In other words, it is the way that supports student learning by using various formats of materials.

2.1.3 The Benefits of Blended learning

The rising of blended learning is appropriate to the development and change of the Blended learning combines the superiority of online learning and traditional teaching. It promotes the development and reform of teaching. Many researchers have found that blended learning has many benefits to students, teachers, and finally facilitates the teaching as described in the following sections.

2.1.3.1 The main benefits for the students

Blended learning is student learning-centered, and it has positive effects on students in many aspects.

1) Develop students' different life skills

Life skills are important for success in life. According to World Health Organization (1994), which includes self-responsibility, independent learning skills, critical thinking skills, problem-solving, decision making, communication skills, and collaboration skills. Hadisaputra, Ihsan, Gunawan and Ramdani (2020) claimed that blended learning encourages student-centered learning. It can develop students' independent learning skills and critical thinking capacities. When students learned through blended learning their self-directed was enhanced (Adinda & Mohib, 2020). Autonomous learning skills have also been enhanced (Ahn, 2017). Furthermore, blended learning has a significant effect on the development of students' critical thinking (Eska, Nasution, Harahap & Manurung, 2017; Suana, Ningsih, Maharta, & Putri, 2020). Students also can get more confidence from self-evaluated tasks in blended learning (Geta & Olango, 2016). Learning with a blended model, students need to complete the learning assignments and solve the learning problems by themselves, including self-learning online, classroom group discussion and homework completion (Tekane, Pilcher & Potgieter, 2019). In their attempts to finish assignments, students can think on their own or learning with their friends. It is good to help students develop critical thinking, collaboration skills and problem-solving skills (Eagleton, 2017; Cleveland- Inners & Wilton, 2018).

2) Develop students' ICT skill

Information communication technology (ICT) is an important skill for the 21st century (Dube, 2017; Asunka, 2017). In these digital times, ICT plays an important role in the classroom, providing students with the opportunity to learn and apply the skills required for the 21st century (Ratheeswari, 2018). When students learn with a blended learning model, students need to explore new computer tools (Punie, Zinnbauer & Cabrera, 2006; Al-Musawi, 2011). For example, Google Classroom, Zoom Meeting, Facebook, Line,

and Web Board. As a result, students can develop ICT skills (Zaka, 2013; Prince, Dewodo & Atiglah, 2020).

3) Offer flexible time and place to learn

Blended learning through online learning provides students with more opportunities to learn outside of school hours. Students have flexible time to learn and use resources anytime, anywhere (Tucker & Wycoff & Green, 2017). Students can learn in an offline classroom anytime, anyplace (Yalcinkaya, 2015). What's more, blended learning can help students set their own learning space easily and conveniently (Luthan, Misra & Lutan, 2021). Students are also enabled to improve their personal skills (Tyley, 2020).

4) Enlarge communication scope

A blended learning model offers communication opportunities for students (Lalima & Lata-Dangwal, 2107; Cleveland-Inners & Wilton, 2018). When students meet any problems, they can communicate with their classmates, their teachers, or even net friends (Mohamad, Hussin, & Shaharuddin, 2015; Husniyah, 2018). What's more, blended learning can offer more time for teachers and students with creative and cooperative activities (Nurmasitah, Faridi, Astuti & Nurrohmah, 2019).

2.1.3.2 The main benefits for the teachers

The teachers can also get benefits from blended learning, including knowing students well, getting close to students, getting abundant learning materials as well as improving teachers' ICT skills. The main benefits of blended learning can be indicated in the following.

1) Help teachers know students better, make the gap shorter between students

Students via self-learning have finished some assignments before class. In class, teachers and students have more time to interact and so does online communication (Lalima & Lata-Dangwal, 2107). When students have problems with learning, they can interact with

teachers directly (Dziuban, Graham, Moskal, Norberg and Sicilia, 2018). Teachers help students solve problems in time as well, which enriches students' learning experience (Cleveland-Innes & Wilton, 2018). The interaction between teachers and students is unrestricted, which makes teachers and students closer and produces more learning effects. As Arney (2015) stated that blended learning can help teachers find more methods to adapt to this generation of students.

2) Get more teaching resources

With the development of Internet technology, the teaching resources of blended learning are no longer limited to the knowledge in textbooks (Jia & Zhang, 2021). Teachers can use the Internet to search and collect more teaching resources and provide students with abundant learning materials (Montrieux, Vanderlinde, Schellens, & De-Marez, 2015). It is conducive to helping students broaden their horizons (Jia & Zhang, 2021). Furthermore, Teachers can update their course content anytime, anyplace. Traditional teaching can only show the resources in the classroom but now with blended learning both online and offline, teachers can send them to students immediately and students can automatically learn. It is not only enriching teachers' teaching resources but also gives classes new life (Cleveland-Innes & Wilton, 2018).

3) Enhance teachers' ICT skills

Blended learning requires high ICT technology for teachers who need to learn how to use it first, and then guide students to use it (Ghavifekr & Rosdy, 2015). Zaka (2013) claimed that blended learning can help teachers build information literacy skills of the 21st century. Blended learning promotes the professional development of teachers (Al-Musawi, 2011). Similarly, it corresponds to the field of teacher career and development under the framework of 21st century learning (Vidovic & Velkovski, 2013; Dimkpa, 2015).

To sum up, blended learning breaks the walls of school (Humaira & Asbah, 2019). It crosses global boundaries and gathers information about different cultures and different ways of learning (Bonk & Graham, 2006; Dziuban et al., 2018). When schools close under

difficult situations such as pandemics, floods, and snow, storms, some online teaching can be used. Students can learn at home by themselves or learn online guided by teachers (Zhang, 2020). In the classroom, students and teachers could get more time to interact. It not only stimulates students' enthusiasm but also makes learning more interactive and teaching efficiency will increase (Wang, 2019)

This study adopts the blended learning approach because it aims to provide more flexible learning methods for students as well as encourage students to learn independently and improve their critical thinking, computer literacy, cooperative ability. A blended learning model will be designed as a new teaching model in an attempt to teach Chinese listening.

2.1.4 The Model of Blended Learning

Staker and Horn (2012) after verifying and summarizing the models of blended learning in K-12 of America, point out that there are mainly four models of blended learning: 1) Rotation Model which includes the Station Rotation, Lab Rotation, Flipped Classroom, and Individual Rotation models. 2) Flex Model. 3) A La Carte Model. 4) Enriched Virtual Model. Their models are the most widely accepted now. Therefore, the review mainly focuses on four models from Staker and Horn (See Figure2.1).

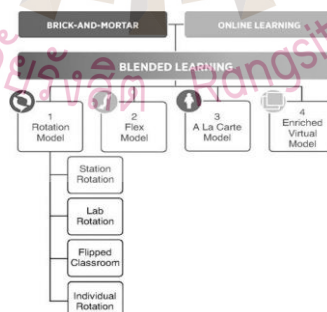


Figure 2.1 Blended learning model

Source: Staker and Horn, 2012, p2

Rotation Model refers to the conversion of students in any course or subject. According to a fixed timetable or following the arrangement of the teacher. Among these learning templates, at least one template is online learning (Staker & Horn, 2012). Students will switch between online learning, group learning, and classwork, or between online learning and class discussions or projects. The key to this model is that the teacher controls the transition time and monitors the students. Du (2017) pointed out that under this model, students' learning activities are often related to access to teaching materials or exchanging opportunities outside the classroom. The benefit of this model is students can arrange their learning places, it depends on the individual needs of the students and the blended method. Students can learn in their homes, in the classroom or in the laboratory.

Station Rotation refers to one or more classrooms. Under this Station Rotation model, students are divided into several groups and switched between models: group face-to-face instruction, individual study, group program, and so on. In the line of station rotation, students and the teacher are in the same classroom. Students are required to stay in the fixed station and learn by themselves first and the learning time is stipulated by the teacher (See Figure2.2).

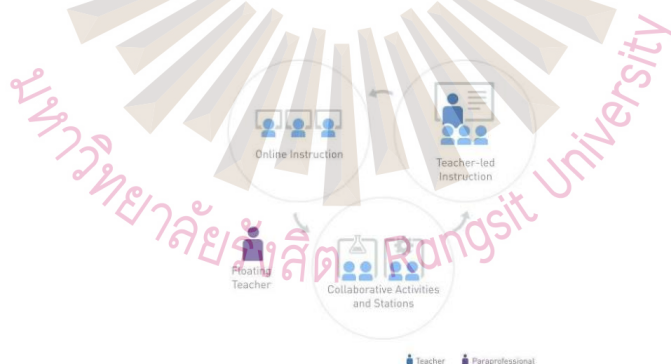


Figure 2.2 Station model

Source: Staker and Horn, 2012, p9

Lab Rotation refers to students moving to the computer room for online learning of the courses. The Lab Rotation model allows teachers to spend more time focusing on the cultivation of students' dialectical thinking skills. The school's multimedia network

facilities are necessary to the Lab Rotation (See Figure 2.3).

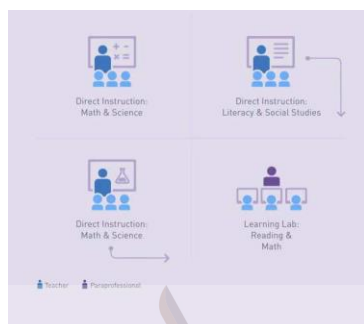


Figure 2.3 Lab Rotation model

Source: Staker and Horn, 2012, p10

Flipped classroom subverts the traditional relationship between class time and homework. Students need to participate in online learning at home and complete their homework first and then participate in face-to-face school classes. The teacher uses class time to guide or practice projects. In the flipped classroom, students are the center of the learning process. While the teacher acts as a guide or facilitation of students learning (See Figure 2.4).

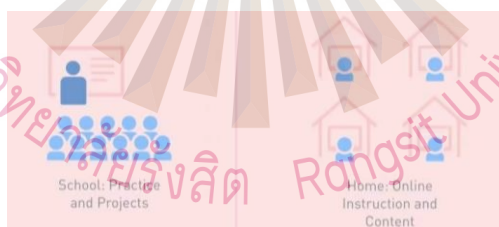


Figure 2.4 Flipped classroom model

Source: Staker and Horn, 2012, p11

Individual Rotation means students switch to different learning modes according to the personalized learning schedule customized by the teacher. In this mode, the daily schedule is unique to each student and the teacher (See Figure 2.5).

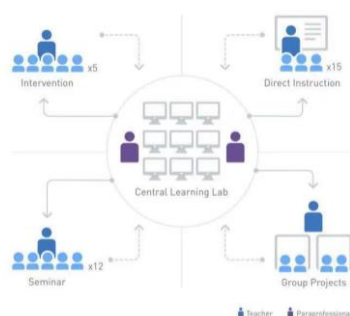


Figure 2.5 Individual Rotation model

Source: Staker and Horn, 2012, p12

Flex model refers to students studying online, and sometimes offline. This model allows students to freely switch between online learning and face-to-face learning according to their needs. Teachers provide support and instruction to students. For example, students learn the lesson online on campus while the teacher supervises and gives guidance (See Figure 2.6).

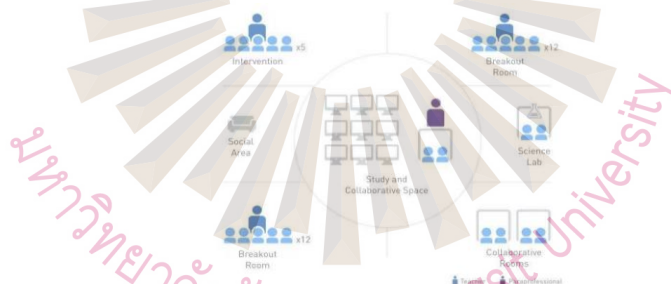


Figure 2.6 Flex model

Source: Staker and Horn, 2012, p13

A La Carte refers to the course that students take even from another school. If the student's school does not offer this course, students can choose this course online. Credits of this course are counted as the total credits of the school learning. The teacher of the online course and the teacher of the school is not the same person. In actual learning, if the school cannot offer some courses, students can learn the course they need from the online support of another school (See Figure 2.7).



Figure 2.7 A La Carte model

Source: Staker and Horn, 2012, p14

Enriched Virtual model means the courses in this mode will provide a mandatory face-to-face learning mode. Students must first learn face-to-face with the teacher twice a week. Then, students can complete the rest with online learning in any place they like. Many universities mainly adopt the Enriched Virtual model. Students study with their teachers at a fixed time, then students need to self-study and complete assignments at other times (See Figure 2.8).

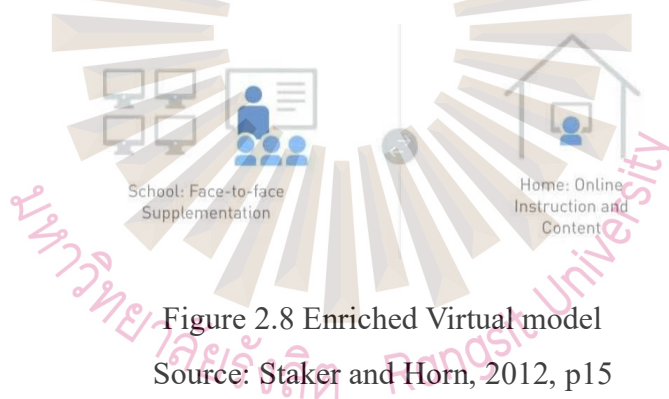


Figure 2.8 Enriched Virtual model

Source: Staker and Horn, 2012, p15

New models of blended learning emerge all the time. No matter how it changes, only in line with people's needs, the model designed can promote the successful practice of blended learning. Horn and Saker (2014) pointed out that no matter what model is to be used, understanding blended learning is important. Students can be given some power to master their own learning in blended learning.

This study adopted the station rotation model and the flipped classroom under the rotation model. The station rotation model mainly uses offline learning to supplement the

subject content. In the classroom, the teacher guides transfer of learning between group learning and teacher instructed learning. The flipped classroom model is mainly used for students' concentrated learning and self-study of knowledge before class. The students access the website provided by the teacher for self-study and refine the key knowledge. In the classroom, students are divided into small groups where emerging communication takes place between teachers and students as well as students and students. This is better for students to master and apply the knowledge. The details of a strengthened blended learning model are shown below (See Figure 2.9).

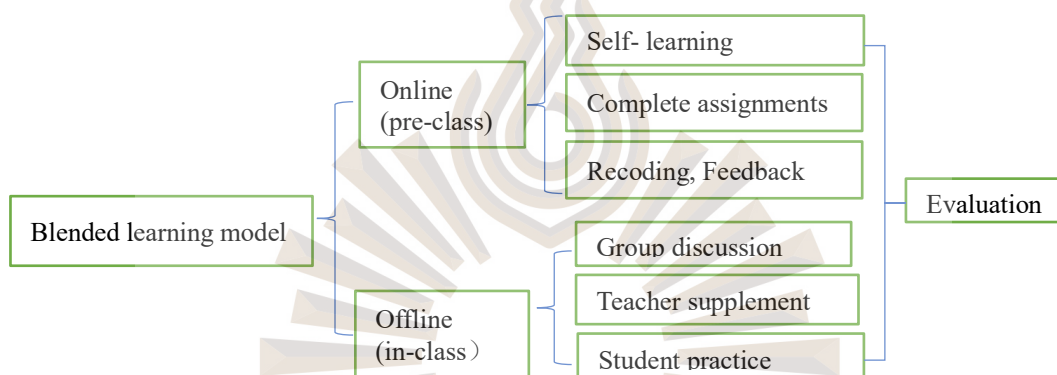


Figure 2.9 Blended learning model in the Listening class

Source: Researcher, 2021

2.1.5 Influential Factors of implementing Blended Learning

Compared with traditional teaching, the learning environment, the learning behavior, and the teaching methods of the blended learning model are different. This is a new challenge to both the teacher and the students, especially when high technology is a requirement (Horn & Saker, 2014). Therefore, the implementation of the blended learning model requires the cooperation of the student and the teacher, and more importantly, the application of online information technology (Arney, 2015).

The teachers

Firstly, blended teaching content is not included in textbooks. Online courses

generally require teachers to prepare learning resources and send them to students in advance. The teacher's duty is to guide students to cooperate and discuss in groups and answer questions in time (Shivam & Singh, 2015). Therefore, teachers need to put more energy into the teaching content to deal with students' problems than in the traditional classroom. The teacher should have a certain degree of assurance in the selection of curriculum content. The content should not only be innovative to attract students' interest but also be gradual and orderly (Bonk & Graham, 2006; Horn & Staker 2014). Secondly, teachers should fully understand the students' learning situation and guide process guidance. Therefore, the ability of teachers is very important in promoting the teaching of the whole course. It is necessary to carry out effective training for teachers (Arney, 2015).

The students

Online courses under the blended learning model generally require students to complete learning assignments before class (Du, 2017) This has a high demand for students' autonomous learning (Arney, 2015). Students should self-study and think about the basic knowledge and related concepts, record the problems they do not understand, discuss them with classmates in class, or ask the teacher for advice. Cleveland-Innes and Wilton (2018) stated that when students become the center of learning, the ability of self-control is necessary. Therefore, students' autonomous learning ability is one of the factors that affect the smooth progress of teaching (Arney, 2015).

The technology

One of the core differences between blended learning teaching and traditional teaching depends on the choice of teaching technology (Arney, 2015). The selection of traditional teaching media mainly considers how to help teachers present the teaching content; in blended teaching, the choice of teaching media focuses more on which media forms can better support students' learning (Arias, Swinton & Anderson, 2018). In traditional classroom teaching, the media is a demonstration tool to assist the teacher's teaching, but the role of media has changed in blended learning (Ghavifekr & Rosdy, 2015). The core of blended learning is the selection and combination of media (Li & Zhao, 2004).

In the process of blended learning, the media is more a channel to obtain information than a tool. In the report of Zhu and Lei (2018), they point out that the learner, the teacher, the technology, the environment, and the teaching methods are important.

Therefore, in this study, when the researcher designed the blended learning model of listening, the characters of students, teachers, selecting appropriate teaching materials and the proper media technology were carefully considered.

2.1.6 The Students' Satisfaction of Blended Learning Model

Students' satisfaction refers to the evaluation of students' attitude towards learning experience teaching service and teaching facilities (Weerasinghe, Lalitha & Fernando, 2017). Measuring satisfaction is important to any education institution. It helps highlight the advantages and disadvantages of the program, including the staff, environment curriculum even policies (Abbas, 2018). However, satisfaction is affected by numerous different factors. Chen (2018) claimed that learning motivation, learning atmosphere, and interaction behavior can affect learning satisfaction directly. Abbas (2018) proved that the interaction during class and the contents of teaching can affect student satisfaction. Seman, Hashim, Roslin and Ishar (2019) found that the environment of blended learning is also an important factor affecting the satisfaction of students. Because the blended learning model provides a relaxing learning environment and flexible class to students, it stimulates the learning interest of students and active learning atmosphere (Yan, 2018). Diep, Zhu, Cocquyt, De-Greef and Vanwing (2019) found that student's academic performance is one of the factors affecting student's satisfaction. Students who get high achievement may have higher satisfaction than students who get the low achievement. Academic performance is one of the most important determinants of the satisfaction of students (Adnan, Mohamed, Tarek, Son & Hosny, 2016). Poon (2019) has found six factors affecting students' satisfaction, including quality of the instructor and the course, student learning environment, personal development of students, student services, appropriate evaluation, and expectation also affects students' satisfaction. Fieger (2012) has introduced the Student Outcomes

Survey that mainly evaluates satisfaction from three themes: teaching, assessment, and generic skills and learning experiences.

In addition, in the National Student Survey (NSS) core questionnaire, most of above mention factors can be found, including quality of the instructor and the course, personal development, teaching facilities, and appropriate evaluation. The National Student Survey is a survey on the satisfaction of British college students to their school. It is conducted by Ipsos MORI every year. There were 27 questions, covering eight aspects: teaching quality, learning opportunity, assessment and feedback, academic support organization and management, learning resources, learning community, student voice, and overall satisfaction.

Based on the above-referred literature, in this study, the student satisfaction questions were adapted from the National Student Survey and the Student Outcomes Survey. Students were asked to indicate their levels of satisfaction with the listening course designed based on blended learning. The teaching quality, the learning opportunity, learning resources, learning environment, learning skill and learning experiences, assessment and feedback, and overall satisfaction. The following figure shows the various factors that were included in the questionnaire (See Figure 2.10).

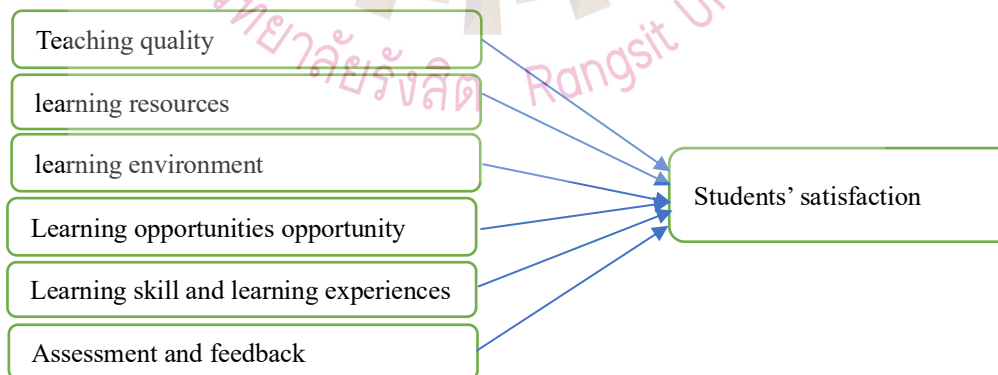


Figure 2.10 Factors indicating students' satisfaction

Source: Researcher, 2021

2.2 Major Theories of Learning

The theories of learning underline all teaching and learning approaches. This section introduces four major learning theories: Behaviorism, Cognitivism, Constructivism, and Humanism.

2.2.1 Behaviorism

Behaviorism was originated in the United States at the beginning of the 20th century. Its important representatives include John B. Watson and B. F. Skinner. In 1913, “The Behavioral Learning Theory” of John B. Watson was published, it triggered the behaviorism movement. Its main point of view is objectivism, and psychology is pure natural science. In brief, the focus is on how people learn (Du, 2017).

Most people advocate B. F. Skinner. Operant conditioning is the core of Skinner’s behaviorism learning theory (Rachlin, 1995). Skinner believes that learning is a kind of behavior. When the subject learns, the reaction rate increases, but when it does not learn, the reaction rate decreases. Skinner has defined learning as a change in response probability.

According to the theory of operant conditioning and positive reinforcement, it reformed the teaching and designed a set of teaching machines and procedure teaching. There are five main principles in Skinner's procedure teaching.

First, positive response. Procedure teaching presents knowledge to students in the form of questions. Students can make positive reactions through writing, speaking, calculation, selection, and comparison in the learning process, so as to improve learning efficiency.

Second, small steps. Skinner (1938) claims that the teaching materials should be divided into several small and logical units to make them easy to understand. Students can be confident throughout the whole learning process.

Third, immediate feedback. The faster the feedback to the student's response, the greater the reinforcement effect (Li et al., 2008). The most commonly used reinforcement methods are to know the results immediately and to move from one box to the next. It can effectively help students improve their learning confidence (Yang, 2020).

Fourth, set your own pace. Procedure teaching takes students as the center, encourages students to learn at the speed most suitable for themselves, and obtains the inducement of steady progress through continuous strengthening (Li, 2011).

Fifth, the lowest error rate. Skinner (1938) believes that error-free learning can stimulate learning enthusiasm, enhance memory and improve efficiency. During the learning and teaching, teachers need to record errors anytime, in order to understand the students' actual level and modify according to the records so as to make it more suitable for the students' level. Moreover, the students may make a correct response every time, thus reducing the error rate to the minimum (Yuan, 2019).

Overall, Behaviorism claims that learning occurs through associations between stimuli and responses. The result of learning is a process of stimuli and reactions. It stresses environment affect learning (Basri, Amin, Umiyati, Mukhlis & Irviani, 2020). At the same time, small steps and set own learning pace also are the view of Behaviorism learning.

Based on above, the teaching design of blended learning model, teachers should pay attention to the impact of the environment on students. The lessons can be divided into smaller modules for learning in order to facilitate students' memory and also facilitate continuous monitoring of students by the teacher. Students should be given the freedom to learn on their own. Be more encouraging to stimulate their learning.

2.2.2 Cognitivism

In the 1960s, J.S. Bruner accepted and developed Piaget's ideas of occurrence and cognition, and put forward the "cognition-discovery theory", which pushed the cognition

theory to a climax.

Cognitivism believes that learning should be an active process of forming cognition (Anderson, 1995). Students should think independently and discover the concepts and rules of learning by themselves. The teaching concept also emphasizes the importance of studying students' learning behaviors. Teaching should pay attention to the basic structure of various subjects and the knowledge structure of textbooks to help students form wisdom or cognitive growth.

Cognitive learning theory also emphasizes that as the subject of learning, people should pay attention to the subject value of people in learning activities. Humans obtain information through the information exchange process of perception, attention, memory, understanding, and problem-solving. Cognition, meaning understanding, and independent thinking play a major role in learning (Woolfolk, 2015).

The learning characteristics of cognitive learning theory can be summarized as follows:

Learning is an active explorer. In learning, students should think independently, actively participate in the process of acquiring knowledge, and become the protagonist in learning to establish their own knowledge system (Du, 2017). These characteristics provide support for the theory that students should learn independently in blended learning.

Human memory is not storage, but retrieval. Students can extract effective information on the basis of knowledge understanding, which is helpful for students' memory storage (Li & Zhao, 2008). In blended learning, students can view the learning materials uploaded by review teachers at any time, which has a certain role in promoting students' memory storage.

The basic structure of the subject is important. Students are required to understand the basic structure of the subject first and use the understanding of meaning to deepen the study of the subject, which has achieved the purpose of in-depth study (Li & Zhao, 2008).

In teaching, teachers are required to provide students with appropriate learning resources to update online resources in time to help students learn more (Al-Musawi, 2011).

Based on the above cognitivism, when designing learning tasks based on the blended learning model, researchers should pay more attention to students' individual differences and teach them according to their abilities so that they can acquire meaningful knowledge. In the teaching process, encourage learners to actively participate in the learning process and encourage students to be independent learners. Create opportunities for students to get feedback and training through their own practical exploration to acquire new knowledge.

2.2.3 Constructivism

In the 1960s, the Swiss philosopher and psychologist J. Piaget created the theory of children's cognitive development and is regarded as the earliest proponent of contemporary constructivist theory. He believes that learning is the process of children's own exploration, construction, and discovery, as well as assimilation and adaptation. Since then, on the basis of Piaget's theory, Lev Vygotsky's "Zone of Proximal Development" established the foundation for the further development of contemporary constructivism.

Constructivists believed that knowledge is not gained through teachers' teaching, but learners realize the construction of meaning through the assistance and help of others under a certain social and cultural background. Context, conversation, collaboration, and meaning construction are the four elements of the constructivist learning environment (Joshi, 2017). Constructivism also advocates student-centeredness, allowing students to discover and explore on their own, and complete the construction of knowledge. The teacher is the identity of the tutor and facilitator in the teaching process (Bada, 2015).

Therefore, its characteristics of learning can be summarized as follows:

1) Advocate learner-centered learning. Learning is the process by which learners construct their own knowledge, which requires learners to actively explore and construct

their own knowledge system for meaningful learning (Michela, 2018). In blended learning, students should first learn to learn independently and create their own learning system instead of waiting for the teacher to teach (Du, 2017; Reid-Martinez & Grooms, 2018; Widyastuti, Lestari, Fadhillah, Nurfarida & Rosidin, 2019).

2) Encourage cooperative learning. Learning is an individualized behavior as well as social behavior. Learning needs to be completed in social interaction. Especially for language learning, teacher-student interaction, student-student interaction, teacher-student collaboration, and student-student collaboration must be paid attention to (Feng, Sun & Cao, 2019). In blended teaching, teachers can set up study groups, and students can discuss and communicate together under the organization and guidance of teachers, share their opinions, and help students a complete and meaningful knowledge system together (Arney, 2015; Widyastuti, et al., 2019).

3) Allow learners to autonomously control their own learning process. Constructivism believes that since learning is a process of active exploration by learners, learners should have places and resources where they can freely explore and learn independently (Du, 2017). In this environment, students can use various tools and information resources to achieve their learning goals (Al-Musawi, 2011). In teaching, in order to support learners' active exploration and complete meaning construction, teachers should provide learners with free learning space during the learning process, various learning resources, and different situations for exploration and construction own knowledge framework (Sui & Shi, 2019).

4) Emphasize situational teaching. Context, conversation, collaboration and meaning construction are the four elements of learning, the combination of the four is considered the best learning environment (He, 1997). In the teaching process, it is necessary to actively create a situation corresponding to the teaching content so that the learning content can be internalized into actual application ability (Du, 2017).

Based on the above basic viewpoints of constructivism learning theory and the understanding of the blended learning model in the literature, it can be seen that constructivism has important guiding significance for the implementation of blended learning. The blended learning of this study adopts a student-centered learning process with the teacher as a proving guide and assistance, focusing on cultivating students' self-inquiry and active discovery. In blended learning, the teacher needs to design meaningful questions for learning units and publishes them online. After that, under the guidance, organization, and monitoring of teachers, students can enter into certain learning situations in the online environment and conduct independent or group cooperation inquiry learning activities so as to achieve meaningful learning construction. In the offline face-to-face teaching, the activities designed by the teacher will be used as the carrier to create as many opportunities as possible for students to display their online learning achievements, attach importance to students' language expression and learning communication, and fully mobilize students' learning initiative. In the blended learning model under the guidance of constructivism, students are allowed to take charge of their own learning, including integrating course materials or searching for supplements to construct their own knowledge. In the process of communicating with the group, it is also a practical application of the knowledge mastered, and knowledge acquired through practical application, rather than rote memorization. To some extent, these have promoted the students' ability of critical thinking and problem-solving as well as the ability to communicate and cooperate.

2.2.4 Humanism

Humanism was founded in the 1950s and became popular after the 1960s. Its main representatives are Abraham H. Maslow and Carl R. Rogers. Humanism advocates that people should be studied as a whole person and people should be concerned about their high-level psychological activities, instead of dividing people into parts for analysis.

Humanistic learning theory explains learning from the perspective of holistic education. Rogers (1957) points out that static learning information is no longer adaptable

to the change of modern society. The previous way of learning is also unable to make students confront the current social situation. Therefore, it is necessary to adopt new and challenging learning models for a changing society.

The humanistic learning theory emphasize the self-realization of people. It believes that everyone has the ability and motivation to develop their own potential. In teaching, students' personality development should be promoted. Also, students' emotions, needs, aspirations, and individual differences of students should be paid attention to.

In addition, humanism emphasizes the influence of the learning atmosphere and external learning environment on students. To treat students equally, to care for and understand students, to reduce the threat of the external environment to students (Zhou, 2015). The teacher takes the role of consultant in teaching and should strive to create a good learning atmosphere to promote students' learning (Timperley, Wilson, Barrar & Fung, 2007). A suitable atmosphere promotes learners' enthusiasm and initiative in learning (Heinrichs, 2016; Chen & Schmidtke, 2017). Humanism reminds teachers how to create a good learning environment for learners so that they can perceive and understand from their own perspective (Purswell, 2019; Al-Shammari, 2021). It is important to create a free, democratic, harmonious, caring, and understanding learning atmosphere for students (Shi, 2006).

Humanism emphasizes that the goal of teaching is to promote learning. Learners should be driven by curiosity to complete the absorption of knowledge, rather than teaching by teachers. Rogers (1957) believes that there are two ways of learning, significance learning and insignificance learning. The significance of learning is learning that integrates everyone's increased experience. The characteristics of significant learning are total concentration, automatic spontaneity, comprehensive development, and self-assessment (Li, 2016). Rogers (1957) claims that significant learning by doing is one of the most effective ways to promote learning. Humanism focuses on meaningful learning. The humanistic view

of learning and education has profoundly affected education worldwide and promoted the development of education reform (Wu, 2016).

Based on the basic characteristics of humanism. In the process of blended learning, teachers should respect every student and treat every student equally. Students should also be provided with a variety of learning resources and a good learning atmosphere to facilitate their learning. Students should be allowed to decide for themselves how to learn. In addition, students should be motivated to learn. At the same time, care should be taken to encourage students appropriately and motivate them in order to promote effective learning.

2.3 Teaching Chinese as a Foreign Language

Chinese as a foreign language began in 1950 until 1983 it became an official subject and has been officially defined. Teaching Chinese as a foreign language refers to teaching Chinese to foreigners, it is a foreign language teaching. In other words, it is a kind of language teaching to non-Chinese native speakers or learners whose first language is not Chinese (Zhao, 2010). The fundamental purpose is to cultivate the ability of learners to communicate in Chinese and master basic Chinese knowledge, listening, speaking, reading, and writing skills (Liu, 2000). Furthermore, enhance students' interest and motivation in learning Chinese, develop students' intelligence, and cultivate students' self-learning ability of Chinese. Besides, acquaintance with Chinese cultural and basic knowledge of China's national conditions improves cultural literacy (Lyu, 1996; Liu, 2000; Zhao, 2005; Liu, Zhang & Sun, 2017).

Therefore, curriculum setting and arrangement focus on the fundamental purpose. The curriculum mainly adopts the combination of the comprehensive course and the sub-skill course. There are usually comprehensive classes, listening classes, speaking classes, reading classes, and writing classes. The contents of teaching Chinese as a foreign language focus on four aspects: 1) linguistic elements, including Chinese phonetics, vocabulary, grammar, and Chinese characters. 2) Verbal skills, including Chinese listening, speaking,

reading, and writing. 3) Verbal communication skills, such as Chinese pragmatic rules, discourse rules, communicative strategies. 4) Cultural knowledge, such as cultural factors of Chinese, basic national conditions of China (Liu, 2000; Zhao, 2005; Liu et al., 2017).

2.3.1 The Characteristics of Chinese as a Foreign Language

Now the development of Chinese as a foreign language has been through 70 years and has formed its own disciplinary characteristics. Nowadays, it has become an independent discipline and established a complete discipline system (Liu et al., 2017), with clear research objects and objectives, a complete discipline theoretical system, a mature research team, and abundant research achievements (Zhao, 2005). Lyu (1996) points out that teaching Chinese as a second or foreign language has the same nature as teaching English as a foreign language, but it also has its own particularity.

Firstly, Chinese as a foreign language teaching has the generality as well as the particularity of second language teaching. Chinese as a foreign language is a language teaching, master language skills are very important (Liu, 2000). It is a kind of foreign language teaching. The students who generally have no Chinese foundation, cannot speak Chinese. Chinese teaching starts from pronunciation and learning to speak (Liu et al., 2017).

Secondly, the Chinese have their own special characteristics. Chinese is a language system in which the character and the sound are separating. That means Chinese characters, Chinese phonetics and the meaning of Chinese are independent (Liu et al., 2017). Therefore, phonetics and Chinese characters are difficult for learners (Guo, 2016; Fan, 2015). Chinese has four tones. The tones can distinguish the meaning based on the sound. In writing, Chinese characters are pictorial and different. Numerous languages have no tones (Guo, 2016). Besides, Chinese characters are different from English, Thai, or Japanese. It is a two-dimensional square character and the strokes of a Chinese character are complex (Li, 2014). Therefore, Chinese characters are difficult for learners who are non-Chinese speakers.

Thirdly, Chinese as a foreign language is a discipline with equal emphasis on theory and practice. The learners from different regions and different countries have different cultures. The most important purpose of language learning is communication (Zhao, 2005). Therefore, teaching Chinese as a foreign language is not only teaching theory but also practice (Liu, 2000; Zhao, 2005; Liu et al., 2017). Thus, in the language class or after class, more practice should be allowed and more activities should be conducted.

In brief, Chinese as a foreign language requires mastery of language skills for the purpose of communication. However, the students are usually those who do not have the foundation of the Chinese language. Therefore, during teaching, the focus is on students' skills training, practicality, and the communicativeness of the language.

2.3.2 Principles of Teaching Chinese as a Foreign language

At present, Chinese as a Foreign language has become an independent subject (Liu, 2000). The principles were gradually improving, based on the special characteristics of the Chinese. Chinese as a foreign language has its own principles as discussed below.

Cultivate Chinese communicative competence

The purpose of language learning is for communication (Hymes, 1972). All teaching activities should be designed to develop communication skills. Mastery of the basic knowledge and skills of Chinese is important for communication (Liu, 2000). Therefore, learning Chinese includes learning vocabulary, pronunciation, grammar, and character writing.

Emphasize student-centered learning

Traditional teaching is teacher-centered, thus leading to student passive learning. Chinese as a foreign language is a subject different from the other courses. Teachers should improve students' enthusiasm in class. guide students to create initiative and creativity, students' self-learning and cooperation-learning abilities (Zhao, 2010).

Combine language and culture

Each country has its own culture. Culture is one of the most important factors affecting language learning (Lyu, 1996; Wen, 2008). It is necessary for students to be familiar with the basic Chinese national conditions, cultural background, and cultural literacy. Language learning is inseparable from culture (Liu, 2000).

Strengthen the connection between theory and practice

Students should master the theoretical knowledge at first and then apply it to practice, consolidate theory in practical training (Zhao, 2010). In actual teaching, teachers should pay attention to guide students to apply the knowledge in class to their actual life, so that knowledge can be sublimated into practice (Liu, 2000). Learners should be allowed to practice more and talk more.

Emphasize appropriate input

Language teaching should start from students' receptive ability (Krashen, 1982). The quantity and difficulty of knowledge in teaching should be in line with the physical and mental development of students (Li, 2019). That is, it should not be lower than the level of the students and over than the level of the students. The teaching process should follow the principle of “less but better” (Zhang, 2018).

Learn step by step

Every subject has its own knowledge system. From easy to difficult are the rule of the knowledge system and the learning principle that learners should follow (Liu, 2000). In Chinese learning, students should start from easy to difficult (Zhao, 2004). Liu, Zhang and Sun (2017) claim that Chinese is complicated. Chinese language learning must start from its phonetic knowledge to vocabulary and grammar.

In summary, each language has its own characteristics. In order to master the language, learners should follow its learning principles in order to build a complete body of knowledge. These principles provide guidance for teaching listening. When teaching

Chinese to no-Chinese native speaker, it is important to focus on meeting students' individual needs, to combine appropriate output with students' own characteristics, and to pay attention to the diversity of teaching and learning, and to teach with appropriate cultural teaching.

2.4 Teaching Chinese Listening

According to Wilt (1950), in the total time of people's lifetime, listening accounted for 45%, speaking 30%, reading 16% and writing accounted for 9%. The paper from the World Science (2017) pointed out that listening and speaking should be mastered first.

2.4.1 Definitions of Listening

Listening is a skill to give attention to someone or something in order to hear him, her or them and understand what others have said (Howatt & Dakin, 1974). Most researchers claim that comprehension is the nature of listening, in most methodology manuals listening and listening comprehension are synonymous (Richards, 2008). That is, listening as comprehension. From the perspective of cognitive, listening comprehension is a cognitive process of a series of information processing and transformation (Brown, 2006). It is a process of using the existing knowledge to understand the true meaning of the speaker after receiving new information (Anderson & Lynch, 1998).

Graham and Santos (2015) noted that listening is unidirectional, where the person seeking comprehension does not interact with the speaker, such as listening to a lecture, radio broadcast, or to an announcement. Brown (2001) argued that listening is not only a process of one-way receiving but also an interactive process of language in which the listener should decode the received language information according to his own knowledge storage in this process. Rost (2005) also claims that listening is a process of receiving information know what the speaker actually says, construct the utterance, react to the speaker, and communicate and negotiate with the speaker, and responding, and creating

meaning through involvement, imagination, and empathy. Kim and Pilcher (2016) stated listening comprehension as one's ability to appreciate spoken language at a discourse level, including conversations, stories, and informational oral texts, in the processes, involve listener extracting and constructing the meaning of information.

In conclusion, listening is a highly complex process in daily communication or in a language (Rost, 2002). For language learners, listening is a crucial skill. It helps language learners to receive information with language input and interacts with other language skills (Vandergrift & Goh, 2012). Khuziakmetova and Porcheskub (2016) stated that listening is a leader among all other kinds of skills (speaking, reading, and writing) and it provides the basis for their development. Kim and Pilcher (2016) also mentioned that the quality of listening ability will affect the quality of both speaking and writing. Ahmadi (2016) claimed that no listening skill, means no language learning, even no communication. Therefore, listening teaching is a crucial step in language learning. Strengthening listening training and facilitate students' listening comprehension ability should be paid more attention to.

2.4.2 Types of Listening

Listening is one of the important skills in human's daily life communication (Sahin, 2020). Different situations need different types of listening. Therefore, in order to fully apply this skill, it is necessary to understand different listening types (Kline, 1996). In the view of listening skills, five major types of listening are discussed below.

First, Discriminative listening. It is an attentive and usually instrumental type of listening (Schmitz, 2016). It is mainly listening to the sound to judge the means of message, the listener is sensitive to the speaker's rate, tone, stress, and stress, so it is often used for recognition of the accents (Tcagley, 2016). Discriminative listening also is used to distinguish emotions (Kline, 1996). For example, when someone is happy or dejected, the feeling could be distinguished from their voice. Discriminative listening is the most basic form of listening (Kline, 1996; Tcagley, 2016; Ramachandran & Shinu, 2017)

Second, Comprehensive listening. This type of listening requires that the listener understand the message, the ideas, and the thoughts (Derrington & Groom, 2004; Kline, 1996). It is close to events in our life. Most comprehensive listening is used in the classroom (Ahmadi, 2016). In order to gain a better understanding of what the speaker means, the listener needs to master vocabulary, grammar, and other language knowledge to remember and retain the information (Kline, 1996). In the classroom, students need to confirm the speaker's purpose, identify the main ideas and then organize the information in order to remember it.

Third, Appreciative listening. It is a type of listening where the listener can gain enjoyment (Derrington & Groom, 2004). The purpose of appreciative listening is for fun or appreciation. It is an emotional response (Lucas, 2004). When people listen to music, radio, television, film, or listen to storytellers telling stories. Listeners can choose what they like to listen to (Kline, 1996). Buus, Einboden, Gill, Liu, and Ong (2020) proved that appreciative listening can be used in medical treatment by clinicians.

Fourth, Critical listening. It focuses on evaluating and analyzing the message content (Ramachandran & Shinu, 2017). It is beyond understanding as the listener is required to judge the message of the speaker to decide if it is rational or irrational, positive or negative, true or false (Sahin, 2020). Kline (1996) claims that critical listening is important in a democratic society, the job, or the classroom. Students use critical listening when they listen to debates, commercials, political speeches, and other arguments. Developing critical listening is possible with practice (Erkek & Batur, 2020).

Fifth, Empathetic listening. It refers to listening to the speaker who intends to know the feeling of the speaker to show him or her empathy, support, and advice. (Ramachandran & Shinu, 2017). The purpose is to get the speaker to listen to a friend or acquaintance and to get him to talk about a problem. It involves understanding the speaker's mental state during the conversation. It could be a personal problem, or an overload of work, or something else (Cuny, Wilde & Stephenson, 2012). Empathetic listening is a tool for

empowerment because it allows students to feel heard and understood in a possible way, not in a typical public speaking class (Fabian, 2019).

Listening is one of the indispensable activities in our daily life. It may be with family, friends, classmates, teachers, colleagues, or leaders. An appropriate listening way to understand the message is necessary. Listening as a skill can be trained and improved (Boonchit, 2017). Better listening will help shorten the distance between people. How to improve listening skills must be the focus of the instructor (Zhou, 2015).

This study investigated whether students listening skills could be improved with a blended learning model of lessons. As it is also worth noticing the requirements of each type of listening, data were collected on this to show how students studying Chinese listening could be best prepared.

2.4.3 The Process of Listening

Listening occupies an important position among four language skills but listening comprehension is a complex skill for non-native speakers (Pangaribuan, Sinaga & Sipayung, 2017). Without a doubt, to be a good listener, the listening comprehension processes must be learned. For the listening processes, bottom-up processing, top-down processing, and interactive processing are commonly accepted by many educators (Solak & Erdem, 2016).

Bottom-up processing can be defined as sensory analysis that begins at the entry-level-with what our senses can detect. It emphasizes the impact of the input of new knowledge on comprehension. The bottom-up model uses the pronunciation, words, and sentences and analysis of language factors to derive the information (Richards, 2008).

Unlike top-down processing, bottom-up processing is purely data-driven and requires no previous knowledge or learning. Bottom-up processing takes place as it happens (Kardan et al., 2015). This model advocates that appropriate listening skills training and

vocabulary and grammar explanations should be arranged before listening comprehension (Gilakjani & Sabouri, 2016).

The teachers generally start from the recognition of phonetics and then enter the learning of new words, sentences, and texts in turn. Therefore, learners need to have a large vocabulary in order to understand the structure of sentences and understand the meaning of sentences or texts (Richards, 2008). However, O'Malley and Chamot (1994) argued that the bottom-up model makes the learner get the words, sentences, and grammar independently and lacks the connection between contexts, which is easy to lead to misunderstanding of vocabulary.

Top-down processing means the use of existing knowledge to comprehend, judge, and predict the received information. Wilson (2008) claims that much of comprehension of the top-down model relies on what occurs in the mind before. In the listening process, this model emphasizes that relevant phonetic vocabulary and grammar teaching should not be conducted before listening activities, but to activate background knowledge, organize students to predict the content of the materials they want to listen to, select and process the information in short-term memory during listening, and complete the whole listening in the process of continuous prediction and verification (Liu, 2015).

In summary, students need to master the technique of using the keywords to construct a discourse, infer the meaning of the text, infer the situation upcoming, and estimate the question related to the topic. It requires teachers to focus on training the ability of inference of students. As commonly believed, top-down processing often weakens the decoding of linguistic form and ignores the role of linguistic knowledge. If the listener is unfamiliar with listening materials input, he or she would fail to activate the relevant schema to complete the listening comprehension.

Interactive processing involves interaction bottom-up processing and top-down processing. Rumelhart (1977) claims that listening is a process of interaction between

bottom-up processing and top-down processing. Many researchers suggest both top-down and bottom-up listening processing should be combined to enhance listening comprehension (Gilakjani & Sabouri, 2016). Richards (2008) states that in real listening, both bottom-up and top-down processing happens at the same time. Liu (2019) claims that interactive processing makes comprehension and interpretation become easily. In addition, Wilson (2008) and Gilakjani & Sabouri (2016) both believed that the interactive model overcomes the deficiency of the top-down model and bottom-up model. It is the most ideal model for listening teaching.

In short, listening comprehension is processing with multiple factors. Thus, in order to achieve better listening comprehension, different listening sub-skills must be practiced and developed. From the pilot researches (Rost, 1990; Field, 2008; Richards, 2008; Wilson, 2008; Nation & Newton, 2009; Vandergrift & Goh, 2012), there are major sub-skills as listed below:

Listening for gist

In listening, it is good to understand the main idea of the text, which is helpful for listening comprehension. Therefore, the listener should listen for main idea sentences or keywords to catch the main message.

Listening for specific information

Listen to some particular information requires the listener to pay attention to specific details such as numbers and dates.

Listening for details

Listen carefully and try to grasp as much information as possible to understand the details that support the gist.

Listening for attitude

Different intonations can reflect different attitudes and feelings. If one can distinguish what the speaker is expressing, it will help to comprehend the meaning.

Inferring meaning

Guess the meaning of an unknown word from the context or use keywords

to infer the meaning.

Predicting content

Use clues or mobilize existing knowledge or life experience to make predictions.

Relating the listening text to the social and situational context

The culture of each language is different, it is significant to relate listening text to the current situation.

When teaching listening, strengthening students' listening skills training is required, especially, listening sub-skills as mentioned above, should be strengthened as well as the interaction between teachers and students, and between students. Hu (2015) believes that in listening teaching, students' listening comprehension skills can be improved mainly through four modes: teacher-student interaction, student interaction, human-text interaction, and human-computer interaction. These four types of interaction were promoted in the study throughout the lessons that were designed based on blended learning.

2.4.4 Strategies of Listening

Listening comprehension is extraordinarily important. Improving the learners' listening capacity is the key to language learning. Scholars and researchers have explored listening strategies for teaching this skill. As a result, various strategies have emerged. Three kinds of strategies have been mentioned many times by researchers such as Conrad (1989); Oxford (1990); O'Malley and Chamot (1990); Rost and Ross (1991); Buck (2001), Wilson (2008) and Bingol, Yidliz and Mart (2014). They are cognitive, metacognitive, and socio-affective.

Cognitive Strategies means some methods and technologies used in information processing, including rehearsal-strategy, elaboration-strategy, and organizing-strategy.

Rehearsal-strategy refers to the strategy of remembering information through continuous and active repetition of information. Repetition, copying, and marking all

belong to the rehearsal strategy.

Elaboration-strategy is to organize and integrate the existing knowledge and new knowledge in a meaningful way so that new information can be easily understood, memorized, and retrieved. There are many methods of elaboration-strategy, for example, loci-method, acronyms, peg-word method, key-word method.

Organizing strategy refers to the strategy of classifying and sorting information to establish the category, level, or structure relationship between information so as to strengthen and improve the memory, understanding, and expression of materials. The essence of organizational strategy is to organize the learning content with a certain structure. Cluster strategy, outline, diagram, and flow chart are all organizational policies.

In the listening process of this study, the teacher should teach the students some listening skills, and focus on listening skill training, such as how to capture the keywords, how to reasoning according to the context, and so on. If they can master listening skills, it will be good for their listening scores in the tests. Zhao (2018) proves that on the test, students who were good at listening and cognitive strategies got the more correct answers.

Metacognitive Strategies refer to learner self-management, such as plan, monitor and adjust the learning process. In the process of learning, learners must use some strategies to arrange their own learning plans, monitor their own learning process, and adjust their own learning plans and methods according to the learning outcomes. Metacognitive strategies include planning strategy, monitoring strategy, and self-regulation strategy (Vandergrift & Cross, 2015).

The planning strategy is reflected in a learning process, that is, students should first set their own learning goals, and analyze how to complete the learning tasks. Monitoring strategy refers to the strategy of monitoring the process and effect of learning. For example, monitor whether you are distracted during the study, monitor and manage your attention; monitor your speed and time during the examination; self-questioning of

material, and monitor whether you understand and understand the materials. Control strategy refers to the strategy of adjusting the learning plan and method according to the effect of learning. When finding that there is not enough time in the examination, skip the difficult problems and do simple questions first; when finding that the original problem-solving method is invalid, use other methods; if learning according to the original plan cannot complete the learning task, adjust the learning plan.

Thompson and Rubin (1996) point out that metacognition not only helps students to make effective self-adjustment in listening learning but also improves their listening comprehension. According to Wenden (1998), the metacognitive knowledge of second language learners helps us to understand the learners' views on the learning process. Nunan (1998) believes that metacognitive strategies can help students understand the learning process more clearly, strengthen their metacognitive knowledge structure, develop their metacognitive knowledge, and help them achieve better academic performance. O'Malley and Chamot (1994) also pointed out that metacognition plays a potentially important role in improving listening comprehension, which can help students to adjust and regulate themselves effectively.

In real-time teaching, many educators combine metacognitive strategies with their class and found that it is effective to work. Nosratinia, Ghavidel and Zaker (2015) based on Aderson's Model, designs a listening class and finally finds that metacognitive strategies can promote listening comprehension. Wang (2020) states that the application of metacognitive strategies can improve the students' ability of autonomous learning, in conclusion, metacognitive strategies play a positive role in listening comprehension, and teachers can guide students to conduct listening training according to metacognitive strategies in listening teaching so as to give play to students' autonomy.

In the line of metacognitive strategies, when conducting blended learning, teachers should give more guidance to students in listening. The teaching process is divided into four aspects: listening, listening to the regulation, problem-solving, and evaluating after listening,

in order to cultivate learners' listening metacognitive awareness and improve listening comprehension and language ability.

Socio-affective Strategies Among the input hypothesis of Krashen, one is the affective filter hypothesis. Krashen (1982) believes that students' comprehensible input is influenced by affective factors, such as motivation, attitude, anxiety, and self-confidence. They are obstacles in the process of language acquisition. and that emotion directly affects understandable input and learning effects. For example, in the process of teaching listening, stress, anxiety, or poor health will influence listening input, thereby affecting the validity of listening. Therefore, teachers should pay attention to teaching methods, but also pay attention to create a good learning atmosphere for students so as to eliminate students' nervous anxiety.

According to the Affective Filter Hypothesis (Arnold, 2000), when students have low anxiety about foreign language learning, their spirit will relax and the effect of language input will be better, which will promote language learning, and vice versa.

Lu (2019) finds that most students are in an anxious state in Chinese listening learning because they seldom use Socio-affective Strategies. The higher the level of Chinese listening anxiety, the more learning strategies students used. The more frequently the students used low-skill learning strategies, cognitive strategies, and metacognitive strategies, the more anxious they were. Therefore, she suggests emphasizing the use of Socio-affective Strategies.

Feng (2020) through the study of the relationship between listening anxiety and listening strategies as well as their influence on listening performance finds that listening anxiety and listening strategies are important factors affecting learners' listening level. If learners fail to use appropriate listening strategies when they complete the listening task, they will have anxiety during the process, which will affect the improvement of listening level.

All the above shows that socio-affective is one of the important strategies on listening comprehension, it cannot be ignored. During the listening training, teachers should pay more attention to socio-affective and help students to reduce anxiety, for example, listening to songs, watching video and movie clips, listening to the radio, or employing games to attract students' interest, to stimulate students' enthusiasm for learning. According to Hurlock (1925), praising and encouraging more can better stimulate students' interest in learning.

2.4.5 HSK Level 4 Listening

Chinese Proficiency Test (HSK) is a standardized and international Chinese proficiency test for non-native Chinese speakers. It was designed and developed by the Chinese proficiency test center of Beijing language and culture university. The test focuses on the ability of candidates whose Chinese is not their native language or first language to use Chinese for communication in life, study and work. According to the regulation of the China Ministry of Education, a foreign student can register Chinese universities and apply for scholarships to study in China by HSK score reporter and HSK score as an important basis for enterprise employment.

HSK was first developed in 1984. In 1990, the examinations were organized regularly in China. In 1991, HSK was officially implementing overseas (Luo et al., 2011). At present, HSK constitutes a relatively complete system from low level to the high level. In order to make the HSK better appositeness the Chinese learners. Office of Chinese Language Council International (Hanban) organization the Chinese language teacher, linguistics, psychology, and education experts to overseas for investigating. After the full investigation, Hanban based on the basis of the actual situation absorbs the advantage of the original HSK, references from the latest achievements of international language test, and launches a new Chinese proficiency test.

HSK is divided into six levels, ranged from HSK Level 1 to HSK Level 6. The

vocabulary size of each level is based on the International Chinese Language Proficiency Scales for Speakers of Other Languages and the Common European Framework of Reference for Languages (CEF). The corresponding relationship between HSK, International Chinese Language Proficiency Scales for Speakers of Other Languages, and the Common European Framework of Reference for Languages (CEFR) is shown below (See Table 2.2).

Table 2.2 The corresponding relationship

HSK	Vocabulary Range	International Chinese Language Proficiency Scales for Speakers of Other Languages	CEFR
Level 1	150	Level 1	A1
Level 2	300	Level 2	A2
Level 3	600	Level 3	B1
Level 4	1200	Level 4	B2
Level 5	2500	Level 5	C1
Level 6	More than 5000		C2

Source: Adapt from Hanban, 2010

According to the Chinese Proficiency Test (HSK) Syllabus (2010) students of different levels must be master different Chinese skills. The detailed skills of each level were be shown below (See Table 2.3).

Table 2.3 The Chinese skills of each level of HSK

HSK level	Chinese skills
Level 1	Can understand and use some very simple Chinese words and sentences, so as to meet specific communication needs and have the ability to further learn Chinese.
Level 2	Can communicate with each other in Chinese in a simple and direct manner on familiar daily topics, thus achieving an excellent level of elementary Chinese.

Table 2.3 The Chinese skills of each level of HSK (Cont.)

HSK level	Chinese skills
Level 3	Can complete basic communication tasks in life, study and work in Chinese. They can handle most of the communication tasks when traveling in China.
Level 4	Can discuss a wide range of topics in Chinese and communicate with native Speakers of Chinese fluently.
Level 5	Can read Chinese newspapers and magazines, enjoy Chinese movies and TV programs, and give a more complete speech in Chinese.
Level 6	Can easily understand the Chinese information they hear or read, and express their opinions fluently in Chinese, either orally or in writing.

Source: Adapt from Hanban, 2010

The test questions of the HSK examination are expertly appraised by experts of the National Chinese Proficiency Examination Committee, who based on the International Chinese Language Proficiency Scales for Speakers of Other Languages to write test items. The National Chinese Proficiency Examination Committee is composed of experts in the fields of Teaching Chinese as a Foreign language, Chinese language and literature, psychological and computer technology, which is a reliable guarantee for the reliability and validity of the examination (Liu, 1997). In addition, all the test paper through the prediction and equivalence measurement. Before forming the official test paper, experts make 3 sets of test papers and conduct the exam in the sample group who with equivalent to the test level. Then experts select the test papers from the 3 sets of prediction test papers according to the indexes of each question to form a formal test. Then using equivalence measurement. The formal papers will be tested in the sample group again. Finally, the HSK test paper can be officially put into use (Ren, 2001). The test items of HSK form the database system now, the test paper is automatically generated by the computer. In addition, the examination is solely supervised by the Ministry of Education of China. The quality report of the new Chinese Proficiency Test (2012) shows that most HSK tests have a reliability of 0.90. Many researches show that HSK validity also reaches a high level (Wang, 2006; Chai, 2011).

HSK Level 4 tests have a total of 100 questions, divided into three parts: listening, reading, and writing. The listening comprehension of HSK Level 4 is divided into three parts, consist of 45 questions. It is required to answer the 45 items in 30 minutes and each question is listened to once. Part 1 contains 10 items, require to judge true or false according to dialogue. Part 2 contains 15 items, requires listening to the short dialogue, choose the correct answer. Part 3 consists of 20 items, requires listening to the long dialogue, choose the correct answer. The detailed paper (See Appendix H).

In recent years, many researchers have analyzed the type of questions on the listening test of HSK Level 4 and found that the scope of listening of HSK4 is focused on work and study, life, culture and nature, these dialogues are more life-oriented and direct in language and involved the attitude, emotion of people (Du, 2017). Wang (2019) argued that listening of HSK level 4 not only talks about attitude, emotion, and purpose but is also related to the reasoning short story, the language is more formal. Therefore, Wang (2019) made a detailed analysis of listening of HSK Level 4 and finds that the topics cover a wide range, including daily life, work, education, science and technology, culture, nature, and other aspects. Among the topics, daily life is the most frequently asked question, under the topic of daily life, family life and transportation are the most frequent topics. The major topic can summarize as follows (See Table 2.4).

Table 2.4 The topics of listening of HSK4

Daily life	family life, campus life, workplace life, weather, shopping, food, transportation, social life, sports, health care, personal finance, environmental protection, news reports, etc.
All kinds of information	personal information, event information, item information, time information, premises information, etc.
Education	teaching activities, learning situation, phenomenal problems, etc.
Occupational work	employment separation, daily office, public relations activities, customer negotiations, etc.
Culture	customs and traditions, customs and traditions, geographical places, language and writing, etc.
Experience and perception	life reflection, life perception, etc.

Table 2.4 The topics of listening of HSK4 (Cont.)

Literature and art	various stories, various arts, introduction of works, famous people and celebrities, etc.
Technology	Network technology, general knowledge of science, etc.
Nature	animals, plants, natural phenomena, environmental climate, people and nature, etc.
Economy	economic phenomena, economic management, business and trade, etc.

Source: Adapted from Wang, 2019

It can be seen that the listening of HSK Level 4 involves a wide range, but there is regular. Thus, in this study, all test questions were selected from HSK Level 4 (2018) test paper. The details are shown in Table 2.5 below.

Table 2.5 Listening Content of HSK Level 4 (2018)

Question	Content	Skills
1	Talk about the weather	Mastering the vocabulary about the weather, knowing how to Description the weather and identify synonyms
2	Talk about daily life	Inferring the main idea of the conversation
3	Talk about food	Inferring the main idea of the conversation
4	Talk about people's hobbies	Inferring the main idea of the conversation
5	Praise others	Mastering the vocabulary of praise, Inferring the main idea of the conversation
6	At the airport	Inferring the main idea of the conversation
7	Describe personality	Mastering the vocabulary that describes the character of a person and inferring the main idea of the conversation
8	Talk about daily life	Inferring the main idea of the conversation
9	Talk about daily work	Inferring the main idea of the conversation
10	Get sick and see a doctor	Mastering the vocabulary of sick and need to know how to describe pathological symptoms
11	Describe the location	Mastering orientation words
12	Talk about travel	Inferring the main idea of the conversation
13	Talk about weight loss	Guessing the meaning of words
14	Talk about daily work	Inferring the main idea of the conversation
15	Ask others about their attitudes and opinions	Inferring the main idea of the conversation
16	Talk about camera characteristics	Mastering the words that describe the characteristics of things
17	Describe the traffic jam takes	Mastering the words that describe the traffic and inferring the main idea of the conversation
18	Talk about the plan	Inferring the main idea of the conversation
19	Buy a ticket	How to ask for a price

Table 2.5 Listening Content of HSK Level 4 (2018) (Cont.)

Question	Content	Skills
20	Discuss opinions, attitudes	Inferring the main idea of the conversation
21	Describe the climate.	Mastering the vocabulary about the climate and inferring the main idea of the conversation.
22	Location.	Understanding the characteristics of each location
23	Talk about daily work.	Inferring the main idea of the conversation
24	Describe the characters of the person	Mastering the vocabulary that describes the character of a person and inferring the main idea of the conversation
25	Talk about festivals	Mastering the vocabulary of festivals and the activities of each festival
26	About daily life	Inferring the main idea of the conversation
27	Character relations	Mastering character relationship vocabulary and inferring character relationships based on dialogue
28-29	Daily life.	Inferring the main idea from the dialogue
30	Location.	Understanding the characteristics of each location
31	Daily life	Inferring the main idea from the dialogue
32	In a hotel	Master the vocabulary of check-in and inferring the main idea of the conversation
33	Travel, book air tickets	Knowing how to selecting an airplane seat and inferring the main idea of the conversation
34-35	Daily life	Summary and inferring the main idea from the dialogue
36-37	Rent a house	Mastering how to describe the location and characteristics of the house, inferring the main idea from the dialogue
38-39	Talk about animal characteristics	Mastering vocabulary about characteristics of the animal
40-41	Talk about TV shows	Inferring the main idea from the dialogue
42-43	Talk about shopping	Inferring the main idea from the dialogue
44-45	Inspiring short story	Summarizing and inferring the main idea from the story

Source: Researcher, 2021

As shown in the table above, the main listening skills involve summarizing and inferring the main idea of the conversation. Additionally, it is also important to master the vocabulary of different situations.

2.4.6 Major Difficulties during Listening Comprehension

Listening is the process by which auditory organs receive and decode voice messages (Purdy & Borisoff, 1997). During the process of delivery, it is influenced by many

factors. According to the previous researches the factors influencing the listening comprehension can be concluded as follows:

The characteristics of Listening material

If the listening content is too difficult, it directly influences the students. If the listening content is too simple, students also feel that listening practice is meaningless (Brown, 2006). It is best to choose material that is suitable for students' level and close to students' living background (Brown, 2006). In addition, the quality of listening material especially recorded materials. If recorded materials have poor quality, the learners' listening, as well as the emotions, will be affected (Edrenius, 2018). Therefore, Richards (2008) suggests using authoritative or standard materials.

The characteristics of delivery

Listening exists in daily life. It is a receptive skill. Watching television or listening to the radio does not need learner responses (Kline, 1996). But in communicating with others, the speech rate of the speaker, the accent of the speaker affect students' understanding. Wilson (2008) states that the quality of recordings speed and number of speakers and accents can affect students' understanding. Furthermore, the environments of delivery can also affect listening (Kurniawati, 2019). Most students are used to listening in the classroom, when they start to listen to the conversation outside the classroom, sometimes they do not adapt, especially in the noisy environment, it is a big challenge for foreign learners.

The culture of language

As known to all, each language has its different cultural background. Language listening should connect with language culture. When the listeners understand the cultural background knowledge and store it in their minds, the listeners can infer, predict and filter the information, and then achieve listening comprehension (Lei, 2018). In addition, when students accumulate enough cultural background knowledge, it can also enrich students'

minds, broaden their horizons, cultivate their learning interests and stimulate their learning motivations (Liu, 2017).

The characteristics of the learner

The characteristics of the learner include age, learning style, emotions and the way of handling knowledge (Wilson, 2008). The age, learning style and cognition affect the size of the learner's vocabulary. When they encounter unfamiliar words, they stop to think and miss the next part of the listening text. They may become anxious and tense.

To sum up, when teaching listening, teachers should adopt different training approaches to train learners, choose authoritative listening materials, create a good listening environment for students, and usually pay attention to develop students' abilities in different listening environments. In addition, attention should be paid to developing students' interest in learning Chinese and improving their motivation. As Anderssen, Kritzing and Pottas (2019) mentioned that motivation is another factor that affects listening comprehension. If learners are motivated to learn, they will enjoy the class.

2.5 Related Studies

In this study, other researchers' relevant researches on listening skills and Blended Learning were reviewed. In order to obtain practical research results and where the study conducted filled in the landscape.

2.5.1 Blended learning improved students' listening skills

Guo (2010) conducted the research Application and Reflection of Blended Learning in the field of Teaching Chinese as a Foreign Language. This study focuses on the relationship among blended learning model, autonomous learning ability and Chinese listening comprehension. This study adopted a case study design. It experimented on a blended learning course of Chinese as a Foreign language at Stendhal University for three years. The findings of the research showed that a good curriculum of blended learning

model can improve students' autonomous learning ability. Autonomous learning ability can also improve the quality of the blended learning model and students' listening comprehension.

Chen (2020) conducted research on Listening Teaching in Junior Schools based on Blended learning Model. This study intended to explore the effects of blending on students' listening skills and students' attitudes toward the blended learning model. The results of experimental study showed that the blended learning model is helpful to improve students' listening skills and found that through blended learning students' interest in learning has improved and their learning attitude has changed from negative to positive.

Caruso, Colombi and Tebbit (2017) researched on the integration and effectiveness of blended learning in developing and assessing second language listening skills. They found that blended learning is more conducive to improving students' listening skills and meeting their needs. It was easier for teachers to assess as well.

Yang (2018) carried out a study on the application of blended learning based on MOOC in college. The study aimed to explore the blended learning model's influence on traditional class teaching. The data were collected through the pre-posttest, the questionnaire and the interview. The results of the study proved that the blended learning model can improve the teaching efficiency of listening and provide feasibility in the teaching of Chinese listening and speaking classes.

Ahn (2017) conducted a qualitative case study to investigate student perceptions of course effectiveness factors for language proficiency as well as learner autonomy in a blended learning model in language. It was found that blended learning model effective for language learning and student s' achievement, especially in listening and reading comprehension skills.

Qian (2019) conducted research aimed to investigate the effect of blended learning on learners' autonomous learning ability and academic achievements. In this study, two

classes were selected as the experimental class and the control class. The experiment was carried out for one semester. Finally, the scores of the two classes were compared. The result indicated that the optimization effect of blended learning was very obvious, which not only improves learner' autonomous learning ability but also improves the quality and effect of teaching and their listening skills.

Therefore, it can be hypothesized that on average, the students' Chinese listening skill score after the intervention by blended learning will be higher than that of before at $p = 0.05$.

2.5.2 Students were satisfied with blended leaning model

Sari and Wahyudin (2019) conducted research entitled "Undergraduate students' perceptions toward blended learning through Instagram in English for business class". This study took 116 undergraduate students as the sample size and used mixed methods with observation, questionnaire, and interview to collect data. This study intended to investigate the students' attitudes using the blended learning model. The results of this study showed that most of the students were with positive perceptions in a blended learning environment. Blended learning was found to affect students' motivation and attitude.

Karaaslan and Kilic (2019) studied "Students' attitudes towards blended language courses: A case study". This study took one group of second-year students from a School of Foreign Languages as the study's sample and explored students' attitudes with blended learning from learning-flexibility, study-management, technology use, classroom-learning, and online interaction. The statistical analysis of the questionnaire and focus group meeting showed that students who got a high achievement hold a positive perspective for blended learning.

Tian (2019) conducted research aimed to investigate the effects of the blended learning model on teaching efficiency and teaching effect as well as students' achievement and classroom activity. The study was conducted for 16 weeks at a university in China. Data

collected from the questionnaire survey, the pre-posttest and classroom observation confirmed that the blended learning model based on smart teaching is suitable for business Chinese classes. It improved the students' Chinese level and students' interest in learning.

Qi (2020) conducted research on The Application of Mixed Learning Mode in Comprehensive Learning and Teaching of Primary Chinese. This study adopted the literature method, survey method and conducted classroom teaching practice in a class of Chinese comprehensive courses in primary school. The findings of the study showed that both students and teachers hold a positive attitude toward the blended learning model and the teaching effects have also increased significantly.

Koenig (2018) conducted research entitled "Effects of Blended Learning on At-Risk Youth: A Quantitative Study" at the university. This study aimed to explore the impact of blended learning on secondary at-risk students in the public classroom environments. The study was based on the data source of Measures of Academic Progress (MAP®) scores and used the Rausch Unit score (RIT score) to measure student achievement and growth. The results of the research showed blended learning is a form of instruction that combines traditional class face-to-face instruction, rich and engaging online content, and adaptive and interactive technologies. Using blended learning for secondary at-risk students make them got a good performance. And increasing students' interest to learning.

Cirak-Kurt and Yildirim (2018) conducted "The Students' Perceptions on Blended Learning". Through a Q method analysis and found most of students have a general tendency towards the blended learning process. And also shows that the factors can affect students' perceptions including: student-friendly environment, diverse learning materials, and a student-centered teaching model.

Therefore, it can be hypothesized that on average, the students participating in the blended learning Chinese listening class will be satisfied with their listening classes at $p = 0.05$.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter presents how the study was conducted by introducing the study's research design, research site, research population and sample, research instruments, data collection, data analysis as well as ethical considerations adopted in the study.

3.1 Research Design

This study was aimed to test the effectiveness of the blended learning model in a Chinese listening course. Therefore, the quantitative approach was employed to collect the data in the format of the Pre-Post Test scores earned at both events, which were expected to show how much improvement in students' Chinese listening skills after treatment.

In this study, a survey questionnaire was sent to each respondent in the group. Then, semi-structured interviews were organized to collect qualitative data from volunteering interviewees.

At the beginning of the study, one class of Mathayom 4 students was required to take a pre-test so as to identify the participating students' initial listening ability before the treatment. Then, the group went through the Chinese listening lessons which were designed based on blended learning. After 12 periods of the course, the Post-test was conducted to collect the scores of students. The scores of the two tests were compared to find whether or not the students' listening skills were improved, judging from the scores earned by the students in the Post-test. After that, the questionnaire, an instrument of the quantitative approach and semi-structured interviews of the qualitative approach was used to collect students' satisfaction with blended learning. Finally, the quantitative data were analyzed by a computer program, while the interview data were content analyzed (See Table 3.1).

Table 3.1 The Steps of the research and People Involved

	Research Step	Participants	Organization/People Involved
1	Questionnaire Design	The Researcher	3 Experts for IOC
2	Semi-Structured interview Design	The Researcher	3 Experts for IOC
3	Lesson plans	The Researcher	3 Experts for IOC
3	Pre-Post Test Distribution to Samples	One group of 31 students	Mathayom 4 students from Thai Chinese school
4	Questionnaire Distribution to Samples	One group of 31 students	Mathayom 4 students from Thai Chinese school
5	Semi-Structured interview Distribution to Samples	5 volunteers from the Samples	The class Chinese teacher of Mathayom 4
6	Data Analysis	1. Pre- Post Test 2. Semi-Structured interviews	1. Mean and S.D 2. Content Analysis

3.2 Research Site

Basic introduction of the school

The location of research is at one of the most famous Private Chinese schools in northern Thailand, where the researcher has been working for two years. This school has a history of 73 years in the Chinese learning area. There are 2,279 students, 90 teachers in school and 26 Chinese teachers among them. Its 22 Chinese teachers are Thai, 4 Chinese teachers from China. It is a school with 20 classes in kindergarten, 30 classes in elementary and 9 classes in secondary. Moreover, only one class per grade in high school. This study focuses on students of Mathayom Suksa Four, with a total 34 students.

The policies about Chinese

In this school, Chinese is the most important subject. All of the students from learning, each class has at least 10 periods each week, each class 45 minutes long. According to school policies, students who want to enroll in school should pass the Chinese test at the beginning. In line with the school policy, one requirement for graduation of each

level is passing an HSK Examination. The students of Prathom 6 need to pass HSK level 2 to graduate; junior students of Mathayom 9 need to pass HSK level 3 to graduate; and senior students of Grade12 are required to pass HSK level 4 to graduate. This school arranges for students to attend HSK once a year. Prathom 1 to Mathayom 12 have comprehensive Chinese classes and listening-speaking Chinese classes. But in Junior School they also have 2 period Chinese interest classes every week. There are also 3 other classes in High School, including Chinese culture, Chinese geography, and Chinese history.

Chinese Textbooks

From the perspective of Chinese textbooks, the textbook for Kindergarten is “Happy Learning Chinese”, prescribed by the Thai Ministry of Education. The contents of this book are focused on Chinese vocabulary. The textbooks for Elementary School and Junior High Schools are “Chinese”, published in 1996 by Jinan University. “Chinese” is based on the actual needs and characteristics of overseas Chinese education in the College of Chinese Language and Culture of Jinan University. Starting from the age and psychological characteristics of the teaching objects, the Chinese proficiency test outline and “Commonly Used Characters in Modern Chinese” are written as foundation and reference books, and the content goes from shallow to deep progressively. The only regret is that the content topic is too old. The textbook of high school is “Intensive Chinese for Prep-University Students”, including comprehensive textbooks and listening textbooks. It is a series of textbooks designed by Hanban of China in line with the HSK Syllabus and shows the teaching idea of “combining learning with testing”. This series is designed for pre-university students who are going to study in China and who will be taking the HSK test (Levels 1–5).

3.3 Research Population and Sample

3.3.1 Population and Sample

The population of this study were 34 students from Mathayom 4 of Ratwittaya

School of Thailand, including 7 males and 23 females, age ranging from 15-16. The students selected enrolled in Chinese listening courses in the first term of 2021.

3.3.2 Sampling Technique

The sampling method used in this study is random sampling. The sample size of this study was calculated based on the Krejcie and Morgan's formula (1970). According to the Krejcie and Morgan (1970), if the population is a small group, the small sample technique was needed. Thus, the sample size of this study was determined based on the Krejcie and Morgan's (1970) sample size formula below. The calculation of the sample size was based on $p=0.05$.

$$s = \frac{X^2NP(1 - P)}{d^2 (N - 1) + X^2P(1 - P)} \quad (3-1)$$

Where, s=required sample size

X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841)

N= the population size

P= the population proportion (assumed to be 0.50 since this would provide the maximum sample size)

D= the degree of accuracy expressed as a proportion (0.05)

According to Krejcie and Morgan's sample size formula (1970), the population was 34, the sample size should be 31.31 (31). Therefore, the sample size of 31 students was selected by principal who randomly picked the paper containing the name of students. A priori power analysis ($\alpha = 0.05$, a power=0.8) indicates that the estimated sample size would be 26 participants. Therefore, this clearly indicates that the power provided by this sample (31) is then greatly increased.

3.4 Instruments

In this study, two types of instruments were used. One is the research instruments which consisted of the Pre-Post Test, the Questionnaire and the Semi-structured interviews. The Pre-Post Test was conducted before and after the intervention, aimed to examine the achievement of the students. The questionnaire survey and the semi-structured interview aimed to collect the satisfaction of the students were conducted after the post-test. Another one is the intervention instrument, the lesson plans.

3.4.1 Research Instruments

This research adopted three research instruments to help implement the study including the Pre-Post Test of Chinese listening, the students' satisfaction questionnaire and the semi-structured interview.

3.4.1.1 The Pre-Post Test

In this study, the Pre-Post Test was the main research tool in the study for learning achievement. The Pre-test was aimed to check the student listening skill before implementation of blended learning. The Post-test was conducted on the same items to see whether the students had any significant changes in their academic achievement after the treatment. According to the policies of the school, Chinese graduates of Mathayom 3 must pass HSK level 3, graduates of Mathayom 4 must pass HSK level 4, and the objective target of the study was Mathayom 4. Thus, the researcher randomly chose one set of HSK level 4 listening test papers as the Pre-Post Test. The whole listening test of HSK level 4 consisted of 45 items and 45 questions were required to complete in 30 minutes (See Appendix H).

3.4.1.2 Students' satisfaction Questionnaire

The questionnaire was conducted after the Post-test to examine the satisfaction with blended learning of Thai high school students. After reviewing the areas of satisfaction of students in Chapter 2, the satisfaction questionnaire of this study was

designed based on the National Student Survey and the Student Outcomes Survey. It consisted of 25 items. The items mainly contained six aspects: students' perception of teaching quality (Item 1 to 6), students' perception of learning resource (Item 7 to 10), students' perception of the learning environment (Item 11 to 15), students' perception of listening skills and learning experiences (Item 16 to 22), assessment and feedback (Item 23 to 24) and overall satisfaction (Item 25) (See Appendix D).

All items of the questionnaire were scored with 5-point Likert Scale (1932): 1=totally disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree as shown in Table 3. 2.

Table 3.2 Description of Likert Scale

Level of opinion	Scores	Interpretation
Totally disagree	1	Very dissatisfied
Disagree	2	Dissatisfied
Neutral	3	Moderate
Agree	4	Satisfied
Strongly agree	5	Very satisfied

Source: Brown, 2010

According to Dornyei and Taguchi (2010), questionnaires are various and they can be used successfully with different people in different situations and for different targets. The questionnaire is a standardized set of questions that capture personal data on one or more particular topics according to a fixed formula (Lavrakas, 2008). Krosnick (2018) claims that questionnaires collect information about individual opinions, preferences, experiences, expectations, and behaviors that can reveal the scientific nature of research.

3.4.1.3 Semi-structured Interviews

Interviewing is an important data collection technique that involves verbal interaction between the researcher and the interviewee (Nihir, 2009). This study

adopted the Semi-structured interviews and was conducted after the Post-test in order to find out the satisfaction of students of the blended learning model in the study. The questions of the interview consisted of four questions. Five volunteers from the participants were required to answer the questions shown below.

1) Do you like to learn Chinese listening in this way (blended learning)?

Can you explain why?

2) Have you improved some skills in this learning process?

3) Can you tell me about your experience in this course?

4) Would you give some suggestions for this listening class?

3.4.2 The Intervention Instrument

In this study, the only intervention instrument was the lesson plans.

3.4.2.1 The lesson plans

This study was conducted in one month and implemented 4 Chinese listening lesson plans in total (See Appendix J). The lesson plans were designed following blended learning model steps. The participants were required to join the class three times a week. The topics were selected matching their level and based on the topics of the HSK level 4 as shown in Table 2.5.

Background of students: All 34 students from a private Chinese school in Thailand have passed HSK level 3. But, because of the learning environment and traditional teaching approach, the students' listening ability still has a large rising space.

Teaching material: Considering the different levels of sample students and the purpose of Chinese listening for this research, the topic of the listening class from the Chinese book "Intensive Chinese for Prep-University Students (Listening)". This textbook is based on the topic outline of the HSK syllabus. The contents of the texts are taken from real Chinese communicative situations and achieve full coverage of the vocabulary outline of HSK level 1-5. This book also provides comprehensive coverage of

HSK level 1 to 5 exam questions, enabling a seamless transition between classroom instruction and the HSK exam.

Objectives: To improve students' listening skills.

Course Schedule: June to July

Table 3.3 Teaching activity

Time	Activity	Topic
Week 1	Lesson plan 1	It is good to get up early and go to bed early
Week 2	Lesson plan 2	Order food
Week 3	Lesson plan 3	Shopping and bargain
Week 4	Lesson plan 4	Transportation

Teaching Process: the teaching process (Table 3.4) was designed based on the blended learning model (Table 1.1) of this study.

Table 3.4 Blended Teaching Process

Subject	Chinese listening	Participants	34
Grade	Mathayom 4	Teaching materials	PowerPoint, video, audio,
Teaching Process	<p>Step 1: Online self-learning:</p> <ol style="list-style-type: none"> 1) The student clicks the link to Quizlet posted by the teacher, learns vocabulary, and completes the exercise on the Quizlet. 2) Preview the topic of the class, watch the video and answer the questions. 3) Students recode the questions which cannot solve by themselves <p>Step 2: Face to face learning:</p> <ol style="list-style-type: none"> 1) Group discussion. 2) Students Present. 3) The teacher supplements. 4) Watch the video or listen to the audio, strengthen the listening skill. <p>Perform the conversation.</p> <p>Step 3: Evaluate.</p>		

Expectations:

1) Blended learning improved students' Chinese Listening skill by improving their scores.

2) Students held a positive attitude toward blended learning model and were interested in Chinese listening classes.

3.5 Reliability and Validity

3.5.1 Validity

Content validity is achieved by making professional judgements about the relevance and sampling of the contents of the test to a particular domain (Kerlinger, 1986). In this study, the content validity of the questionnaire, questions of semi-structured interviews, and the lesson plans were tested by two professors from the Institute of Education of Rangsit university of Thailand and one from the International Education Department of Baise University of China by using Item Objective Congruence Index (IOC). The calculation of IOC was done by the program created by Sukamolson and Sitti (2019). The formular is as follow:

$$I_{ik} = \frac{(N-1) \sum_{j=1}^n X_{ijk} - \sum_{i=1}^N \sum_{j=1}^n X_{ijk} + \sum_{j=1}^n X_{ijk}}{2(N-1)n} \quad (3-2)$$

When

I_{ik} =Index of congruence between Objective i and Item k

N = all objectives

n = all content experts

After examination by 3 experts for the IOC analysis, the items which got 0 were revised following the experts' advice to ensure that all of items were acceptable.

The IOC result for the questionnaire was 0.99. while the IOC result for the semi-structured interview was 0.84, and the IOC result for the lesson plan was 1 (all score IOC of three

instrument were higher than 0.75 was required). The instruments used in the study showed high validity, thus were acceptable (See Appendix C, E, G).

3.5.2 Reliability

Reliability of questionnaires used Cronbach's Alpha. According to Gliem (2003), illustrated the value of Coefficient Cronbach's Alpha as the following: $\alpha \geq 0.9$ = Excellent, $0.9 > \alpha \geq 0.8$ = Good, $0.8 > \alpha \geq 0.7$ = Acceptable, $0.7 > \alpha \geq 0.6$ = Questionable, $0.6 > \alpha \geq 0.5$ = Poor, and $0.5 > \alpha$ =Unacceptable. Therefore, the coefficient must be between 0.7 to 0.8 ($0.8 > \alpha \geq 0.7$) which indicates that the consistency is acceptable. The Cronbach's Alpha of the Questionnaires was 0.922, so the questionnaire was highly reliable.

3.6 Data Collection

Data collection was done after getting the permission from the school and students. The score of the pre-test was collected before the course and the score of the post-test was collected after all the teaching. The students attended the test and completed the test paper. The teacher marked the test paper and collected the scores on both tests.

The questionnaire was conducted after finishing all courses. For the questionnaire, 31 students were required to fill in the questionnaire form and the teacher collected the results of the questionnaires.

Semi-structured interviews were also conducted with 5 volunteer students after the course. Students were interviewed by guiding questions by their class teacher and required to express their opinions, the teacher recording the answer of students. Then the researcher collected the answer information and analyzed the contents of each question in the interview.

3.7 Data Analysis

In this section, the researcher explained which analytical method was used to analyze collected data.

3.7.1 Pre-Post Test

The data analysis of pre-post test scores was completed with a computer program. T-test dependent, Mean, and Standard Deviation were used to examine whether the students have improved in Chinese listening skills. When the significance of the test is less than significance ($P < 0.05$), it means the scores of the experimental students are significantly different from the pre-test and post-test, and students' Chinese listening skill has been improved. In addition, the researcher has presented the result of two tests in the table and compared the mean value and difference of Pre-Post Test.

3.7.2 Questionnaires

The data analysis was done with a computer program, the descriptive statistics of the frequency and percentage of all items in the questionnaire were calculated in order to find the result of students' answer question by question. Finally, the results will be presented in the table.

3.7.3 Semi-structured Interviews

The data from the interviewee was analyzed by the computer program (hyper research). The steps for analyzing the interview data were as follows: 1) Select the resources 2) Create theme code book 3) Select the interview content and apply the corresponding code 4) Click on the report generator to display the analysis results.

3.8 Ethical Considerations

In order to ensure the authenticity of the data and avoid leaking personal information about students and teachers involved in research. The researcher must carry out the research within the scope of ethics.

- 1) The school's permission was obtained for conducting this research in the school.
- 2) The researcher avoided interfering with the normal teaching progress of schools when conducting experimental courses.
- 3) The researcher did not violate the wishes of students in the questionnaire survey and semi-structured interviews.
- 4) The researcher strictly protected the privacy of participants, including the names and any identification by not revealing any information about the research participants. All data received from the participants was kept in a safe place.
- 5) The research applied for the Documentary Proof Exemption from the Ethics Committee of Rangsit University. The certificate number is NO. RSU-ERB2021/0.



CHAPTER 4

DATA ANALYSIS

In this chapter, the data analysis and the results of the research from the pre-post test, the questionnaire, and the semi-structured interview were presented. The results were used to respond to the research questions of the study. This chapter covers three sections. The first section involves the analysis of pre- post test results to find out the impact of blended learning on students' Chinese listening skills. The second section presents the data analysis of the questionnaire and the semi-structured interviews to investigate the satisfaction of Mathayom Suksa Four students toward blended learning. The third section presents conclusion of this chapter.

4.1 Analysis of Pre-Post Test Results

This section shows the data of the pre-test and the post-test were collected to find out the impact of Blended Learning on students' Chinese listening skills.

4.1.1 Analysis of Individual Student Performance

The scores of the pre-post test from 31 students were presented in Table 4.1. The total score on the listening test was 45 points.

Table 4.1 Distribution of the scores of the pre-test and the post-test

Student No.	Pre-test	Post-test	Increases
1	37	43	6
2	35	36	1
3	23	34	11
4	19	20	1
5	36	38	2
6	30	35	5
7	32	40	8

Table 4.1 Distribution of the scores of the pre-test and the post-test (Cont.)

Student No.	Pre-test	Post-test	Increases
8	37	42	5
9	42	43	1
10	34	40	6
11	39	40	1
12	20	24	4
13	38	39	1
14	32	34	2
15	28	33	5
16	33	37	4
17	34	37	3
18	31	39	8
19	32	33	1
20	20	21	1
21	42	44	2
22	33	36	3
23	42	43	1
24	30	32	2
25	33	35	2
26	36	41	5
27	31	37	6
28	20	32	12
29	43	45	2
30	29	30	1
31	33	38	5

Table 4.1 shows the students' scores improved. In brief, 9 participants improved 1 point, 6 participants 2 points, 2 participants 3 points, 2 participants 4 points, 5 participants 5 points, 3 participants 6 points, 2 participants 8 points, 1 participant 11 points and 1 participant 12 points. The results proved that students' academic performance gets better in the post-test than the pre-test.

4.1.2 The Results of Paired-Samples t-test

The comparison between the pre-test and pose-test score are summarized by mean,

standard deviation (SD) and significance value (p) < 0.05 . The detail results are shown in Table 4.2 Paired-Samples t-test

	Differences					t	df	Sig. (1-tailed)
	Mean	Std.	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	3.77		.53623	-4.86933	-2.67906	7.038*	30	.005
pretest	32.39	6.64						
posttest	36.16	6.19						

* $p < 0.05$

Table 4.2 shows the data analysis results of the paired-samples t-test. The significance of the study was 0.005 ($p = 0.005$), which clearly lower than 0.05 ($p < 0.05$). It indicated that there is difference in the experiment. The results from the pre-test ($M = 32.39$, $SD = 6.64$) and post-test ($M = 36.16$, $SD = 6.19$) listening test indicate that the students had improvement in listening skills based on the implementation of the blended learning, $t(30) = 7.038$, $p = .005$.

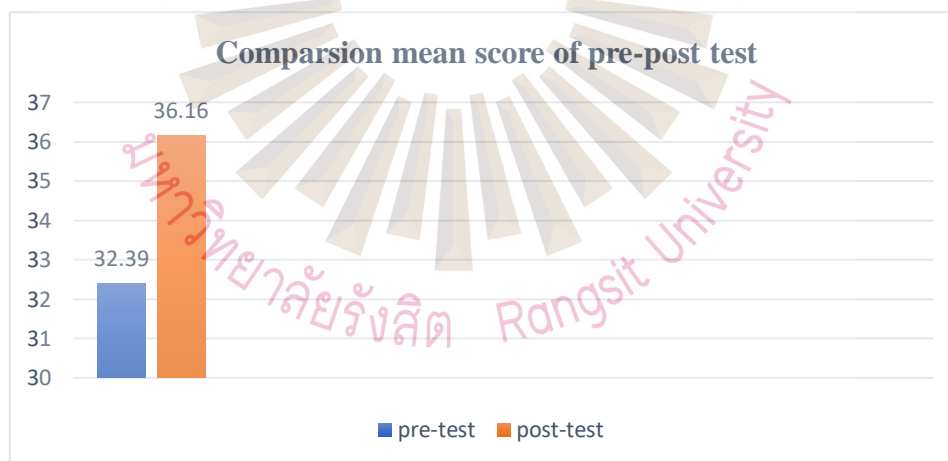


Figure 4.1 Comparison of Pre-test and Post-test Means

Figure 4.1 shows that the mean score of the post-test (36.16) was higher than that of the pre-test (32.39). It suggests that the scores of the post-test increased compared to the scores of the pre-test after using the Blended Learning approach.

4.2 Students' Satisfaction Analysis

In this section, the data from the questionnaire and semi-structured interview are presented and used to reveal the students' satisfaction level of Mathayom Suksa Four in Blended learning model. The following is a detailed analysis and presentation in two parts. The first part is questionnaire data analysis and results. The second part is semi-structured interview data analysis and results.

4.2.1 Questionnaire Data Analysis

The questionnaire consisted of 25 questions. The findings of the questionnaire were examined for student satisfaction towards blended learning. The data analysis was done with the frequency of each question and presented in Table 4.3 as below.

Table 4.3 Descriptive Statistics for the Questionnaire Indicators (n=31)

Item	Frequencies and Percentage (n=31)					
	SD	D	N	A	SA	Total A/SA
Teaching quality						
1. My instructor is knowledgeable in the subject content.	0 0%	0 0%	8 25.8%	10 32.3%	13 41.9%	23 74.2%
2. My instructor provided opportunities to ask questions.	0 0%	0 0%	5 16.1%	19 61.3%	7 22.6%	26 83.9%
3. My instructor treated me with respect.	0 0%	0 0%	7 22.6%	15 48.4%	9 29%	24 77.4%
4. My instructor made the subject as interesting as possible.	0 0%	0 0%	4 12.9%	22 71%	5 16.1%	27 87.1%
5. My instructor delivered the subject content effectively.	0 0%	0 0%	3 9.7%	18 58.1%	10 32.3%	28 90.4%
6. My instructor efficiently made the class run smoothly.	0 0%	0 0%	8 25.8%	16 51.6%	7 22.6%	23 74.2%
Average	0%	0%	18.82%	53.78%	27.42%	81.2%
Learning resources						

Table 4.3 Descriptive Statistics for the Questionnaire Indicators (n=31) (Cont.)

Item	Frequencies and Percentage (n=31)					
	SD	D	N	A	SA	Total A/SA
7. The learning resources are easy to access.	0 0%	0 0%	13 41.9%	11 35.5%	7 22.6%	18 58.1%
8. The learning resources are up to date.	0 0%	0 0%	6 19.4%	13 41.9%	12 38.7%	26 80.6%
9. The quality of the listening materials is practical.	0 0%	0 0%	10 32.3%	13 41.9%	8 25.8%	21 67.7%
10. The listening learning materials are enjoyable.	0 0%	0 0%	9 29%	15 48.4%	7 22.6%	22 71%
Average	0%	0%	30.65%	41.93 %	27.43 %	69.36 %
Learning environment						
11.The design of discussion, evaluation, cooperation and other activities in the teaching process are going well.	0 0%	0 0%	10 32.3%	19 61.3%	2 6.4%	21 67.7%
12.The learning atmosphere is good.	0 0%	1 3.2%	11 35.5%	13 41.9%	6 19.4%	19 61.3%
13.The interaction between the teacher and classmates is good.	0 0%	0 0%	6 19.4%	15 48.4%	10 32.3%	25 80.7%
14.This course has provided me with opportunities to explore ideas or concepts in depth.	0 0%	0 0%	8 25.8%	15 48.4%	8 25.8%	23 74.2%
15.I have the right opportunities to provide feedback on my course.	0 0%	0 0%	10 32.3%	18 58.1%	3 9.7%	21 67.8%
Average	0%	0.64%	29.06%	51.62 %	18.72 %	70.34 %
Listening skills and Learning experiences						
16.This course has made me more confident in listening to Chinese.	0 0%	0 0%	6 19.4%	14 45.2%	11 35.5%	25 80.7%
17.This course helps me develop my ability to work as a team member.	0 0%	0 0%	10 32.3%	16 51.6%	5 16.1%	21 67.7%
18.This course helps me develop the ability to plan my own work.	0 0%	0 0%	8 25.8%	17 54.8%	6 19.4%	23 74.2%

Table 4.3 Descriptive Statistics for the Questionnaire Indicators (n=31) (Cont.)

Item	Frequencies and Percentage (n=31)					
	SD	D	N	A	SA	Total A/SA
19.This course improved my skill in understanding the main idea of a conversation.	0 0%	0 0%	6 19.4%	17 54.8%	8 25.8%	25 80.6%
20.This course improved my skill in doing summaries.	0 0%	0 0%	6 19.4%	17 54.8%	8 25.8%	25 80.6%
21.This course improved my vocabularies that matches each situation.	0 0%	0 0%	5 16.1%	17 54.8%	9 29%	26 83.8%
22. I have received helpful comments on my work.	0 0%	1 3.2%	9 29%	13 41.9%	8 25.8%	21 67.7%
Average	0%	0.46%	23.06 %	51.13 %	25.34 %	76.47%
Assessment and Feedback						
23.Instructor often praised and encouraged good learning behaviors in class.	0 0%	0 0%	11 35.5%	13 41.9%	7 22.6%	20 64.5%
24.Assessment was fair to all students.	0 0%	0 0%	10 32.3%	12 38.7%	9 29%	21 67.7%
Average	0%	0%	33.9%	40.3%	25.8%	66.1%
Overall satisfaction						
25. Generally speaking, I am satisfied with this course.	0 0%	0 0%	6 19.4%	16 51.6%	9 29%	25 80.6%

*n=number of participants, SD=Strongly disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly agree

The results of Table 4.3 shows that most of the responses from students focused on 3 (Neutral), 4 (Agree) and 5 (Strongly agree). The overall satisfaction Item 25, where the “Strongly agree” received a 29% and “Agree” received 51.6%, shows that 80.6% of the students were satisfied with blended learning. It indicates that students were generally satisfied with blended learning.

On average, 81.21% of the participants agreed and strongly agreed with the teaching quality (Items 1-6). Based on this result, it clearly indicates that students were

satisfied with the lessons at the high level. However, among the six items of teaching quality (Items 1-6), Item 5 “My instructor delivered the subject content effectively” got the highest degree of “Strongly agree” and “Agree” (90.3%), while Item 1 “My instructor is knowledgeable in the subject content” and Item 6 “My instructor efficiently made the class run smoothly” got the lowest degree of “Strongly agree” and “Agree” (74.2%).

In terms of the learning resources (Items 7-10), 69.36% of the participants agreed and strongly agreed. It means that the students were generally satisfied with the learning resources. However, among the four items, Item 8 “The learning resources are up to date” got the highest degree of “Strongly agree” and “Agree” (80.6%), while Item 7 “The learning resources are easy to access” got 58.1%.

As for the learning environment (Items 11-15), 70.32% of the participants agreed and strongly agreed with the items. This result suggests that the blended learning environment meets students' requirements and students had satisfaction with blended learning environment. However, among the five items, Item 12 “The learning atmosphere is good” got the lowest degree of “Strongly agree” and “Agree” (61.3%). while Item 13 “The interaction between the teacher and classmates is good” with 80.6%.

The results of the listening skills and learning experiences, Items 16-22, on average, showed that 68.64% of the participants agreed and strongly agreed with the items. It obviously indicates that most of the students were satisfied with the skills acquired. However, among the seven items, Item 17 “This course helps me develop my ability to work as a team member” and Item 22 “I have received helpful comments on my work” got the lowest degree of “Strongly agree” and “Agree” with (67.7%), while Item 21 “This course has made me more confident in listening to Chinese” got (83.9%).

In addition, on average, among the six dimensions: the teaching quality, the learning resources, the learning environment, listening skills and learning experiences, assessment and feedback and overall satisfaction. The highest level of satisfaction was

found at the teaching quality (81.21%). The lowest level of satisfaction was found at assessment and feedback (66.1%).

Table 4.4 One-Samples t-Test for Overall Satisfaction when the criteria = 2.50/5.00

	t	df	Sig. (1-tailed)	Mean	Std.	95% Confidence Interval of the Difference		Minimum	Maximum
						Lower	Upper		
Overall Satisfaction	32.58*	30	.005	4.10	.70	3.8399	4.3536	neutral	strongly agree

*P<0.05

Table 4.4 shows that the mean score of overall satisfaction was 4.10 ($SD=0.70$). The highest level was “strongly agree” and the lower level was “neutral”. It confirmed second hypothesis stating that on average, the students participating in the blended learning Chinese listening class will be satisfied with their listening classes at $p = 0.05$. However, in this case, generally speaking they are highly satisfied with their learning. (4.10/5.00).

4.2.2 Semi-structured Interview Data Analysis

The raw data was recorded in audio form and it was further processed into valuable information to respond to the research questions of this study. This section aims to determine the students' satisfaction to blended learning. 5 student volunteers were interviewed one by one. An analysis of the findings was categorized into four relevant themes, which include: Students like blended learning, skills development, learning style of students and suggestions from students, which were described in below.

Students like blended learning

In the interviews, the majority of students stated that they liked the blended learning approach and expressed the reasons for their likes of blended learning. The reasons can be summarized as Figure 4.2 below.

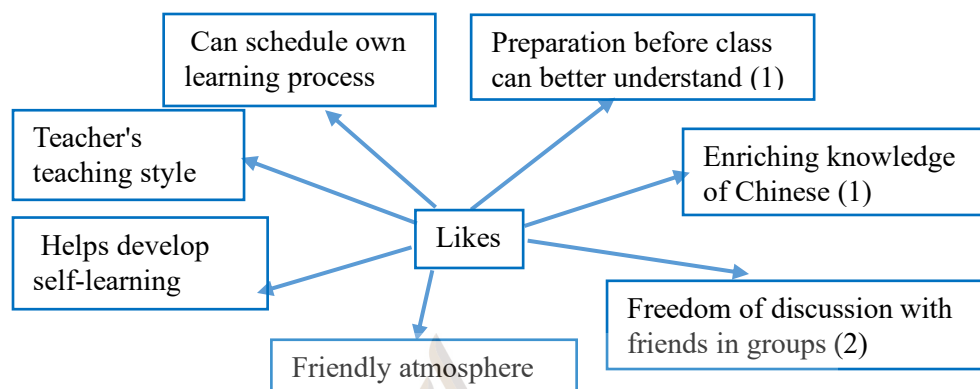


Figure 4.2 The reasons of students like blended learning

In the study, most students stated that they enjoy learning with the blended learning approach, but they had different reasons for like blended learning. Two respondents said that teacher’s teaching style creates an interesting and relaxing learning environment for the students, allows students freedom discussion with friends in the classroom and express themselves easily. One respondent stated that blended learning requirements students to learn in advance. It can help students better follow the teacher in class and help them better understand and acquire knowledge. One respondent also stated that blended learning helped them develop self-learning habits. Such as interviewees explanation said:

“The study atmosphere is active and not as quiet as before. And we can discuss freely in class and be able to say what we want to say (Interviewee 1, personal communication, July 14, 2021)”

“I can freely express our opinions and discussions in class; it allows me to develop the habit of pre-reading before class (Interviewee 2, personal communication, July 14, 2021)”

“The teacher’s teaching approach is very innovative. The teacher uses a variety of games to make the class more interesting and to keep us from getting bored (Interviewee 5, personal communication, July 14, 2021)”

Another respondent pointed out that blended learning enables the student schedule their learning process, and do what their want to do. The views of the respondent as follows:

“I can schedule my learning process, listen to what I want to listen to and read the learning materials I want to read. (Interviewee 3, personal communication, July 14, 2021)”

However, one respondent voiced out different opinions. The respondent emphasized the blended learning requires students to study independently before class. But there was too much homework and no time to pre-learning. Fortunately, the student still presented that a positive with blended learning. As he said:

“This learning approach requires to study in advance. I didn’t have time to pre-study. As a result, I have trouble understanding when the teacher was teaching in class, but luckily my friend always helped me. so that I do not have too much pressure (Interviewee 4, personal communication, July 14, 2021)”

The skills that students developed

When asked whether their learning skills improved in blended learning, all interviewees said “yes”. The Figure 4.3 below shows the improvement of students’ skills.

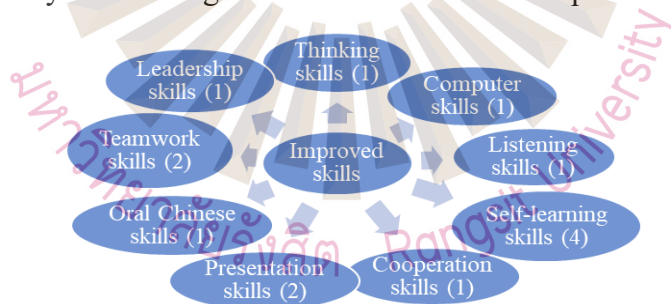


Figure 4.3 Skills development

According to the Figure 4.3, blended learning has improved students’ different skills. All 5 interviewees expressed that blended learning was helpful in the improvement of listening skills, including catch the key points, summarizing skills and enlarged vocabulary. The views as following:

“My listening skills also improved. When I talking to Chinese person, I can

understand what they said, and I also can communicate with them fluently (Interviewee 2, personal communication, July 14, 2021)”

“It helps me improved my vocabulary. And it has improved my ability to take notes quickly, so that I know how to pick up the key points of the material (Interviewee 3, personal communication, July 14, 2021)”

4 respondents stated improved collaborative skills and autonomous learning skills with the blended learning approach. As some interviewees described:

“I think my self-learning is better than before, and I can easy to understand the meaning of conversation when I listen (Interviewee, personal communication, July 14, 2021)”

“Especially teamwork skills, and my oral Chinese skills, I can fluently express in Chinese. My listening skills also. (Interviewee 2, personal communication, July 14, 2021)”

“I think my listening skills. As well as I know how to make teamwork better (Interviewee 3, personal communication, July 14, 2021)”

“Many. Such as self-learning skill, and the most important is cooperation skill (Interviewee 4, personal communication, July 14, 2021)”

In addition, some students agreed that blended learning helps them developed computer skills, presentation skills, critical thinking and leadership skill. As described by some interviewees:

“Before I don’t know how to use PS and how to go about editing video, audio, but I know them well now. I can also make smart mind maps and perfect PowerPoint by using computer (Interviewee 1, personal communication, July 14, 2021)”

“I had improved my presentation skills. As a team leader I got great leadership skills (Interviewee 3, personal communication, July 14, 2021)”

“It makes me have significant improvement. Such as my listening skills,

presentation skills. During the self-learning, I can think when I meet difficult and know how to do that (Interviewee 5, personal communication, July 14, 2021)”

Furthermore, 1 respondent stated that blended learning helps them to accumulate the knowledge of Chinese. 1 respondent also said that speaking skills have improved with the blended learning. Such as the interviewees represented:

“My oral Chinese skills, I can talk with other fluently now (Interviewee 2, personal communication, July 14, 2021)”

“My Chinese knowledge has been improved, including vocabulary, grammar, culture, etc. (Interviewee 5, personal communication, July 14, 2021)”

When most students gained these skills from the study, it means that students were satisfied with blended learning.

Learning style of students

From the interviews, it is also known that students have different learning styles in blended learning, as Figure 4.4 below.

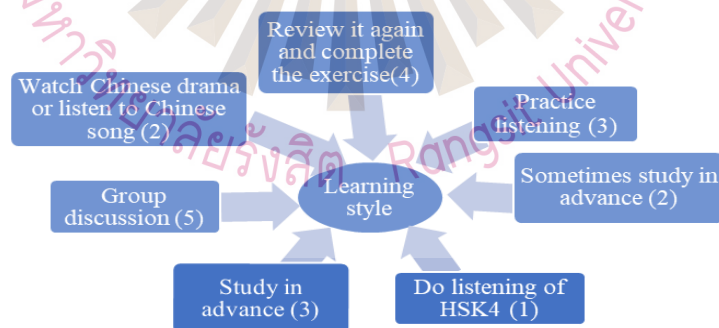


Figure 4.4 Learning style of students

Figure 4.4 shows that most of them had similar learning routine. 3 respondents indicated that they often pre-study by themselves before class, completed the given project and discussed with classmates while in class. As described by some interviewees:

“I usually study in advance by myself.....And then practice listening. In the class room, I would like to discuss with my friends (Interviewee 1, personal communication, July 14, 2021)”

“I usually study in advance....and then practice listening... In the class, we had a group discussion. (Interviewee 2, personal communication, July 14, 2021)”

However, some students have created their individual learning style. As stated by interviewees.

“If I completed the exercise. I would watch Chinese TV series or listen to Chinese song, this is a good way to practice listening (Interviewee 2, personal communication, July 14, 2021)”

“If I completed the exercise. I would listen to Chinese music, which is a good way to practice listening (Interviewee 3, personal communication, July 14, 2021)”

“I went to the website to find listening exercises that are suitable for me to practice, such as listening of HSK4 (Interviewee 5, personal communication, July 14, 2021)”

Additionally, 2 respondents have different voices. 1 respondent stated no time to before study lass because there was too much homework to schedule. and another said the content taught is too simple to preview. As 2 respondents stated that:

“Before the class, I just finish the assignment from the teacher. Sometimes I study on myself at first. Learning the vocabulary and searching for information when I don’t understand. (Interviewee 4, personal communication, July 14, 2021)”

“The lessons we learned are too easy for me. I like to go searching online for teaching materials that are appropriate for me, and then learn by myself, do listening of HSK4 Test. (Interviewee 5, personal communication, July 14, 2021)”

Suggestions from students

Blended learning is a new learning approach for the students. From the interviewed, there are some challenges in the implementation process. To address these challenges, the students suggested as follows.

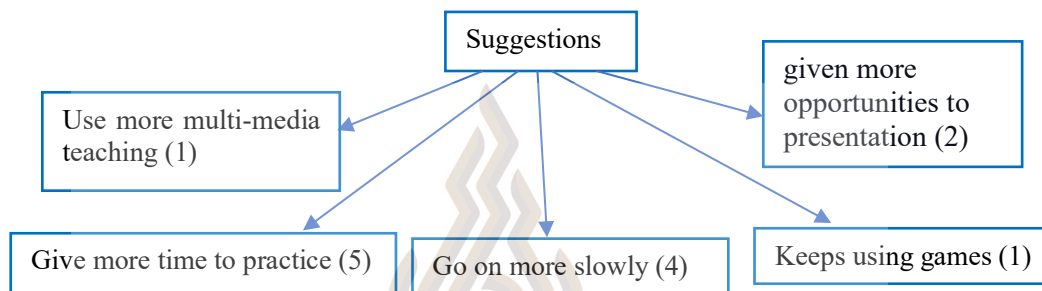


Figure 4.5 Suggestions from students

According to respondents, all 5 interviewees voiced their wish that the teachers could give them more time to practice and prepare for the presentation. As some interviewees mentioned:

“I hoped that the teacher would go on more slowly. And given more time to practice and given us more opportunities to presentation (Interviewee 1, personal communication, July 14, 2021)”

2 respondents claimed that hoped the teacher to continue applying blended learning approach in the coming learning. Use more multimedia to explain the Chinese knowledge to the students and keep using games to teach in the classroom. It was evident that students are satisfied with blended learning.

“I hoped the teacher could give us more time to practice in the class. I hope that in the future the teacher can still use more PowerPoint, more multimedia to explain the Chinese knowledge to us, such as pictures, videos, etc. (Interviewee 3, personal communication, July 14, 2021)”

“I hoped that the teacher would go on more slowly. Give us more time to practice And I hope the teacher keep using games to teach in the classroom

in the future to keep the class interesting (Interviewee 5, personal communication, July 14, 2021)”

4.3 Conclusion

This chapter covers all the findings and data analysis. The results of pre-post test indicated that blended learning improve students’ Chinese Listening skills of Mathayom Suksa Four Thai students. Blended learning has positive effects on Chinese listening classes. The findings from the questionnaire show that students satisfied with blended learning. Blended learning affect student satisfaction in many aspects, such as teaching quality, learning resource, learning environment, listening skills and learning experiences, assessment and feedback. Additionally, the findings from the semi-structured interview also show that students satisfied with blended learning approach. The blended learning would help students improve their skills in various areas. In collection of computer skills, cooperative skills, self-learning skills, critical thinking, presentation skills, and leadership skill. To sum up, students had more opportunities and motivation to learn base on the blended learning approach. The next chapter, therefore, moves on to discuss the findings.

CHAPTER 5

CONCLUSION, DISCUSSION AND RECOMMENDATION

This chapter reviews the results of the data analysis in Chapter 4 and provides conclusions. A discussion of the findings and recommendations from this study are presented. This chapter covers three main sections as follows:

Section 5.1 Conclusion

Section 5.2 Discussion

Section 5.3 Recommendations

5.1 Conclusion

The present study was designed to explore the effects of blended learning on Thai school high students in a Chinese listening class. Two objectives of the study were:

- 1) To find out the effectiveness of the blended learning model in relation to students' Chinese listening skills;
- 2) To investigate the satisfaction of Mathayom Suksa Four students toward the blended learning Chinese listening class.

In this study, the researchers aimed to reach the objectives by answering two research questions:

- 1) Can a Blended learning model improve students' Chinese Listening skills of Mathayom Suksa Four Thai students?
- 2) Are students satisfied with Chinese listening classes by using the blended learning?

After analyzing the collected data, major findings of this study were presented as following sections.

5.1.1 The findings of Pre-Post Test

The findings were focused on the data from the pre-post test. The results of the pre-post test shows that all 31 participants improved their scores on the listening test. It can be determined from the comparison of the maximum and minimum scores in the pre-post test, the average scores and the standard deviation (SD) values. The minimum score in the pre-test was 19 and the maximum score was 43, while in the post-test the minimum score was 20 and the maximum score was 45. The average score of the post-test ($\bar{x}=36.16$) which is 3.77 points higher than the average score of the pre-test ($\bar{x}=32.39$). Figure 4.1 shows that 6 students did not meet the school's passing score in the pre-test while only 4 in the post-test. The number of people who scored more than or equal to 36 increased from 10 in the pre-test to 20 in the post-test. It indicated that the students made progress after the blended learning intervention for listening learning. Thus, by comparing the pre-test and the post-test, it could be concluded that students' listening skills had improved under the study with blended learning. The findings of the students' improved Post-test scores confirmed the hypothesis which stated that the blended learning improve students' Chinese Listening skills of Mathayom 4 Thai students.

5.1.2 The findings of Questionnaires

According to analysis of the questionnaires data, it was found that most students have a positive attitude toward blended learning. The percentage of agreement and strong agreement for overall satisfaction was 80.6% and the mean score was 4.10 ($SD=.70$) which indicates students were happy with blended learning. Especially in teaching quality 81.21% of participants choose agreed and strongly agreed. That means that the quality of teaching meets the requirements of the majority of students. However, the assessment and feedback remained lowest percentage of agreed and strongly agreed with 66.1%, which noted that teachers should improve the way of assessments of blended learning.

5.1.3 The findings of Semi-structured Interviews

The finding of semi-structured interviews provided a further explanation of students' satisfaction with blended learning. On the one hand, four respondents indicated their satisfaction with blended learning. One respondent said that blended learning allowed students to pre-study before class, this helped better understand the knowledge in the class. Another respondent also claimed that the way of assignments is creative and teachers made class interesting by using game to teaching. One respondent pointed that blended learning allowed students schedule learning process, choose the proper listening materials. Two respondents commented that blended learning provided a friendly environment to students, allowed them to discuss freely with classmates in class. One respondent said teachers have responsibilities and understand students' needs. Additionally, one respondent also agreed that the new activities for teaching listening lessons brought fun and ideas. On the other hand, all five interviewees indicated that blended learning had improved listening skills, and other skills, such as presentation skills, teamwork skills, leadership skills and computer skills. Therefore, the reason for satisfaction can be explained as the improvement of their listening skills and other skills, as well as a friendly learning atmosphere.

However, one respondent claimed that too much homework from school and other subjects, as a result, the students had no time to pre-study in advance. Thus, there are some challenges and concerns to be addressed, including 1) excessive additional assignments; 2) students did not have time to complete the pre-reading task before class. Participants suggested as following: 1) teachers should slow down during the teaching of the class; 2) give more time to students to practice and prepare for the presentation.

Furthermore, the finding of semi-structured interviews also showed that blended learning was helpful, not only help students improved listening skills but also improved 21st century skills. Four respondents stated that blended learning allowed students to work in small group, it helped them to build cooperative skills. Blended learning required students to utilize free time outside of class to reinforce their learning by pre-study content. Which

helped them to develop independent learning skill. Two respondents indicated that blended learning helped them improve their presentation skills. One respondent stated that computer skills were better than before. One respondent pointed that self-learning before class allows him to figure out his own problems when he faced. This help to build critical thinking and problem solving. Another respondent indicated that speaking skills and leadership skills had also improved.

The following figure illustrates the improvement of students' skills of blended learning.

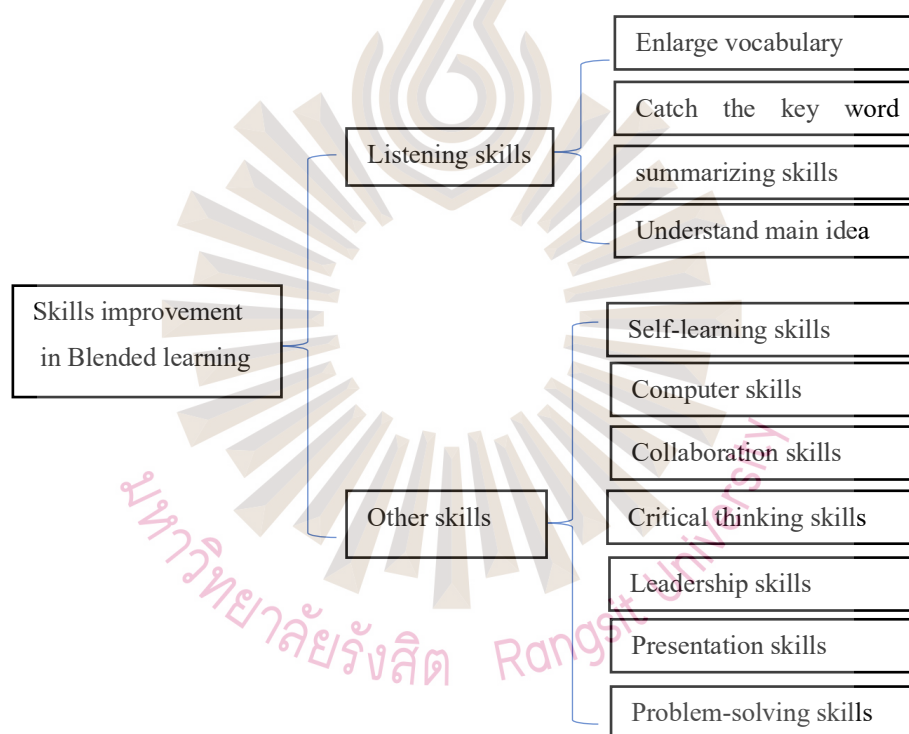


Figure5.1 Skills improvement in blended learning course

5.1.4 Summary

Therefore, the findings of the study indicated that most of the students agreed that blended learning was successful in enhancing the teaching and learning process. The finding of pre-post test estimated that students got an improvement in blended learning

listening class. The analysis of the questionnaires and semi-structured interviews suggested that students generally accepted the concept of blended learning because it increased flexibility in accessing resources and information anywhere at any time, and it also helped students to develop various skills besides listening skills, including computer skills, teamwork skills, independent learning skills, independent thinking skills, and leadership skills.

5.2 Discussion

In the previous section, the researcher has analyzed the data of collection and the overall findings of this study display that: a) students got improvement in Chinese listening skills; b) most of students were satisfied with the blended learning model.

To have a further study on blended learning, the researcher will discuss the findings in detail in this part. And here are some points are discussed in this section:

- 1) Blended learning model can improve most students listening skills and develop other skills.
- 2) The students were satisfied with listening class base on blended learning model.

5.2.1 Discussion of Students' Listening Skills Improvement

The results of the two test papers shows a general improvement in students' listening skills. Table 4.2 shows the students got a higher mean score in post-test ($\bar{x}=36.16$) than in the pre-test ($\bar{x}=32.39$). The standard deviation of the post-test ($SD=6.19$) had decreased by 0.45 when compared to the pre-test ($SD=4.2$). It indicated that students' scores were more concentrated around the mean in the post-test. The students got a better achievement in post-test.

This finding was similar to Guo (2010), Banditvila (2016), Lalimal and Lata-Dangwal (2017), Liu (2017), Seage and Türegün (2020) stated that the use of blended learning approach can help students to promote their listening skills. It is also in line with

Caruso, Colombi and Tebbit (2017), Yang (2018), and Chen (2020) who agreed that blended learning is a combination of online and offline teaching and learning which provides students with many opportunities to develop their listening skills in their learning. The blended learning approach helped students to improve learning outcomes (Dziuban et al., 2018; Rao, 2019). This finding is also in line with Ahn (2017) who conducted a study on the application of blended learning models in a Korean Language Course, and found that blended learning model help to effectively develop students' skills in all aspects of Korean language. Especially in listening skill.

The reasons for students' improved performance may be attributed to the blended learning model affects learners' Chinese listening skills in many aspects.

Firstly, blended learning focus on the student-center and enables students to improve their listening skills by helping and supporting group members. It can stimulate students adopted a deep approach to learning (Baeten, Kyndt, Struyven & Dochy, 2010). The finding was supported by Zaka (2013), Horn and Staker (2014), Du (2017), who found that blended learning developed students self-learning when their received available support. Which can allow students to easily decide on the best environment for their learning (Kentnor, 2015). In the class, students not only share their knowledge through reports or presentations, but also discuss and interact with their peers and teachers to have a better understanding (Yang, 2018). Students can identify, ask questions, and solve problems, whereas traditional teachers cannot provide these opportunities for students (Hamad, 2015).

Secondly, blended learning enabled students to learn independently out of the class. When students learning online independently, they can avoid blindness and inefficiency in independent listening learning, creating effective unity between independent learning and classroom teaching before and after class, and allowing students to target practice according to their weak points. This finding was supported by Zaka (2013); Yang (2018); Ahn (2017), Hadisaputra et al. (2020) who views that blended learning help students meet their different

needs and enhance their listening skills from the knowledge of the method. According to Lemmetty and Collin (2020), and Bates (2015), independent learning has been shown to have a significant impact on learner outcomes. As a result, when they gained more knowledge of Chinese inside and outside class, students were able to improve their listening skills, including enlarge their vocabulary and culture knowledge. Finally, students would be able to master listening skills more easily: the ability of catch the key word, ability of word synonym, and the ability to infer and summarize main ideas (Ahn, 2017; Yang, 2018; Chen, 2020).

Thirdly, blended learning is flexible. Flexible leaning time, flexible learning places and flexible learning paths. This finding is similar with Deschacht and Goeman (2015), Yalcinkaya (2015), Lalima and Lata-Dangwal (2017), Tucker, Wycoff and Green (2016), Yang and Wang (2019) and Chen (2020) who stated students can practice listening at any time, whatever pre-class, in-class or after-class. It means that students have more time to practice their listening for successful outcomes. When the students have more time for outcomes, it was easier to achieve success (Khader, 2016; Rahmawati, 2019; Luthan, Misra & Luthan, 2021). Besides, blended learning approach allowed the students to find various suitable learning materials and get more information they need. Therefore, the students can understand better when they meet different listening situations (Porter, Graham, Bodily & Sandberg, 2016; Rahmawati, 2019). As well as various learning materials add fun to listening learning, which help raise student' learning interests (Yang, 2018; Qian, 2019).

Fourth, blended learning encourages student-center. It was supported by Nazarova (2020) who conducted the study to investigated the personalizing school learning through blended foreign language learning and found that Personalized learning enhances student-centered instruction in the classroom. Blended learning listening course was designed with students in mind and rich teaching activities to meet their needs. Most of the students acquired some practical listening skills to some extent, which helped them to process various listening materials better. Thus, the factory effect students' listening skills improve also included the fact that the teacher is a guide in the whole blended learning process, while

the students are the main designers of their learning. Whether students are studying online or working in a team, their listening training and their learning schedule are designed by themselves. This finding agrees with Yalcinkaya (2015), Tucker, Wycoff and Green (2017) and Prince, Dewodo and Atiglah (2020), who stated that blended learning offer flexibility time and place to learn. Within a blended learning environment all students can critically develop their learning projects, while the teacher is in a guiding position and has less control over the student learning process (Zaka, 2013; Kintu, Zhu & Kagambe, 2017). Students can improve their listening vocabulary as well as their listening skills by helping and supporting team members. Students actively interact, discuss problems, share ideas, focus on the learning process, and help each other throughout the learning process. It was similar with Cleveland-Inners and Wilton (2018) stated that a blended learning model enlarged students' communication scope and offer more time for teachers and students with creative and cooperative activities while students meet any problems can easily solve.

Furthermore, students got more practice in listening in blended learning model. When students learn in a flexible environment of blended learning, they can get more practice. Caruso, Colombi, and Tebbit (2017) agreed with that listening instruction should be a frequent activity. Regular listening practice is the best way to improve students' listening skills. Canpolat, Kuzu, Yildirim and Canpolat (2015), Gilakjani and Sabouri (2016) and Schmidt (2016) agreed that listening is one of the most important skills in language learning, students need to do more listening practice. Through a blended learning model, students have more opportunities to practice their listening skills while participating in the program. Listening requires more practice time, so perhaps a course is too short. When students go through frequent listening practice with a teacher they can improve as well (Hurley, 1998). However, which is the time constraint of this study. That is why some students suggested teachers should slow down during the teaching of the class and give them more time to practice and prepare.

5.2.2 Discussion the improvement of students' other skills

From the findings of the study, it was reported that blended learning model also supports students in developing other skills, such as critical thinking skills, collaboration skills, and computer skills in the study. The finding agreed with Zaka (2013), Cleveland-Inners and Wilton (2018), Tucker, Wycoff and Green (2017) who found blended learning encouraged students developed critical thinking skills, collaboration skills, and computer skills. In order to provide an effective learning outcome in a limited time, teachers try to combine all practices in the course and adopt a student-centered approach, allowing students to learn in small groups. It was briefly supported with Rasika (2018) views that student-centered commitment is an effective way to increase student engagement and critical thinking. It aligned with Ahn (2017) who found that blended learning provided a student-centered and collaborative environment, where can take control of their learning from previous experiences and help them cultivate critical thinking skills. Senturk (2021), Hadiyanto, Failasofah and Armiwati (2021) stated that blended learning improves students' 21st century skills as well. Blended learning enabled students to learn independently before the class, when the student meet problems, they can think and work out for themselves at first, actually, the problem-solving skills and critical thinking also developed in this learning process.

Furthermore, during self-learning the students need to learn online and go to the website found the learning resource, it was required students to know computer skills. When the students worked in class, they need to discuss and cooperate with friends, it was help them to establish collaboration skills. which is similar to views of Sriarunasmee, Techataweewan and Mebusaya (2015) that blended learning supported students to developed self-directed learning and the communication skills. It was also supported by Cohen and Sasson (2016), Endangsari (2020) viewed that blended learning allowed students work collaboratively in computer-supported assignments and allow students to make decisions about their learning and build their experiential knowledge, which can develop and enhances student skills such as communication skills, collaboration.

Additionally, this study found blended learning help students improved their presentation skills and leadership skills. During the interviews, 2 students expressed that blended learning improved their presentation skills. The reason was in a blended learning classroom, students are required to present their learning first. Students need to practice and presentation the ideas of team. In addition, 1 interviewee claimed improved leadership skills. When students work as a team, their need a good team leader to ensure team work is going well. As a result, the students who was team leader they can develop their leadership skills. This finding was different from other studies.

5.2.3 Discussion of Students' Satisfaction

Base on the analysis of questionnaire data, it was found that most students were satisfied with blended learning. Including satisfied with the teaching quality, the learning opportunity, learning resources, learning environment, learning skill and learning experiences, assessment and feedback. Furthermore, from the semi-structured interview data, it was found that majority of students agreed that blended learning was helpful in their listening improvement. Most students mentioned that enjoy learning with friendly learning atmosphere of blended learning and enjoyed independent learning because they could go for targeted exercises for their weaknesses. Moreover, it helped them to develop various skills besides listening skills, including computer skills, teamwork skills, independent learning skills, critical thinking skills, presentation skills and leadership skills.

The first factor of student satisfaction with blended learning can be explained as the advantages of blended learning. Blended learning is a learning model that integrates the advantages of offline and online (Horn & Staker, 2014; Li & Carroll, 2017; Rao, 2019). When students learn independently in pre-class, they can have more opportunities to complete their targeted and individual tasks. During class, they were more active in finding solutions through group discussions, this new approach provides students with a flexible, free and relaxing learning environment, which was helpful for their listening learning and

improved listening skills (Ahn 2017; Yang, 2018). He (2020) observed blended learning model provides a relaxing learning environment and flexible class to students, it was an important factor affecting satisfaction of students. In addition, students got more learning resource to practice listening and the questions were posed to students who have encountered difficulties in their independent learning. Therefore, most of students have more motivation to solve the problems. When the course was easy, enjoyable, active, well organized and offered an equal opportunity for them. It motivated them to learn and make them progressed. This finding was supported by Huang (2019) who claimed that the learning atmosphere and interaction behavior can affect learning satisfaction directly. It was also supported Abbas (2018) views that the interaction during class and contents of teaching can affect the student satisfaction.

The second factor can affect students' satisfaction with blended learning was skills improvement. Blended learning helps to improve their other skills such as presentation skill, computer skill, cooperative skill, independently learning skill, critical thinking skill and leadership skill. Therefore, students were satisfied with blended learning. This finding was supported by Banditvilai (2016) and Dziuban et al. (2018), when students acquire learning skills, they are satisfied with the learning approach. Li and Carroll (2017) claimed that skills improvement can affect students' satisfaction.

The third factor was good academic performance. This finding confirmed by Adnan, Mohamed, Tarek, Son and Hosny (2016) who believed that academic performance is one of the most important factors in determining student satisfaction. From the result of pre-test and post-test, most of students got a better achievement. When students got a great academic performance may have higher satisfaction (Siming, Gao & Xu, 2016; Diep et al., 2019; Kintu, Zhu, & Kagambe, 2017).

5.2.4 Discussion of Blended Learning Approach

This study was conducted within the theoretical framework of Behaviorism,

Cognitive, Constructivism and Humanism theories. These four theories are interrelated and share the ultimate goal of enhancing learners' cognitive development by autonomous learning, as well as interaction and collaboration.

In the line with the theoretical framework of the study, a good blended learning should include a student-centered approach with the teacher as the assistant. Students should observe, explore and experiment by themselves, foster innovation, think independently, reorganize materials, discover knowledge and master principles on their own to achieve significant learning. As Rogers (1957) claimed that significant learning is important. It can develop students' motivation and initiative to learn. Furthermore, the teacher treats students equally and with respect in learning. It also creates a relaxed and friendly learning atmosphere where students can discuss freely with their friends and provide a cooperative learning environment.

In this study, most students stated that teachers give them feedback in timely and it was helpful. The immediate feedback from teacher is important (Schunk, 2012; Manivannan, 2016). That is why the assessment and feedback in this study got a lowest degree among six dimensions. Therefore, the teacher should communicate with students in a time, motivate them and help them to effectively regulate their learning process.

Blended learning emphasizes collaboration learning, teachers and students are partners and collaborators (Gao, Xu & Wu, 2008; Zhong & Ye, 2010). Du (2017) claimed that knowledge needs to be acquired in an interactive learning environment. To make students work in group, students received more support emotionally and cognitively from their peers and students are more attentive and willing to participate in the classroom, this motivates students to complete their tasks and enjoy their time (Al-Murshid, 2019; Vogt, 2014). Student-centered also increases students' overall motivation, attitudes toward language, self-efficacy, self-directedness, and beliefs about language learning (Kassem, 2018). As well as constructivist suggested that learners should be able to internalize knowledge gained from their own experiences, and teachers should create collaborative

student-centered environments that encourage students to arrangement their own learning and use critical thinking skills to solve problems (Zhong & Ye, 2008, Xu, 2019). Thus, the learning environment and learning atmosphere is important to students (Sieberer-Nagler, 2015). Teachers should be able to manage their classrooms and provide a friendly learning atmosphere for their students. So that students can better complete the team work and achieve their learning purposes (Ghavifekr & Rosdy, 2015). This is why students of the students got a low degree of classroom management (74.2%), learning atmosphere (61.3%) and ability to work as a team member (67.7%).

Therefore, there are some different opinions about the blended learning approach and Chinese listening lessons. Some students considered that blended learning is a new approach to learn Chinese. It requires students to have more time to pre-study in advance. But it was difficult for students who were used to traditional teaching approaches to follow this new approach. It means that the blended learning model is still a big challenge for them, and they consider that they need more time to practice at the beginning. As Alvarez (2020) stated that students often faced challenges in blended learning and when students did not know blended learning before. Therefore, students need more time to work on blended learning.

5.3 Recommendations

This study focused on Mathayom Suksa Four students of a Thai high school where students had 10 Chinese periods a week. This study focused on a Chinese listening course. The study found that blended learning enhanced students' Chinese listening skills, and most of the students were satisfied with blended learning. It is recommended that further studies on blended learning be conducted.

5.3.1 Recommendation for Blended Learning Implementation

- 1) Teachers may encourage to know how to design a student-centered class and

how to help learners construct their knowledge and encourage them become autonomous learners.

2) Technology support is a critical factor in implementing blended learning, and the implementation of blended learning requires a stable network for students and teachers to ensure easy communication between teachers and student.

3) Teachers and students should continually communicate and negotiate with each other about teaching activities and lessons to ensure that blended learning is carried out successfully.

4) Implementing blended learning requires strong support from schools, parents and students.

5.3.2 Recommendation for Future research

Based on the results of this study, coupled with the limitation of the research, The researcher would like to give some recommendations for future researches as follows:

1) Future research should include study how students in different countries, and at different grade levels are affected by the blended learning model.

2) Future research should investigate Blended learning in longer than the present research.

3) Future research can study the teacher's opinion by implement Blended learning to teach students in various subjects.

4) Future research should emphasize the application of a blended learning approach to a more subject area.

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APPENDICES

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Appendix A

CONFIRMATION LETTER FROM THE RESEARCH SCHOOL



มหาวิทยาลัยรังสิต Rangsit University
 12345 ถนนวิภาวดีรังสิต แขวงวิภาวดี กรุงเทพมหานคร 10900
 Tel: (66) 2597 2200-30 Fax: (66) 2791 5757
 E-mail: info@rangsit.ac.th



MEMORANDUM

Faculty/Institute Suryadhep Teachers College

Tel: 1275

Ref: STC. 4800/0955

Date 25 March 2021

Topic: Request for Permission to Collect Data at Your School

Dear Mr. Somsak Kaweerat,

School licensee of Rat Wittaya School

This letter is sent to you to request for permission to collect data for an educational research at your school from May to June 2021 by a student, Miss Wanyan Zhou, Student ID 6205436, who is studying in a Master of Education (Bilingual Education). Her thesis is entitled "Application of a Blended Learning Model for the Chinese Listening skills for High school Thai Students: An Investigation of the Chinese as a Foreign Language Listening Class".

Miss Wanyan Zhou has already passed her research approval on 19 December 2020 and is now occupied with preparing her study instruments.

We, therefore, hope that your permission for the student to collect the data at your school will be granted. Your kind support in this matter will be greatly appreciated.

Yours sincerely,

Usaporn Swekwi

(Associate Professor Dr. Usaporn Swekwi)

Dean of Suryadhep Teachers College

Rangsit University



The image features a large, faint watermark of the Rangsit University logo in the background. The logo is a circular emblem with a stylized flame or sunburst at the top, radiating lines forming a circle, and the university's name in Thai and English at the bottom.

Appendix B

INITIATON LETTER FROM THREE EXPERTS

Expert 1



Memorandum

STC 4800/0949

24 March 2021

Ref: Invitation for you to be our IOC (Item Objective Congruence) expert

Attachments: 1) Skill Area Analysis of HSK Test Items on Listening

2) The Student Satisfaction Questionnaire

3) The Semi-Structured Interview Questions

4) The Listening Course Lesson Plans

Dear Dr. Mongkol Sodachan,

Rangsit English Language Institute

Our student, Miss Wanyan Zhou 6205436, who is studying in the second year of Bilingual Education, has now completed her Thesis Proposal Defense on 19 December 2020. The research title is "Application of a Blended Learning Model for the Chinese Listening Skills for High School Thai Students: An Investigation of a Chinese as a Foreign Language Listening Class". Currently, she is in the middle of the instrument design phase and has come up with the instrument for her study.

Thus, I would like to invite you to be our IOC (Item-Objective Congruence) expert in assessing the validity of the instruments. The package has been attached herewith.

I truly appreciate your kind support in this matter and hope that you will accept my invitation.

Sincerely yours,

Usaporn Swekwi

(Assoc. Prof. Dr. Usaporn Swekwi)

Dean

Suryadhep Teachers College
Rangsit University

มหาวิทยาลัยรังสิต Rangsit University

Expert 2



Memorandum

STC.4800/0950

24 March 2021

Ref: Invitation for you to be our IOC (Item Objective Congruence) expert

Attachments: 1) Skill Area Analysis of HSK Test Items on Listening

2) The Student Satisfaction Questionnaire

3) The Semi-Structured Interview Questions

4) The Listening Course Lesson Plans

Dear Dr. Boonsri Cheevakumjorn

Rangsit International College

Our student, Miss Wanyan Zhou 6205436, who is studying in the second year of Bilingual Education, has now completed her Thesis Proposal Defense on 19 December 2020. The research title is "Application of a Blended Learning Model for the Chinese Listening Skills for High School Thai Students: An Investigation of a Chinese as a Foreign Language Listening Class". Currently, she is in the middle of the instrument design phase and has come up with the instrument for her study.

Thus, I would like to invite you to be our IOC (Item-Objective Congruence) expert in assessing the validity of the instruments. The package has been attached herewith.

I truly appreciate your kind support in this matter and hope that you will accept my invitation.

Sincerely yours,

Usaporn Swekwi

(Assoc. Prof. Dr. Usaporn Swekwi)

Dean

Suryadhep Teachers College

Rangsit University

Expert 3



Memorandum

STC.4800/0951

24 March 2021

Ref: Invitation for you to be our IOC (Item Objective Congruence) expert

Attachments: 1) Skill Area Analysis of HSK Test Items on Listening

2) The Student Satisfaction Questionnaire

3) The Semi-Structured Interview Questions

4) The Listening Course Lesson Plans

Dear Prof. Long Ju,

Baise University

Our student, Miss Wanyan Zhou 6205436, who is studying in the second year of Bilingual Education, has now completed her Thesis Proposal Defense on 19 December 2020. The research title is "Application of a Blended Learning Model for the Chinese Listening Skills for High School Thai Students: An Investigation of a Chinese as a Foreign Language Listening Class". Currently, she is in the middle of the instrument design phase and has come up with the instrument for her study.

Thus, I would like to invite you to be our IOC (Item-Objective Congruence) expert in assessing the validity of the instruments. The package has been attached herewith.

I truly appreciate your kind support in this matter and hope that you will accept my invitation.

Sincerely yours,

Usaporn Swekwi

(Assoc. Prof. Dr. Usaporn Swekwi)

Dean

Suryadhep Teachers College

Rangsit University

龙菊
2021.3.26

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Appendix C

ITEM OBJECTIVE CONGRUENCE FOR QUESTIONNAIRE

Item Objective Congruence (IOC) for Questionnaire by the Expert

+1: the item clearly matches the stated objectives.

0: the item is unclear or unsure whether the measures meet the stated objectives.

-1: the item does not match the stated objectives.

No	Items	Expert 1	Expert 2	Expert 3	IOC Average	Congruence
1	My instructor is knowledgeable in the subject content.	+1	+1	+1	1	Accepted
2	My instructor provided opportunities to ask questions.	+1	+1	+1	1	Accepted
3	My instructor treated me with respect.	+1	+1	+1	1	Accepted
4	My instructor made the subject as interesting as possible.	+1	+1	+1	1	Accepted
5	My instructor delivered the subject content effectively.	+1	+1	+1	1	Accepted
6	My instructor efficiently made the class run smoothly.	+1	+1	+1	1	Accepted
7	The learning resources are easy to access.	+1	+1	0	0.67	Accepted
8	The learning resources are up to date.	+1	+1	+1	1	Accepted
9	The quality of the listening materials is practical.	+1	+1	+1	1	Accepted
10	The listening learning materials are enjoyable.	+1	+1	+1	1	Accepted
11	The design of discussion, evaluation, cooperation and other activities in the teaching process are going well.	+1	+1	+1	1	Accepted
12	The learning atmosphere is good.	+1	+1	+1	1	Accepted
13	The interaction between the teacher and classmates is good.	+1	+1	+1	1	Accepted
14	This course has provided me with opportunities to explore ideas or concepts in depth.	+1	+1	+1	1	Accepted

Table Item Objective Congruence (IOC) for Questionnaire by the Expert (Cont.)

No	Items	Expert 1	Expert 2	Expert 3	IOC Average	Congruence
15	I have the right opportunities to provide feedback on my course.	+1	+1	+1	1	Accepted
16	This course has made me more confident in listening to Chinese.	+1	+1	+1	1	Accepted
17	This course helps me develop my ability to work as a team member.	+1	+1	+1	1	Accepted
18	This course helps me develop the ability to plan my own work.	+1	+1	+1	1	Accepted
19	This course improved my skill in understanding the main idea of a conversation.	+1	+1	+1	1	Accepted
20	This course improved my skill in doing summaries.	+1	+1	+1	1	Accepted
21	This course improved my vocabularies that matches each situation.	+1	+1	+1	1	Accepted
22	I have received helpful comments on my work.	+1	+1	+1	1	Accepted
23	Instructor often praised and encouraged good learning behaviors in class.	+1	+1	+1	1	Accepted
24	Assessment was fair to all students.	+1	+1	+1	1	Accepted
25	Generally speak, I am satisfied with this course.	+1	+1	+1	1	Accepted

Appendix D

SATISFACTION OF QUESTIONNAIRE

มหาวิทยาลัยรังสิต Rangsit University

Table Questionnaire of Satisfaction of Blended learning

Satisfaction of Blended learning						
No	Statement	Lever of opinion				
		1	2	3	4	5
Teaching quality						
1	My instructor is knowledgeable in the subject content.					
2	My instructor provided opportunities to ask questions.					
3	My instructor treated me with respect.					
4	My instructor made the subject as interesting as possible.					
5	My instructor delivered the subject content effectively.					
6	My instructor efficiently made the class run smoothly.					
Learning resources						
7	The learning resources are easy to access.					
8	The learning resources are up to date.					
9	The quality of the listening materials is practical.					
10	The listening learning materials are enjoyable.					
Learning environment						
11	The design of discussion, evaluation, cooperation and other activities in the teaching process are going well.					
12	The learning atmosphere is good.					
13	The interaction between the teacher and classmates is good.					
14	This course has provided me with opportunities to explore ideas or concepts in depth.					
15	I have the right opportunities to provide feedback on my course.					
Listening skills and Learning experiences						
16	This course has made me more confident in listening to Chinese.					
17	This course helps me develop my ability to work as a team member.					
18	This course helps me develop the ability to plan my own work.					
19	This course improved my skill in understanding the main idea of a conversation.					
20	This course improved my skill in doing summaries.					

Table Questionnaire of Satisfaction of Blended learning (cont.)

	Satisfaction of Blended learning					
No	Statement	Lever of opinion				
21	This course improved my vocabularies that matches each situation.					
Assessment and Feedback						
22	I have received helpful comments on my work.					
23	Instructor often praised and encouraged good learning behaviors in class.					
24	Assessment was fair to all students.					
Overall satisfaction						
25	Generally speak, I am satisfied with this course.					



The background of the page features a large, faint watermark of the Rangsit University logo. The logo is a circular emblem with a stylized flame or sunburst at the top, radiating lines in the middle, and a base with Thai script and the English name 'Rangsit University'.

Appendix E

ITEM OBJECTIVE CONGRUENCE FOR SEMI-STRUCTURED INTERVIEWS

Item Objective Congruence (IOC) for Semi-structured Interview by the Expert

+1: the item clearly matches the stated objectives.

0: the item is unclear or unsure whether the measures meet the stated objectives.

-1: the item does not match the stated objectives.

No	Items	Expert 1	Expert 2	Expert 3	IOC Average	Congruence
1	Do you like to learn Chinese listening by this blended way? Please explain.	+1	+1	0	0.67	Accepted
2	Have you improved some skills in this learning process? Tell me about them.	+1	+1	0	0.67	Accepted
3	Can you tell me about your experience in both positive and negative way about this course?	+1	+1	+1	1	Accepted
4	Would you give some suggestions for this kind of listening class?	+1	+1	+1	1	Accepted

The image features a large, faint watermark of the Rangsit University logo in the background. The logo is circular, with a stylized flame or sunburst design at the top and a ring of radiating lines below it. The text "มหาวิทยาลัยรังสิต" (Mahavithayalai Rangsit) and "Rangsit University" is written in a circular path around the bottom of the logo.

Appendix F

SEMI-STRUCTURED INTERVIEWS

SEMI-STRUCTURED INTERVIEWS

Interviewee: Zhou Wanyan, Chinese Teacher of Class

Place of interview: Classroom Mathayom 4

Interviewer:

Date of interview:

Objective of the interview: To investigate the satisfaction of Mathayom 4 students toward the blended learning Chinese listening class

Q 1: Do you like to learn Chinese listening in this way (blended learning)? Can you explain why?

Q 2: Have you improved some skills in this learning process?

Q3: Can you tell me about your experience in this course?

Q4: Would you give some suggestions for this listening class



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Appendix G

ITEM OBJECTIVE CONGRUENCE FOR THE SKILL AREA ANALYSIS OF HSK TEST ITEMS

Item Objective Congruence (IOC) for the Skill Area Analysis of HSK Test Items by the Expert

+1: the item clearly matches the stated objectives.

0: the item is unclear or unsure whether the measures meet the stated objectives.

-1: the item does not match the stated objectives.

Question	Listening Sub-skills	Expert 1	Expert 2	Expert 3	IOC Average	Congruence
		+1	+1	+1	1	Accepted
1	Mastering the vocabulary about the weather, know how to describe the weather and identify synonyms	+1	+1	+1	1	Accepted
2	Understanding the main idea of the conversation	+1	+1	+1	1	Accepted
3	Understanding the main idea of the conversation	+1	+1	+1	1	Accepted
4	Understanding the main idea of the conversation	+1	+1	+1	1	Accepted
5	Mastering the vocabulary of praise, Understanding the main idea of the conversation	+1	+1	+1	1	Accepted
6	Understanding the main idea of the conversation	+1	+1	+1	1	Accepted
7	Mastering the vocabulary that describe the character of a person and Understanding the main idea of the conversation	+1	+1	+1	1	Accepted
8	Understanding the main idea of the conversation	+1	+1	+1	1	Accepted
9	Understanding the main idea of the conversation	+1	+1	+1	1	Accepted
10	Mastering the vocabulary of sickness and need to know how to describe pathological symptoms	+1	+1	+1	1	Accepted
11	Mastering words showing directions	+1	+1	+1	1	Accepted
12	Understanding the main idea of the conversation	+1	+1	+1	1	Accepted
13	Guess the meaning of words	+1	+1	+1	1	Accepted
14	Understanding the main idea of the conversation	+1	+1	+1	1	Accepted
15	Understanding the main idea of the conversation	+1	+1	+1	1	Accepted
16	Mastering the words that describe the characteristics of things	+1	+1	+1	1	Accepted
17	Mastering the words that describe the traffic and Understanding the main idea of the conversation	+1	+1	+1	1	Accepted

Item Objective Congruence (IOC) for the Skill Area Analysis of HSK Test Items by the Expert (Cont)

Question	Listening Sub-skills	Expert 1	Expert 2	Expert 3	IOC Average	Congruence
18	Understanding the main idea of the conversation	+1	+1	+1	1	Accepted
19	Know how to ask for a price	+1	+1	+1	1	Accepted
20	Understanding the main idea of the conversation	+1	+1	+1	1	Accepted
21	Mastering the vocabulary about the climate and Understanding the main idea of the conversation.	+1	+1	+1	1	Accepted
22	Understanding the characteristics of each location	+1	+1	+1	1	Accepted
23	Understanding the main idea of the conversation	+1	+1	+1	1	Accepted
24	Mastering the vocabulary that describe the character of a person and understanding the main idea of the conversation	+1	+1	+1	1	Accepted
25	Mastering the vocabulary of festivals and the activities of each festival	+1	+1	+1	1	Accepted
26	Understanding the main idea of the conversation	+1	+1	+1	1	Accepted
27	Mastering character relationship vocabulary and understanding character relationships based on dialogue	+1	+1	+1	1	Accepted
28-29	Understanding the main idea from the dialogue	+1	+1	+1	1	Accepted
30	Understanding the characteristics of each location	+1	+1	+1	1	Accepted
31	Understanding the main idea from the dialogue	+1	+1	+1	1	Accepted
32	Mastering the vocabulary of check in and understanding the main idea of the conversation	+1	+1	+1	1	Accepted
33	Knowing how to select an airplane seat and understanding the main idea of the conversation	+1	+1	+1	1	Accepted
34-35	Summarizing and understanding the main idea from the dialogue	+1	+1	+1	1	Accepted
36-37	Mastering how to describe the location and characteristics of the house, Understanding the main idea from the dialogue	+1	+1	+1	1	Accepted
38-39	Mastering vocabulary about characteristics of animal	+1	+1	+1	1	Accepted

Item Objective Congruence (IOC) for the Skill Area Analysis of HSK Test Items by the Expert (Cont)

Question	Listening Sub-skills	Expert 1	Expert 2	Expert 3	IOC Average	Congruence
40-41	Understanding the main idea from the dialogue	+1	+1	+1	1	Accepted
42-43	Understanding the main idea from the dialogue	+1	+1	+1	1	Accepted
44-45	Summarizing and understanding the main idea from the story	+1	+1	+1	1	Accepted





Appendix H

THE PRE-POST TEST

听力

第一部分

第 1-10 题:判断对错。

1. ★老张经常迟到。 ()
2. ★睡太久对身体不好。 ()
3. ★他希望大家能提些意见。 ()
4. ★在入口处换礼物。 ()
5. ★他认为输赢并不重要。 ()
6. ★这节课讲气候变化。 ()
7. ★舞会将在这个礼拜天举行。 ()
8. ★那种镜子比较轻。 ()
9. ★九江市历史很短。 ()
10. ★有误会要及时解释清楚。 ()

第二部分

第 11-25 题:请选出正确答案。

- | | | | |
|----------|--------|--------|---------|
| 11.A 写小说 | B 做蛋糕 | C 学游泳 | D 练普通话 |
| 12.A 认识路 | B 很失望 | C 方向感差 | D 怕发生危险 |
| 13.A 奖金少 | B 来不及了 | C 专业不符 | D 要经常加班 |
| 14.A 堵车了 | B 马上出发 | C 手表坏了 | D 没到时间 |
| 15.A 很聪明 | B 太紧张 | C 不热情 | D 很积极 |
| 16.A 房东 | B 叔叔 | C 妹妹 | D 邻居 |
| 17.A 没预习 | B 没考好 | C 填空题 | D 复习得不错 |
| 18.A 非常冷 | B 热极了 | C 很凉快 | D 十分暖和 |
| 19.A 体育馆 | B 家具店 | C 图书馆 | D 洗手间 |
| 20.A 饿了 | B 胳膊疼 | C 没休息好 | D 咳嗽得厉害 |
| 21.A 在机场 | B 很得意 | C 讨厌阴天 | D 丢了登机牌 |
| 22.A 洗澡 | B 跑步 | C 写总结 | D 打印材料 |

- | | | | |
|-----------|---------|---------|---------|
| 23.A 厨房 | B 教室 | C 办公室 | D 卫生间 |
| 24.A 没带地图 | B 啤酒不打折 | C 没看到表演 | D 没尝到小吃 |
| 25.A 最近很忙 | B 换号码了 | C 无法上网 | D 忘记密码了 |

第三部分

第 26-45 题:请选出正确答案。

- | | | | |
|-----------|---------|---------|----------|
| 26.A 衬衫破了 | B 男的感冒了 | C 药店关门了 | D 女的现金不够 |
| 27.A 填单子 | B 擦桌子 | C 倒垃圾 | D 去应聘 |
| 28.A 很热闹 | B 空气好 | C 森林多 | D 交通方便 |
| 29.A 请假 | B 交作业 | C 送照片 | D 想报名 |
| 30.A 警察 | B 演员 | C 护士 | D 服务员 |
| 31.A 郊区 | B 医院后面 | C 火车站右边 | D 高速公路旁 |
| 32.A 很值得 | B 十分精彩 | C 让人难受 | D 比较无聊 |
| 33.A 很爱笑 | B 比较胖 | C 刚出生不久 | D 今天过生日 |
| 34.A 毛巾 | B 帽子 | C 眼镜盒 | D 塑料袋 |
| 35.A 大使馆 | B 篮球馆 | C 首都宾馆 | D 长城饭店 |
| 36.A 很漂亮 | B 很正式 | C 有点儿大 | D 稍微瘦了点儿 |
| 37.A 很吃惊 | B 正在减肥 | C 不爱打扮 | D 要去约会 |
| 38.A 冰箱 | B 空调 | C 照相机 | D 传真机 |
| 39.A 很复杂 | B 用处大 | C 语言简单 | D 不太准确 |
| 40.A 很粗心 | B 要出国了 | C 唱歌很好 | D 爱写日记 |
| 41.A 被骗了 | B 没赚到钱 | C 签证没办好 | D 朋友要离开 |
| 42.A 吃烤鸭 | B 唱京剧 | C 打羽毛球 | D 修理自行车 |
| 43.A 教课 | B 爬长城 | C 办演出 | D 收拾房子 |
| 44.A 要友好 | B 千万别激动 | C 不能太随便 | D 别在众人面前 |
| 45.A 只说优点 | B 声音要大 | C 提前通知 | D 先表扬后 |

The logo of Rangsit University is a circular emblem. At the top is a stylized flame or sunburst. Below it, a ring of radiating lines forms a circle. The text 'มหาวิทยาลัยรังสิต' (Mahavithayalai Rangsit) is written in Thai script along the bottom arc, and 'Rangsit University' is written in English along the bottom arc.

Appendix I

ITEM OBJECTIVE CONGRUENCE FOR LESSON PLANS

Item Objective Congruence (IOC) for the Lesson Plans by the Expert

+1: the item clearly matches the stated objectives.

0: the item is unclear or unsure whether the measures meet the stated objectives.

-1: the item does not match the stated objectives.

No	Expert 1	Expert 2	Expert 3	IOC Average	Congruence
Lesson plan 1	+1	+1	+1	1	Accepted
Lesson plan 2	+1	+1	+1	1	Accepted
Lesson plan 3	+1	+1	+1	1	Accepted
Lesson plan 4	+1	+1	+1	1	Accepted





Appendix J

LESSON PLANS

Lesson 1

Subject	Chinese listening	Topic	It is good to get up early and go to bed early
Grade	Mathayom 4	Time	135 minutes (3 periods)
Teaching materials	PowerPoint, video and audio clips		
Objectives	<ol style="list-style-type: none"> 1. Students must learn some words about get up/ go to bed and know how to use them. 2. Listening skills: can understand the common expressions of talk about living habits. 3. Learn how to introduce one's living habits and give comments on other living habits. 		
Teaching focus	Listening and understanding.		
Teaching Process	<p>Section 1:</p> <p>Online study:</p> <ol style="list-style-type: none"> 1. Students go to the google classroom and click the link of quizlet.com and learning vocabulary and complete the exercise on the quizlet. 2. Preview the topic of class and watch the video and answer the questions. 3. Students recodes the questions which cannot solve by themselves <p>In class:</p> <ol style="list-style-type: none"> 1. Lead in by pictures and ask questions. (3 minutes) <ol style="list-style-type: none"> 1) When you go to the bed and when you get up in the morning? 2) Do you like to lie in? why? 3) Do you often stay up late? 2. Dictation:(10 minutes) <ol style="list-style-type: none"> 1) Ask some student write in the whiteboard, and others write in the notebook. 2) Correction. 3. Listening training: (25 minutes) <ol style="list-style-type: none"> 1) Listening and choose the answer (25, items) 		

	<p>2) Listening and fill in the blank. (5 items)</p> <p>3) Correction.</p> <p>4. Teacher explains techniques of listening skill, how to pick the key words and understands the meaning of conversation. (5 minutes)</p> <p>5. Assignment. (2 minutes)</p> <p>Section 2:</p> <p>Online study:</p> <p>1. Preview the topic of class and watch the video and answer the questions.</p> <p>2. Complete the exercise on the book.</p> <p>3. Students recode the questions which cannot solve by themselves</p> <p>In class:</p> <p>1. Students post the questions, discusses in group and present at first. (10 minutes)</p> <p>2. Feedback questions from teacher.</p> <p>3. Teacher explains the questions and supplement, such as explain the difficult words and sentences. (10 minutes)</p> <p>4. Teacher plays the audio and students listen and repeat after audio. (5 minutes)</p> <p>1) Teacher corrects the pronunciation.</p> <p>2) Students listen to the audio of conversation.</p> <p>3) Students explain the main ideas of the text.</p> <p>5. Watch the video again and correct the answer together. (3 minutes)</p> <p>6. Students practice the dialogue of the living habit in group and talk about own living habit in pairs. (10 minutes)</p> <p>7. After listening to the conversation, others students should give comment of themselves. (5 minutes)</p> <p>8. Assignment: preview and complete the listening exercises on the book. (2 minutes)</p> <p>Section 3</p> <p>Listening Mini Test (45 minutes)</p>
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Lesson 2

Subject	Chinese listening	Topic	Order food
Grade	Mathayom 4	Time	135 minutes (3 periods)
Teaching materials	PowerPoint, video and audio clips		
Objectives	1. Students must learn how to order food, how to give comment on smell, color and taste of food. 2. Listening skills: can understand the common expressions of ordering food. 3. Supplement: how to order food online.		
Teaching focus	Listening and understanding.		
Teaching Process	<p>Section 1</p> <p>Online study:</p> 1. Students go to the google classroom and click the link of quizlet.com and learning vocabulary and complete the exercise on the quizlet. 2. Students preview the topic of class and watch the video and answer the questions. 3. Students recode the questions which cannot solve by themselves <p>In class:</p> 1. Lead in: show the pictures and ask questions. (5 minutes) 1) Do you know this dish? 2) What is your favorite food, can you talk about it? 2. Dictation:(10 minutes) 1) Ask some students write in the whiteboard, and others write in the notebook. 2) Correction. 3. Listening training: (25 minutes) 1) Listening and choose the answer (25, items) 2) Watch the video and fill in the blank. (5 items) 3) Correction.		

	<p>4. The teacher plays the video about the topic, students talk about the main idea of video. (10 minutes)</p> <p>5. Summary: students fill in the evaluate form. (3 minutes)</p> <p>6. Assignment. (2 minutes)</p> <p>Section 2:</p> <p>Online study:</p> <p>1. Students preview the topic of class and watch the video and answer the questions.</p> <p>2. Students complete the exercise on the book.</p> <p>3. Students recode the questions which cannot solve by themselves.</p> <p>In class:</p> <p>1. Students pose the questions, group discusses and presented at first. (10 minutes)</p> <p>2. Feedback questions from teacher.</p> <p>3. The teacher explains the questions and supplement, such as explain the difficult words and sentences. (5 minutes)</p> <p>4. The teacher plays the audio, students listen and repeat after audio. (5 minutes)</p> <p>1) Teacher correct the pronunciation.</p> <p>2) Listen the audio of conversation.</p> <p>3) Students explain the main ideas of the text.</p> <p>5. Students practice the dialogue of the living habit in group and talk about own living habit in pairs. (20 minutes)</p> <p>6. After listening to the conversation, others students should give comment of their classmates. (3 minutes)</p> <p>7. Assignment: preview and complete the exercises on the book. (2 minutes)</p> <p>Section 3</p> <p>Listening Mini Test (45 minutes)</p>
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Lesson 3

Subject	Chinese listening	Topic	Shopping and bargain
Grade	Mathayom 4	Time	135 minutes (3 periods)
Teaching materials	PowerPoint, video and audio clips		
Objectives	<ol style="list-style-type: none"> 1. Students must know words about shopping and bargaining: 质量, 脸色, 便宜, 贵..... 2. Learn how to bargain and how to comment on the quality of the items. 3. Listening skills: can understand the common expressions of shopping, and the words about doing comment. 		
Teaching focus	Listening skills and synonymous		
Teaching Process	<p>Section 1:</p> <p>Online study:</p> <ol style="list-style-type: none"> 1. Students go to the google classroom and click the link of quizlet.com and learning vocabulary and complete the exercise on the quizlet. 2. Students preview the topic of class and watch the video and answer the questions. 3. Students recode the questions which cannot solve by themselves <p>In class:</p> <ol style="list-style-type: none"> 1. Leads in by using video clip about shopping, and base on video asks students some questions. (3 minutes) <p style="padding-left: 40px;">Such as:</p> <ol style="list-style-type: none"> 1) What is the women doing? 2) What does she get? <ol style="list-style-type: none"> 2. Dictation:(10 minutes) <ol style="list-style-type: none"> 1) Asks some students write on the whiteboard, and others write in the notebook. 2) Correction. <ol style="list-style-type: none"> 3. Listening training: (25 minutes) 		

	<p>1) Listening and choose the answer (25, items)</p> <p>2) Watch the video and fill in the blank. (5 items)</p> <p>1) Correction.</p> <p>4. Teacher plays the video clip about the topic, students talk about the main idea of video. (5 minutes)</p> <p>5. Assignment. (2 minutes)</p> <p>Section 2</p> <p>Online study:</p> <p>1. Students preview the topic of class and watch the video and answer the questions.</p> <p>2. Students complete the exercise on the book.</p> <p>3. Students recode the questions which cannot solve by themselves.</p> <p>In class:</p> <p>1. Students pose the questions, discusses in group and present at first. (10 minutes)</p> <p>2. Feedback questions from teacher.</p> <p>3. The teacher explains the questions and supplement, such as explain the difficult words and sentences. (10 minutes)</p> <p>4. The teacher plays the audio and students listen and repeat after audio. (5 minutes)</p> <p>1) Teacher corrects the pronunciation.</p> <p>2) Students listen to the audio of conversation.</p> <p>3) Students explain the main ideas of the text.</p> <p>5. Students practice the dialogue of the living habit in group and talks about own living habit in pairs. (15 minutes)</p> <p>6. After listening to the conversation, other students should give comment of themselves. (3 minutes)</p> <p>7. Assignment: preview and complete the exercises on the book. (2 minutes)</p> <p>Section 3</p> <p>Listening Mini Test (45 minutes)</p>
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Lesson 4

Subject	Chinese listening	Topic	Transportation
Grade	Mathayom 4	Time	135 minutes (3 periods)
Teaching materials	PowerPoint, video and audio clips		
Objectives	1. Students must learn some words about vehicles. 2. Learn how to give comment on different vehicles. 3. Listening skills: can understand when talk about means of transportation.		
Teaching focus	Listening skills and understanding.		
Teaching Process	<p>Section 1: online study: 1. Students go to the google classroom and click the link of quizlet.com and learning vocabulary and complete the exercise on the quizlet. 2. Students preview the topic of class and watch the video and answer the questions. 3. Students recode the questions which cannot solve by themselves</p> <p>In class: 1. Leads in by using pictures and asks students some questions. (5 minutes) Such as: 1) What is this? 2) What is she doing?</p> <p>2. Dictation:(10 minutes) 1) Asks some students write in the whiteboard, and others write in the notebook. 2) Correction.</p> <p>3. Listening training: (25 minutes) 1) Listening and choose the answer (25, items) 2) Watch the video and fill in the blank. (5 items) 3) Correction.</p>		

	<p>4. The teacher plays the video clip about the topic, students talk about the main idea of video. (5 minutes)</p> <p>5. Summary: students fill in the evaluate form. (3 minutes)</p> <p>6. Assignment. (2 minutes)</p> <p>Section 2:</p> <p>Online study:</p> <p>1. Students preview the topic of class and watch the video and answer the questions.</p> <p>2. Students complete the exercise on the book.</p> <p>3. Students recode the questions which cannot solve by themselves</p> <p>In class:</p> <p>1. Students pose the questions, group discusses and presented at first. (10 minutes)</p> <p>2. Feedback questions from teacher.</p> <p>3. The teacher explains the questions and supplement, such as explain the difficult words and sentences. (5 minutes)</p> <p>4. The teacher plays the audio and students listen and repeat after audio. (5 minutes)</p> <p>1) The teacher corrects the pronunciation.</p> <p>2) Students listen the audio of conversation.</p> <p>3) Students explain the main ideas of the text.</p> <p>5. Students practice the dialogue of the living habit in group and talk about own living habit in pairs. (15 minutes)</p> <p>6. After listening to the conversation, other students should give comment of themselves. (3minuets)</p> <p>7. Assignment: preview and complete the exercises on the book. (2 minutes)</p> <p>Section 3</p> <p>Listening Mini Test (45 mimutes)</p>
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Biography

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