

TERTIARY LEVEL STUDENTS' ATTITUDES AND STRATEGIES IN LEARNING ENGLISH ONLINE AT A CHINESE UNIVERSITY IN CHINA

BY LIXU PAN

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Abstract

This study examines 6 sophomore English majors' attitudes toward learning English and reflects their learning strategies that come hand in hand with the attitudes. The study uses a combination of quantitative and qualitative methods to reveal Chinese college students' enthusiasm during COVID-19 epidemic in China. In terms of a quantitative inquiry, a questionnaire with three dimensions-cognitive, affective and behavioral is designed to garner an overall evaluation of attitudes from 50 sophomore English majors' students for the selection of participants and research themes. The qualitative data is semi-structured interviews. The results of this study show 4 positive and 3 negative attitudes affect the online English language learning. The 2 positive attitudes namely self-preparation and collaborative learning help students to work harder for class and encourage them to join with their friends in working on their assignments, reports, and projects. Then the other two: students' curiosity of cultural English background and extensive readings motivate them to research into more English sources to support their learning such as more books and materials in the libraries and on the websites. On the contrary, the 3 negative attitudes toward the instability of the Internet, the dissatisfaction of teachers and materials make them tired of studying and thus, lose their motivation and attention in class. This incident needs teachers' facilitation and directive role to help them proceed with their language learning in the 'new normal' platform. The results of this study mentioned above are attributed to the institutions where the researchers work, to researchers in China and Thailand, and to the global learning community in the 21st century.

(Total 148 pages)

Keywords: Chinese College Students, Online Learning, English Learning Attitudes, A Case Study, Synchronous and Asynchronous Teaching

Student's Signature Thesis Advisor's Signature

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Chapter 1

Introduction

1.1 Background of the Study

With the outbreak of the COVID-19 in 2020, traditional offline courses are no longer sufficient for students' learning needs. In this period, computer-assisted language learning and mobile phone-based mobile language learning are changing the way we learn languages. Online teaching has gradually shifted from being a short-term, reactive, emergency initiative to a regular, proactive and widespread use (Wang, 2021, p.126).

Despite the initiative of online teaching in schools, there are still many problems in the actual online teaching process. There are certain disadvantages of online learning alone, such as overemphasizing the leading role of teachers and neglecting students' independent learning, and students are more likely to lack a sense of identity in a virtual environment (Ji, 2018, p.61). Therefore, it becomes more important for teachers to understand learners' attitudes towards online English learning.

Based on the above phenomenon, understanding students' different learning attitudes towards online English, the teachers can identify the problems in students' English learning. Then the teachers can find effective ways to facilitate students to understand online learning and its necessity by the time the epidemic is still a rage.

1.2 Significance of the Study

The study background in Section 1.1 brings in the idea for me to focus my study on student attitudes toward English online learning in a Chinese context. It is significant in 2 ways: in theoretical significance and in practical point of view.

In terms of theoretical significance, this study looks for constructivist theory (Vygotsky, 2012; Wing and Putney, 2002) as a support and applies synchronous and asynchronous methods (Wintemute, 2022) to carry out the investigation and research. Through collecting data and text records, I investigate and study the attitudes of college students' English learning in China under the online learning mode, and find out the current problems in English learning attitudes from the realistic investigation, so as to understand my students, to prompt more English teachers, course designers, and stakeholders at my university and educators elsewhere to pay more attention students' English learning attitudes and to the students themselves. The focus is on developing students' positive learning attitudes and guiding them to form suitable and effective learning styles.

From the practical point of view, this study hopes to find suitable online learning strategies to enhance positive attitudes in online English learning from the perspective of students. In addition, I hope to further analyze the main factors affecting students' English learning in online mode, and how students' learning can be improved. Also, I wish to improve students' learning, make them form positive emotional attitudes, and provide students with a more suitable learning environment for their online learning.

In conclusion, this study will not only provide suggestions for English teachers' online teaching in order to improve teaching methods and enhance the

effectiveness of online teaching. It also helps students to be able to identify problems in the learning process from their own perspectives, which in turn leads to effective ways to form good attitudes toward learning English online.

1.3 Statement of the Problem

There are 4 disadvantages of online learning in my context. First, the students cannot contact the teacher directly and only need to interact through the computer screen, most of them lack participation, and the teacher's direct supervision of students' online learning gradually diminishes making the learning progress slow. Second, affected by the speed of the Internet, the students sometimes miss the teacher's teaching. This can possibly make students disengaged in their learning. Third, though teachers provide rich learning resources to students during online teaching, yet they cannot guarantee that students can perform learning activities as expected, and learning efficiency decreases (Cao, 2012, p.57). Fourth, by submitting assignments via emails or some other forms of applications (e.g. LINE, WeChat, and Google classroom), students become reluctant to think independently and presumably believe that the teacher will not be aware of their reduced effort, which affects the quality of student learning outcomes (Zhao, 2021, p.5). Therefore, it is necessary to explore what students' learning attitudes are in online learning in this field.

1.4 Context of the Study

The context of my study is the University, participants and their backgrounds below.

This study was conducted at a University called Trees University (pseudonym) in southern Yunnan Province. It was severely affected by the epidemic or COVID-19. After the Covid-19 outbreak, the university switched to online teaching methods. It has 72 different types of majors (e.g., Chinese and Math), including 33 undergraduate majors (e.g., History and Burmese) and 39 specialist majors (e.g., English, science, and Medicine).

Yunnan is located in a geographical location that borders Thailand, Laos, and Myanmar, so Trees University also offers majors that allow for study exchange to Thai Universities. For example, Trees University has established an English major (Thailand orientation) where students will complete two years of study at Trees University and then go on an exchange program at the Chiang Rai Rajabhat University in Thailand to complete the remaining two years of their studies.

Chiang Rai Rajabhat University is a 50-year old public institution of higher education. It was established on September 11, 1969, by the Provincial Government of Chiang Rai, through an application to the Bureau of Teacher Education and Training, and was named "Royal College" by His Majesty the King on May 14, 1992, in keeping with the diversity of the college's training, and Chiang Rai Rajabhat University has since become a member of the Royal College Union, under the Ministry of Education.

It was upgraded to the Chiang Rai Rajabhat University in 2004 by the opinion of the cabinet. Chiang Rai Rajabhat University is a university that aims to develop regional education, to give regional people service is the opportunity to learn, to train students morally, intellectually, physically and aesthetically, to be a center of education for the people and to have research on the Mekong sub-region region. It has 79 undergraduate majors, 14 master's majors and 3 doctoral majors. The class in this

study is the students from the English major (Thailand orientation) who changed to online study in China because of the COVID-19.

As the epidemic continues and is still unpredictable, this is really the large-scale use of the Internet in teaching. Li (2022, pp.24-26) pointed out that in March 2012, the Ministry Of Education formulated the Ten-Year Development Plan for Education Informatisation (2011-2020), which clearly put forward the development goals, tasks and action plans and safeguards for education informatisation, and the Guide to Teaching English at University (2016), which also encourages universities to make full use of information technology and teachers to use online high-quality educational resources to expand and implement teaching content so that students can move toward the direction of self-directed learning. Therefore, various universities have made extensive use of multimedia technology as a way to enrich teaching means and make teaching contents richer while effectively breaking the constraints of time and space on college English teaching, thus enabling students to achieve independent and personalized learning with the support of multimedia technology (Zhang, 2020, p.188).

However, most scholars hold a negative view of the introduction of technology tools into the classroom. Firstly, there is too much focus on the teaching format and neglect of the teaching objectives during classroom use. Second, there is less communication between teachers and students, and students' classroom participation is weakened (Han, 2021, p.117). Third, students' feedback is neglected in the use of technology, which affects students' learning motivation (Duan, 2020, p.254).

Educational psychology states that learning attitude is a very important factor that affects learning. Learning attitudes are learners' psychological dispositions toward

various objects in learning activities and are a very important non-intellectual factor that affects learning (Yan, 2021, p.81). According to Liaw's (2002, pp.17-35) description, learning attitudes can be divided into 3 categories: affective attitudes, cognitive attitudes and behavioral attitudes.

1.5 Aims of the Study

This study aims to find out the attitudes of the sophomore English majors at Trees University towards online English learning and to investigate in what ways these attitudes encourage students' learning strategies to improve their English learning online.

1.6 Research Questions

There are 2 research questions in this study:

- 1.6.1 What are the students' attitudes towards online learning in this study?
- 1.6.2 What are the learning strategies students apply to their online English learning?

1.7 Scope of the Study

In this study, I used a mixed-methods approach, beginning with a quantitative study of 50 sophomore English majors. The students all passed the CET-4 English exam, they had studied English for at least 4 years, and their English proficiency was representative of or even exceeded that of most people. Secondly, six volunteers from

the 50 students conduct semi-structured interviews.

1.7.1 Data Collection

The reason for choosing questionnaires as my quantitative study is that it is simpler, easier and more efficient to collect data. Questionnaires can be submitted directly through electronic devices in an epidemic setting without having to go to a fixed location to avoid the risk of infection; The focus group interview method, on the other hand, allows for the interaction between participants to stimulate more new perspectives and viewpoints and to understand the different points of view of the students.

1.7.2 Data Analysis

The questionnaire uses the five-point Likert scale option method, where each question has 1, 2, 3, 4, and 5 options, and what the options represent are strongly disagree, disagree, neutral, agree, and strongly agree, respectively. For statistical purposes, each of these five options was assigned a score of 1-5.

The 2 data: interviews and teacher's journals described above were collected, compartmentalized, and triangulated using Strauss and Cobin's (2008) triangulation process: open coding, axial coding, and selective coding to obtain answers to the 2 research questions.

1.8 Definition of Terms

Chinese tertiary level students

Tertiary level students who study full-time at a general higher education institution for three to four years. In this study, they refer to year 2 students at Trees University.

Students' attitudes

In my context, they are students' opinions and reflections that affect their learning outcomes. These students sometimes do not feel like studying and are bored with it. As a result, their learning efficiency at this stage is low, which also has a negative impact on the next stage of learning. Thus, it is necessary to find ways to help students solve their problems.

English online learning

In my context, English online learning is done in real time through a one-to-many teacher, and students need to use electronic devices (e.g. TV, computer, iPad, mobile phone, etc) to login and access the online class room at the appointed time. They study all subjects online every day or as often as five times a week. The teaching and learning process is made more vivid and imaginative through various forms of information transmission such as multimedia maps, texts, sounds and images.

English teaching

In my context, English teaching is an EFL or English as a Foreign Language. English majors are usually required to learn the four English learning skills: listening, speaking, reading, and writing comprehensively. They also learn general knowledge of foreign literature, such as representative movies and novels. They also become

familiar with the history, cultures and traditions of English- speaking countries.

Case study

A case study here refers to a case at Trees University. Based on this case, the problems are presented in a point-to-point manner to provide realistic problem-so lving strategies for English learners here. They might be beneficial for other universities with similar contexts.

The next Chapter sees Chapter 2 on Literature Review.



Chapter 2

Literature Review

This chapter is divided into five parts: Online learning, Research on learning attitudes, Research on online learning attitudes, Learning strategies, and conclusion.

2.1 Research on Online Learning

Online learning is a broad concept that is often defined by scholars in terms of the characteristics of the online media it hosts. Online learning includes many different and overlapping terms, such as E-learning (Friesen, 2008), which was first mentioned as early as the mid-1990s, distance teaching (Tang & Xie, 1994, pp.30-33), computer-based learning (Jacobson & Spiro, 1991) or, more recently, online learning (Muilenburg & Berge, 2005, pp.29-48). The most accepted interpretation of online learning is that it is a widely used form of distance education (Taylor, 2002). The U.S. The Department of Education's 2000 White Paper on Educational Technology identifies E-learning as a new way of receiving education through the Internet and explains that E-learning can connect people around the world and has characteristics such as rapid learning and interactivity (Wang, 2006). From these statements, it is clear that online learning is characterized by distance and E-learning, and that the understanding of online learning has been refined through generations of researchers.

Chinese scholar- Ding (2002), on the other hand, proposed the concept and theory of three generations of information technology and three generations of distance education.

The first generation of information technology is based on printing technology and mail communication, which corresponds to the first generation of correspondence education. The second generation of information technology is based on mass media and audio-visual technology, which corresponds to the second generation of open distance education with multimedia teaching. The third generation of information technology is based on electronic communication technology, with computer multimedia and the Internet as the main representatives, corresponding to the third generation of network distance education, or called electronic/network education, electronic/network learning, and network/online learning. (see table 2.1)

Table 2.1 Three generations of distance education

S.C.	Information technology	Distance Education
The first generation	Printing technology and	Correspondence
PEITA	mail communication	education
The second generation	Mass media and	Open distance
	audio-visual technology	education with
		multimedia teaching
The third generation	Electronic communication	
	technology.	Online learning
	(Representative: Computer	
	Multimedia and Internet)	

Source: Adapted from Ding, 2002

Online learning emphasizes the openness of learning resources with the aim of better supporting learners to achieve open and flexible online learning activities (Linda, 1990). Through the online learning approach, learners can take advantage of the computer network to access appropriate teaching and learning resources and implement learning tasks on the computer, rather than being limited to the face-to-face classroom format. The first scholar who proposed the concept of online learning was Hiltz (1994), who understood it as a web application that places the learning homepage and related learning resources of the course studied in the network, forming a virtual online learning space with shared characteristics, and then achieving the effect of face-to-face learning. Other scholars have subsequently defined the concept of online learning from different perspectives. At present, scholars have not yet formed a unified definition of online learning, but commonalities can be found in it. Chinese scholar Ma (2017, pp.117-180) combined the current conceptual definitions of online learning, blended learning, and blended teaching in the academic community, and defined online learning as a form of learning in which learners access digital learning resources and carry out learning activities based on an online learning environment. Zhong (2002, pp.30-34) proposed that online learning is networked learning, and this learning mode needs to rely on the online learning environment composed of multimedia online learning resources, online learning communities and the level of network technology. According to He (2002, pp.3-6), online learning refers to learning and teaching activities conducted mainly through the Internet, which makes full use of the learning environment provided by modern information technology with a new communication mechanism and rich resources to realize a new way of learning.

In summary, the concept of online teaching can be defined as a personalized teaching and learning activity in an online learning environment using web-based information technology as a tool.

With the continuous research on distance education, it has brought some reference to the conceptual study of online education. For example, Huang(2003, pp. 75-79) defines and distinguishes between the terms online learning and distance learning. She considers distance learning as a form of learning that spatially separates the teacher from the learner and ensures that the teacher is able to respond to the learner in a timely manner. Online learning, on the other hand, usually refers to learning activities that use both computers and interactive networks.

In contrast, Czerkawski (2016, pp.138-156) refers to the above two situations as online formal learning and online informal learning. The top-down, teacher-centered and carefully planned formal learning environment is classified as online formal learning, while online informal learning is more of a bottom-up, student-centered and widely participatory learning, where knowledge is transmitted by the Internet and students' learning process is in an unorganized and disorganized state (Zhao, 2021). That is, students are one-way learners and cannot get timely feedback from the teacher. In this study, online learning refers to online formal learning. It is a way of learning that takes place in an online learning environment carefully set up by teachers with clear online learning objectives, based on a network platform where teachers carry out teaching activities and students learn, and students can access online learning resources, interact and participate in learning activities through the Internet.

Based on the above connotations of online learning, simply put, English online learning means that learners learn English through the Internet. There are great advantages of putting English learning in an online environment, which are manifested in the following aspects.

More practice opportunities are provided for English learners. According to the characteristics of language, English learning requires continuous and intensive training. Compared with online teaching, traditional classroom teaching can be affected by factors such as the number of students, teaching time, and teachers' energy (Wang, 2017). Internet teaching overcomes the problem that classroom teaching cannot increase the intensity of listening and speaking training in traditional classroom teaching. Moreover, students' training can be done anytime and anywhere (Miao, 2022, pp.108-116). An authentic language learning environment can be created in the online environment, which is undoubtedly good news for learners who lack an authentic language environment. Through multimedia maps, text, sound, images and other forms of information transmission, the teaching process becomes a more vivid image (Gong, 2004, pp.32-35). In addition, it will stimulate learners' interest in learning and improve their learning efficiency.

Online courses have the advantage of breaking through time and space, and can be taught at any time and any place (Xu, 2017, pp.6-7). Online education promotes collaborative learning. Students share information and resources with each other in a cooperative manner, and share responsibility for learning (Wang et al, 2016, pp. 68-74). Compared to individualized learning, collaborative learning facilitates the development of higher cognitive skills and the formation of healthy emotions in students. However, there are many problems in the implementation of online learning. The quality crisis, such as the lack of depth, low motivation and enthusiasm of students, is also a problem that the online learning approach is encountering (Li, 2021).

In current teaching practices, many learners do not take full advantage of online learning activities due to over-reliance on learner autonomy, the lack of instructor attention, and the lack of relevance and timeliness of learning support systems (Taylor, 2002). As a result, a large number of learners are less or not engaged in online learning processes across all types of online learning.

The lack of face-to-face contact with learners, teachers in online teaching often do not realize that they are communicating with learners in different locations, which can reduce learners' identification and engagement with the learning community (Zhong, 2002, pp.13-17). Different studies (e.g. Mou & Wu, 2017, pp.113-119) have shown the importance of instructional interactions in online environments. For instance, Merrill (2012) points out "The isolation that results from the lack of interaction tends to increase the risk of dropping out or academic failure." Liu's (2017, pp.79-80) research shows that in traditional classrooms, students often cannot concentrate all their efforts, which greatly reduces the quality of teaching. Therefore, interactive teaching is very necessary in the English classroom, which can greatly enhance the communication between teachers and students and deepen the teacher-student relationship while improving the quality of students' listening, forming a good virtuous circle.

2. 1. 1 Online Learning: Synchronous and Asynchronous

Distance education has been using online education as one of the important means of teaching and learning. With the outbreak of the COVID-19, the development of online teaching in distance education has been further promoted. The development of network technology has made online teaching in distance education an irreplaceable teaching method (Liu, 2021, pp.11-15). From the perspective of "online teaching", the existing online teaching modes of distance education can be categorized into two types, namely synchronous online teaching mode and asynchronous online teaching mode.

Zhan (2020, pp.3-10) points out that synchronous online teaching mode of distance education refers to the teaching mode in which teachers and students interact with each other online in different spaces by using online tools or platforms on PC or mobile terminals. The distance education synchronous online teaching mode is usually

carried out with the help of online live streaming software, such as Tencent Classroom, Nail Meeting, Tencent Meeting, Jitterbug Live, Google meeting, Zoom and so on.

Its most obvious feature is that it can set up virtual classrooms to achieve synchronization of teaching and learning, thus improving teaching quality. By using live streaming software to set up virtual classrooms, presentations or screens can be shared with students, audio and video interactions with students can also be realized, and questions and answers between students and teachers can be realized, so that students can have a better acceptance of both theoretical and practical courses (Li & Yan, 2020, pp.110-112).

According to Wu (2014, pp.86-88), asynchronous online teaching refers to the teaching and learning mode in which teachers and students teach and learn at different times and spaces by using online tools or platforms with learning resources as the medium on the PC or mobile side. Asynchronous online teaching mode usually requires the use of learning resources or online platforms with a large number of learning resource systems to complete online teaching, such as MOOC, Udemy, Coursera, YouTube and so on.

In the distance education asynchronous online teaching mode, teachers and students rely on learning resources as the medium of teaching activities, and do not establish virtual classrooms, teachers and students are virtual objects. This model is a way of teaching that allows students to realize 4A (Anyone, Anytime, Anywhere, Anything), and students can choose learning contents and self-regulate their learning time and progress according to their own life, work and study situation (An, 2022, pp.132-134).

Ran & Niu (2021, pp.231-234) argue that synchronous online education, or online teaching, is fundamentally different from face-to-face teaching. In this mode of teaching, the instructor uses a live platform to build a virtual classroom to teach students one-to-one or one-to-many synchronously online, and the teaching activities in this mode are separated only in space, and the teaching time remains the same. In contrast, the teaching activities of asynchronous online education are separated in both time and space. This mode of teaching requires teachers to prepare teaching resources in advance and upload them to the teaching platform, and learners can flexibly arrange the learning time and place according to their personal learning characteristics and plan their own learning progress.

Gai (2020, pp.23-25) holds the same view and she mentions that synchronous online teaching is a model in which teachers and students interact and teach at the same time and in different spaces. Its core feature is the spatial separation of teaching and learning and the synchronization of time. This model can use live-streaming type tools to build virtual classrooms, which can realize one-to-one or one-to-many synchronous online teaching. Asynchronous online teaching means that the activities taught by teachers and the activities learned by students are separated in time and space. This model can accommodate students' flexible time commitment, allowing them to flexibly dispose of their time, self-regulate their learning pace and self-control their learning progress according to their individual learning characteristics. Its core feature is the temporal and spatial separation of teaching and learning.

In recent years, Chinese scholars have focused their research on online teaching models that combine synchronous and asynchronous teaching, while few studies have discussed synchronous or asynchronous teaching alone.

Chen & Kuang (2003, pp.27-28) argue that the synchronous-asynchronous hybrid online teaching model is a combination of synchronous and asynchronous online teaching. This teaching model is conducted in a purely online environment, where the instructor combines multiple teaching methods with the online teaching platform according to the nature of the course and the learning characteristics of the students, making it comparable to, or even better than, existing online teaching.

The results of Liu & Yan's (2022, pp.15-17) survey on the exploration of a blended teaching model combining synchronous and asynchronous teaching showed that 95% of students approved of the asynchronous SPOC (Small Private Online Course) live classroom format, and 82% of students believed that this teaching format would achieve better or equivalent results compared to offline classes. While 96% of the students believed that blended teaching was more conducive to student-teacher communication and was not restricted by the classroom, 30% of the students suggested that blended teaching could lead to inattention, poor self-discipline, and distraction due to the lack of teacher supervision in the classroom.

This feedback also pointed out to teachers that the live classroom should not be "teacher-centered" and that teachers must use various forms of teacher-student discussions, roll call questions, and accompanying tests to attract students' attention while talking about knowledge points.

According to Zhang's (2022, pp.30-34) findings, first, 40% of the teachers adopted the live online teaching mode. Teachers taught online according to the original class schedule, and students listened to the class in real time through the platform, and the length of the online class was the same as the scheduled class time. This live online teaching mode can be regarded as implementing offline teaching on the Internet, which is the online version of the original offline classroom teaching and

does not bring the technical advantages of online teaching into full play. In addition, when there are more live online classes, problems such as network lag and crashes often occur. Secondly, the number of teachers who adopt the recording mode is about 25%. Teachers record their teaching contents into videos beforehand and then upload them to the online platform. This kind of recorded online teaching is still a kind of lecture teaching, and the recorded online teaching cannot realize the synchronization of teaching and learning. Finally, in synchronous and asynchronous hybrid teaching, the "MOOC + live flipped classroom" mode accounts for about 35% of teachers. Flipped classroom teaching is based on a mature MOOC course website and implemented in the hybrid format of "SPOC + live streaming". Firstly, teachers choose the appropriate online courses according to the school and students' situation; then, teachers assign students to study online course resources before class according to the syllabus requirements; finally, teachers use the live video platform to conduct online teaching activities according to the class schedule. This mode enables teachers and students to have two-way interaction and communication in the classroom, which improves the teaching effect of the live online course.

From 2020 to 2021, due to the impact of the new epidemic, the new "synchronous + asynchronous" blended teaching model is attracting attention and is being used in a variety of disciplines: Liu (2020, pp.114-115) presents the experience of using the "Super Star Learning" platform to teach the "synchronous + asynchronous" blended model in a course on histology, which is a basic medical course, with good results; Du (2020, pp.175-176) uses the "synchronous + asynchronous" blended model to teach a course on medical science. Liu (2020, pp. 114-115) introduced the experience of using the "Super Star Learning" platform to carry out the "synchronous + asynchronous" hybrid teaching mode for a course on histology, which is a basic medical course, and achieved good teaching results; and put into practice the concept of "student-centered". Zeng (2020, pp.141-144) took the

English major's course "Overview of Chinese Culture" as an example and introduced and analyzed how to build a "synchronous + asynchronous" dual channel in the rain classroom, so that teaching activities can be carried out in the most appropriate channel. Zhan (2020, pp.3-10) proposed a synchronous asynchronous hybrid teaching mode of "MOOC/SPOC + live classroom + instant messaging group" for a course on enterprise resource planning and supply chain management system, which realized "asynchronous teaching in catechism and synchronous learning in classroom". The model of "MOOC/SPOC + live classroom + instant messaging group" is a synchronous asynchronous hybrid teaching model, which realizes "asynchronous teaching in catechism and synchronous learning in classroom". In addition, He & Dong (2020, pp.35-42) used "Rain Classroom" as a platform to build a synchronous-asynchronous dual-channel teaching model and conducted satisfaction surveys and interviews, concluding that students were more satisfied, and their learning interest and autonomy, and teacher-student interaction were improved.

Even though it has received increasingly widespread attention, most of the studies on synchronous and asynchronous teaching have been conducted with Chinese students in colleges and universities, while in the field of English professional learning, many scholars cling to conventional teaching and consider ground-based teaching irreplaceable, and pay less attention to and have less confidence in online teaching, resulting in few studies targeting synchronous teaching models (Huang, 2021, pp.22-24). Even though the outbreak of the epidemic has led most colleges and universities to carry out synchronous and asynchronous teaching, many schools are still in the figuring out stage, and what students' attitudes are toward synchronous teaching in English courses needs to be more widely noticed and explored.

To sum up, "synchronous" requires that teachers and students communicate on the same frequency, and teaching and learning behaviors must be carried out simultaneously, resulting in timely interaction and feedback, which is mainly carried out through the live streaming function of Tencent Meeting, Blackboard, Nail and other platforms; "asynchronous "This mode is a way for teachers to record the courses or collect relevant course resources, and for students to learn independently according to their own learning habits and preferences; the form of synchronous asynchronous hybrid effectively integrates the advantageous factors of both, breaking the knowledge transmission The synchronous-asynchronous hybrid format effectively combines the advantages of both, breaking the traditional constraints of knowledge transmission and integrating the vividness of the terrestrial classroom into home learning without losing its unique flexibility and convenience, which is, relatively speaking, the most effective and feasible online learning mode today.

Most of the literature is devoted to the study of models that use a combination of synchronous and asynchronous teaching and learning. The synchronous and asynchronous teaching mode breaks through the limitation of time and space during the epidemic, and students can learn anytime and anywhere, which meets students' requirements for personalized knowledge learning. Through repeated video viewing, live classroom key knowledge explanation and combing, pre-review tests in SPOC ensure equivalent teaching effect, VOOV and WeChat group discussion of difficult issues improve students' participation and stimulate students' The VOOV and WeChat group discussions on difficult issues increase student participation and stimulate students' enthusiasm for learning, forming the concept of "student-led and teacher-led".

Different schools choose different ways to teach online depending on their situation, with three different models: synchronous, asynchronous or blended.

In my context, Trees University has chosen a synchronous learning model for its online classes, so it is important to understand the attitudes of students in synchronous learning. For the teachers, this helps them to observe how the students take to the learning mode and adjust the content accordingly. For students, it allows them to see if they are comfortable with synchronous learning.

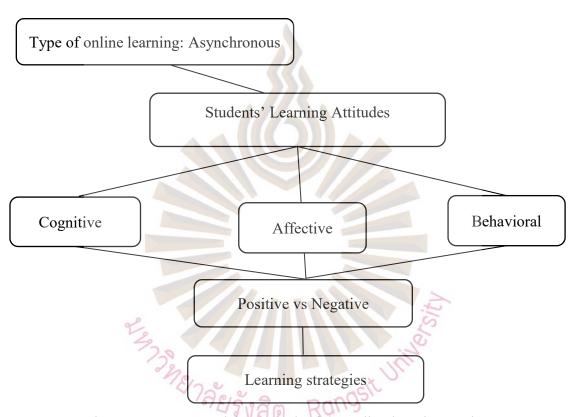


Figure 2.1 Conceptual framework of the online learning environment

2. 1. 2 Online Learning in Different Contexts: Overseas and Local

2.1.2.1 Online Learning in Overseas

The development of online education has been led by the United States. Therefore, most of the terms used in the field of online education were also coined by the United States. The virtual classroom was formulated by Hiltz (1994), who first

introduced the concept of the "virtual classroom" in his book named "The Virtual Classroom: Unlimited Learning Through Computer Networks".

The United States has a well-developed system of traditional educational assessment. As early as 2002, the Sloan Consortium, in cooperation with the Babson Research Group, began to publish an annual survey and evaluation report to grasp and understand the extent of the development of online education, and to conduct a comprehensive survey and analysis of the effectiveness, scale, quality, and barriers to the development of online education in U.S. colleges and universities in the past year (Wang, 2014, pp.34-40). Such surveys help U.S. colleges and institutions fully understand the current status of online education development and the position they are in, and help them adjust their strategies for online education development, thus promoting the development of online education in the United States.

While online education has grown rapidly in the United States, other countries around the world have also launched online education. In 1994, the University of Alberta in Canada established Athabasca University to begin offering online master's degree programs in business administration (Yang, 2007). In July 2000, Canada also established the National Advisory Council on Online Learning to restructure Canada's online learning community. Foreign research on online learning has focused on aspects related to online learning systems. They pay much attention to the integration of practice and theory, and conduct systematic or special studies based on projects (Mayes & Frietas, 2008, pp.5-22). In recent years, they have proposed a set of professional teaching and learning programs in terms of online learning system development, online learning model construction, policy support, learning resource design, and hardware support. They pay more attention to cross-linguistic and cross-regional cultural cooperation, and focus on studying the quality and cost effectiveness of online learning. In order to reduce the cost of online learning and gain

greater efficiency, the U.S. has established campus online learning to share quality online learning resources (Andrew, 2000, pp.23-25).

Research related to online learning can be divided into two phases. The first stage is the introduction of definitions and related theories about online learning. Stockley (2003) and Linda (1990) have proposed definitions about online learning. The most accepted explanation of online learning is that it is a widely used form of distance education and a new way for learners to learn using the Internet through terminals such as computers or cell phones (Taylor, 2002). As research on online learning has evolved, the definition of online learning has been enriched. The second phase focuses on the applications and models of online learning. Foreign research on online learning applications and models is a research hot spot, mainly covering language styles, learning environments, learning experiences, peer learning, learning outcomes and evaluation, and how to carry out online teaching tasks. Ally (2004, pp.15-44) studied the flexibility, connectivity, and ability to facilitate various interactions in online learning. Arnon (2011) used an empirical study to analyze the influence of online learning processes Charles (2011) explored the relationship between online course elements and learning outcomes, and then proposed a learning model for online collaborative learning (Xu, 2021).

2.1.2.2 Online learning in Local

After the 1990s, China's research on online learning has increased year by year, mainly focusing on the study of online learning theory, the design and implementation of online learning systems, online learner groups, and the evaluation of online learning behavior (Yang, 2007). Until 2010, China's research on relevant aspects of online learning reached an unprecedented peak.

In terms of research methods, quantitative research methods are dominant in China's academia on distance education, supplemented by qualitative and mixed research methods, and the application of normative research methods accounts for an overall increasing trend since 2013, reaching 52.97% in 2017, exceeding the share of non-normative research methods for the first time (Tang, Guo & Zhu, 2018, pp.27-36). However, in the application of research methods in 2018, qualitative research hit a new low (6.88%) in the overall continuous decline (Miao, 2022, pp.108-116), which indicates that the methodological awareness of distance education research and the awareness of normative application of research methods in China have significantly increased, and there is a phenomenon of emphasizing quantitative over qualitative in the selection of research methods.

As for research content, research at the theoretical level draws on advanced foreign experience to explore development paths and solutions suitable for China. four articles in Zhong's (2002) "On Online Learning"start from the perspectives of definition, research significance and methods of online learning, propose five elements of teachers, learners, curriculum, technology and activities, and analyze in depth online resources, online activities, online interactions and online The article also provides an in-depth analysis of online resources, online activities, online interactions, and online subjects. Based on the characteristics of dialogue, participation, support and control (DISC) of online learning, Li's "Types of online learning and its characteristics" (2003, pp.49-52) classifies online learning into four types from two dimensions of controlling implementers and online resource organization, and discusses them in detail one by one. However, most of the studies are still in the process of introduction and digestion, mostly focusing on the current situation of online learning (Wang, 2022, pp.150-152), online learning models (Zhao, 2022, pp.93-95), and for

online learning design and development aspects (Li, 2013, pp.32-33), online learning behavior evaluation of the study (Du, 2020, pp.390-395).

Owing to the locations of teachers and students in distance education, it is difficult for teachers to grasp the psychological changes of learners (Yang, 2022, pp. 112-117). In addition, though studies on learning behaviors are involved, it is not solid, so it is especially necessary to judge the changes of learners' emotional attitudes in the teaching process (Guan, 2014, pp.62-66). Thus, empirical research on online learners' learning attitudes and their influencing factors, as well as research on different groups' learning attitudes, will become one of the important hot spots for future research.

In general, from the total research papers, online learning in China is currently in a booming period, and more and more scholars are combining technological development and expanding their research fields. From the content of the articles, the research mainly focuses on the following aspects: the current situation of online learning, the design of online learning systems, online learning models, and online learning strategies. Scholars' research on online learning in China is mainly focused on the reference to developed countries. Although the existing studies have covered all elements of online learning, there is a lack of effective targeting in the survey research, and the research is not thorough and deep enough, and needs to be further expanded.

2.2 Research on Learning Attitudes

In this subsection, three aspects of attitudes, learning attitudes and English learning attitudes are discussed, including the contents of history in this local and overseas.

2.2.1 Attitudes

An attitude is one of the most influential phenomena in all social and psychological structures (Tan, 2021). Domestic researchers have defined "attitudes" from different research perspectives and research methods. First, in terms of the influence of attitudes, Xu (2001, pp.88-91) argues that attitudes are a mediating factor that exists between external stimuli and individual responses; second, in terms of the nature and role of attitudes, attitudes are a comprehensive assessment of objective things and have an inherent psychological tendency to influence people's behavioral choices (Zhou et al., 2005, pp.36-37); third, in terms of the composition of attitudes, researchers have argued that the interplay between cognition, affect, and intention is a relatively stable intra-individual system that is coherent with each other. (Shi, 1998; Shen, 2007, pp.31-32); Fourth, in terms of the causes of attitude formation, scholars believe that attitudes are the result of three interactions, including social life environment, individual psychological orientation and personality, which can only be achieved through social activities. Under the dual influence of external environment and education, individuals' views and assessments of social life are gradually formed, and long-term, stable social behaviors are gradually formed (Zhang, 1995, pp.67-74).

Regarding the structure of attitudes, although many scholars have defined attitudes from different perspectives, researchers generally agree with the ABC structure of attitudes proposed by American social psychologists Rosenberg and Hoveland (1960) (Liu, 2021, pp.17-25), which contains Affective, Behavior and Cognitive. It is the sum of the individual's evaluation of a particular object and the internal tendency to respond, closely linked to the beliefs and values held by the individual (Tao, 2001, p.119-120).

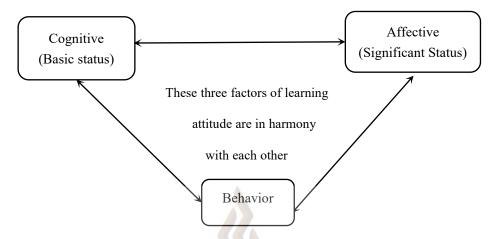


Figure 2.2 The three factors

Source: Tao, 2001

(1) Definition of attitude regarding cognitive factors

It emphasizes the perceptions and understandings that are formed about a particular person or thing." Rokeach considers attitude as a complex cognitive system with structure. According to him, attitudes are the organization of several related beliefs about the same object. This definition focuses on the cognitive aspect." (Zhang, 2000, pp.38-41). The cognitive components of attitudes are often statements with evaluative implications, i.e., they are not only the individual's knowledge and understanding of the attitude object, but also indicate a judgment, approval or disapproval of the individual (Tian, 2021, pp.224-225).

(2) Definition of attitude regarding affective factors

It is the preference and evaluation of a specific person or thing. Attitude contains rational cognition, emotional preference and motor tendency, with some consistency and stability; there is no right or wrong attitude, but there are positive/negative and active/passive tendencies (Aiken, 1970, pp.551-596). At the end of the 20th century, some scholars agreed that "attitude is an individual's positive or negative feeling toward performing the target behavior" (Wang & Hu, 2013, pp.30-34);

Zhu & Huang (2020, pp.388-395) also proposed that attitude is a psychological entity that is expressed as a positive or negative evaluation of a specific thing or behavior formed by a person.

(3) Definition of attitude regarding behavioral

Behavioral intention is a behavioral disposition based on cognition and emotion (Tao, 2003) and is an internal response tendency that has a directive or dynamic influence on an individual's response. The focus of this definition is to emphasize the intentional aspects of behavioral response preparation. Attitudes are often considered to be "the most common psychological phenomenon in human social life. People tend to exhibit fixed patterns of behavior and a variety of attitudes when interacting with others and coming into contact with various groups." (Zhang, 2000). Attitudes may influence behavior and in turn are influenced by behavior (She, 2021).

Therefore, in this study, the "Attitude towards online learning" is attributed to (Figure 2.3):

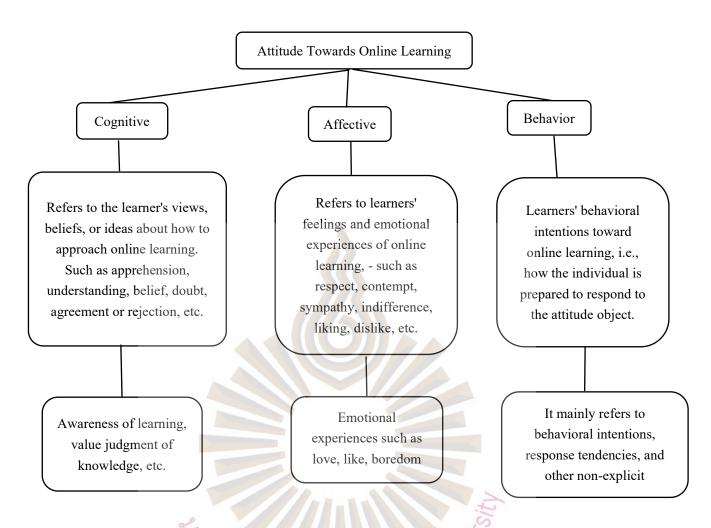


Figure 2.3 Attitudes toward online learning

Source: She, 2021

It is well-known that though attitude is an implicit inner psychological structure that cannot be seen directly, it can be reflected by human speech, actions or other aspects, and it can be studied by means of measurement (Kumar, Rao, Sudha, & Sagar, 2021, pp.118-120). Likert's cumulative scale method was developed by Likert in 1932, in which participants were asked to differentiate each sentence related to the attitude to be measured, and were asked to make judgments and choices. It is currently the most commonly used attitude scale (Aiken, 2008).

2.2.2 Learning Attitudes

In the study of learning theory, the study of learning attitude is a content that cannot be ignored, because it is one of the important non-intellectual factors that affect students' learning (Jin, Zhong, Yi, 2022, pp.9-17). The success of learning depends on the learner's learning attitude. Simonson, Zvacek & Smaldino (2019, p.63) pointed out that there are four important factors that should be considered in the design of distance teaching that affect the success of learners: attitude, experience, cognition and learning style. It can be seen that attitude is a key point that cannot be ignored in online learning. Attitude will affect the interest in learning, resulting in positive or negative learning behavior, and a positive attitude can improve the willingness to learn (Wang, 2021, pp.126-131).

When discussing learning attitude and learning ability, Krashen (1982) pointed out that when learners are engaged in second-level learning, the learning motivation and attitude will have obvious influence on the learning effect of learners; Gagne (1985) put forward that "Attitude" is listed as one of the teaching goals. Attitude plays an immeasurable role in daily teaching. Teachers should attach great importance to cultivating students' learning attitude (Sun, 2006, pp.114-115).

This demonstrates that attitudes influence the rate of learning, motivation, and application performance. When learners have negative attitudes, they develop barriers to learning; conversely, those with positive attitudes are more likely to be actively engaged in learning. Therefore, with positive attitudes, motivation to learn will be higher and academic performance will be higher (Wu, 2021, pp.27-31).

In social psychology, although these researchers have focused on learning attitudes, they can be grouped into three categories based on the ABC structure of attitudes as follows.

First, Ren (2011) considered it from a cognitive perspective as the learner's behavioral performance in the learning process and perceptions of learning activities. This type of concept focuses on cognition and considers learning attitude as a kind of attitude with evaluative tendencies and cognition as well. Gao (2021, pp.24-29) believes that the cognitive level achieved by college students' online learning behavior, is an important indicator to evaluate the quality of online learning, and analyzes the online learning behavior combined with college students' cognitive level to explore the correlation between them, so as to propose effective measures to improve the quality of online learning.

Second, this category of concepts is more oriented towards affective experience. For example, Lu (2018, p.199) argues that learning attitude is an affirmative or negative emotional experience of the activity in which the learner is involved formed during the learning activity, and most secondary school students can make correct value judgments about the personal and social significance of learning scientific and cultural knowledge, and have more positive emotional experiences of learning life than demotivating ones. Li & Zhu, (2020, pp.22-26) and Luo, Chen, Zhu & Zhang (2022, pp.72-75), on the other hand, proposed solutions for how to enhance and improve students' emotional experiences in the learning process in the context of the epidemic. If it can be consistently ensured that learners have a specific emotional experience of the learning activity, it will have a great impact on learners' choices and judgments.

Third, the study was conducted from the influencing factors of behavioral intention, and Wang (2019) explored the influencing factors of middle school students' online learning behavior in SPOC environment from the perspective of learners' perceptions, based on the perspective of behavioral intention and satisfaction. Jing, Li, Jiang (2021, pp.31-38) found that students' behavioral intention to learn online is

influenced by both endogenous and exogenous factors, and students' online learning experience has a moderating effect on the formation process of behavioral intention.

Students' learning attitudes, which can be considered as the sum of students' evaluations and internal tendencies to respond to learning, are the core elements of students' attitude system and constitute the basic personality characteristics of students (Li & Guo, 2005, pp.265-267).

2.2.3 English Learning Attitudes

People's attitudes toward English learning were at a more mature stage in the 1990s (Tan & Jiang, 2008, pp.231-232). The influence of learning attitudes on foreign language learning is very strong (Wang, 2003, pp.1-5), so researchers have conducted relevant studies on foreign language learning, especially English learning attitudes. Wang (2003, pp.1-5) points out that in English learning, learning attitudes and motivation are emotional factors that cannot be ignored and have an impact on them. He points out that the correlation between the attitude towards learning English and the performance of the corresponding subject is higher than that of other subjects. Moreover, the key to success in learning English is a positive attitude and a strong motivation. Since language and emotion are closely related, the attitude toward the subject of English can become especially important in English learning.

Another scholar, Tao (2001), has explored this definition of English learning attitude. He treats English learning as a more specific and narrower learning attitude, which aims at developing students' cognitive, affective and behavioral attitudes in English. And Jia (2004, pp.34-36) defines attitude toward language learning as "a second language learning attitude is a cognitive disposition toward language learning, affect, and behavior in the process of second language acquisition."

In summary, it can be seen that language learning attitude is not only a cognitive disposition, but also includes affective experience and outward behavior in the learning process, and these three factors are coordinated with each other (Sun, 2003, pp.13-16).

2.3 Research on Online Learning Attitudes

"Online learning attitude" is the core concept of this thesis, which has been noticed by many scholars. Currently, different scholars have different perceptions of online learning attitudes.

Online learning attitudes originate from attitudes toward the use of technologies such as computer networks, based on the Technology Acceptance Model (TAM). Davis (1989, pp.319-340) defines online E-learning attitudes as a measure of learners' acceptance of online learning through perceived usefulness and perceived ease of use. Wu (2014) proposed, based on TAM theory, that students' attitudes toward online learning are the positive or negative emotions they experience when they learn through the use of computers. The study focused on individuals' emotional responses rather than behavioral responses. Later, Dookhan (2018) in his study stated that students' attitudes towards online learning are an effect of their purpose and motivation for using online learning and their perceptions of online learning (ease of use, ease of understanding, usefulness, and enjoyment). He took people's beliefs or perceptions about E-learning into account and began to examine the relationship between attitudes and beliefs.

In recent years, researchers have mostly studied online learners of MOOC and learners' willingness to continue learning in blended learning (Li & Han, 2021,

pp.1-7). Based on another theory, the Unified Theory of Acceptance and Use of Technology (UTAUT), Pynoo et al. (2019) argued that students' attitude toward online learning is an acceptance of online learning that is influenced by performance expectations, effort expectations, social influence, and facilitation conditions (Zhang, 2021, pp.102-106).

There are also researchers who have explored the relevant factors affecting online learners' attitudes and willingness to learn, such as using structural equation modeling to study the relationship of variables, and the results show that participants' willingness to continue learning online is directly influenced by their attitudes toward learning and indirectly influenced by their online learning experiences and experiences (Wang, 2020; Shen & Wu, 2020, pp.25-36)

In summary, the definition of online learning attitudes was made on the basis of two dominant theories, namely TAM and UTAUT. In addition, the interpretation of online learning attitudes is in line with personal understanding and various emphases that include learners' cognitive responses, emotional responses, and behavioral intentions.

A review of relevant national literature on attitudes toward online learning reveals from it a dramatic growth in 2020. Scholars have mostly focused on investigating students' attitudes toward online learning and the factors influencing the impact of different factors on online learning attitudes.

Some of the investigations (Xia, Deng & Xiang, 2020, pp.18-23; Wu & Zhang, 2021, pp.167-170) found that the current satisfaction of students with online teaching is generally low in China. The main reasons for this are: difficulties in classroom supervision, visual fatigue, difficulties in teacher-student communication,

and easy distraction (Xia et al., 2020, pp.18-23). Therefore, most professional students prefer face-to-face learning, and online teaching is considered secondary (Yin, 2022, pp.186-188).

On the contrary, some surveys show that students' overall satisfaction with online learning is higher (Zeng, 2020, pp.77-81), but their satisfaction is lower than that of online teaching, although the theoretical knowledge taught online is no different from that of face-to-face courses, and the flexibility of online teaching is higher than that of offline teaching. The main factor affecting students' satisfaction with online learning courses is "perceived usefulness" (Zhao & Li, 2020, pp.19-25). This requires teachers to make students fully aware of the advantages of online learning and related knowledge before online learning, and to get rid of the perception that online learning is "useless" and "inefficient", and to have a correct perception of online learning.

In addition, some surveys have shown that there are significant differences in online learning attitudes in terms of gender (Peng, 2007, pp.153-155), grade (Yang, Wang, Zhang & Zu, 2021, pp.162-164), and region (Han & Xu, 2011, pp.9-14). Peng (2007) found that college students all had negative attitudes toward online learning. The findings of Han& Xu (2011) show that there are significant differences in the effectiveness and satisfaction of online learning between urban and rural areas, specifically, urban college students are more satisfied with online learning than rural college students. This requires us to understand the attitudes of students in different grades and majors toward online learning so that it can be applied more smoothly in teaching.

By analyzing the relationship between online learning satisfaction and latent variables, Gao (2020) showed that the motivation of high school students had a

significant effect on the attitude toward online learning. The main manifestations of this were that factors such as intrinsic interest, personal development, and learning context had a positive effect on the attitude toward online learning. Hu (2013, pp.48-56) found that the perceived usefulness of online learning has a direct impact on learners' continuous learning. In addition, students' satisfaction with online learning is enhanced by the online learning process in terms of knowledge construction and teacher-student interaction. This suggests that in the current online teaching environment, teacher-student interaction has a significant impact on students' attitudes toward learning.

Through the analysis of related literature, this paper concludes that the current research on online learning attitudes by domestic and foreign scholars has been fruitful, but there is also an imbalance of research. In terms of the current status, influencing factors, or strategies to improve students' attitudes toward online learning, the current domestic research on attitudes related to online learning is inadequate. In addition, in the context of COVID-19, many disciplines are being taught online. Domestic scholars have mostly focused on research and overview of online learning in each discipline as a whole, and few scholars have studied a particular discipline, especially English.

2.4 Learning Strategies

In this subsection, three aspects of learning strategies, definition of learning strategies, classification of learning strategies and learning strategies in different context: overseas and local.

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2.4.1 Definition of Learning Strategies

In recent decades, foreign language educators have increasingly focused on the influence of learning attitudes and learning strategies on foreign language learning. Nunan (2000) suggests that learning attitudes and learning strategies are important determinants of learning performance. Stern (1983) argues that strategy is best used to refer to the general tendency or general characteristics of the approach used by language learners.

Learning strategies refer to the learning techniques and methods that learners choose in order to learn a language better (O'Malley & Chamot, 1990). In order to control their learning, learners need to understand their learning process, make informed choices about their learning paths, and actively manage and direct their learning, all of which require students to be able to master and use language learning strategies effectively (Figura & Jarvies, 2007, pp.448-468). Successful learners typically use a wider range of learning strategies that are appropriate for them (Gan, Humphreys, Hamp-Lyons, 2004, pp.229-244).

However, the academic community has not been able to unify the definition of the concept of learning strategies. Many psychologists and educationalists have defined the concept of learning strategies from different aspects. Scholars' definitions of learning strategies are shown in the table below:

Table 2.2 Scholars' definitions of learning strategies

	Scholar	Definition
		Learning strategies are strategies which contribute
	Rubin (1987)	to the development of the language system which
		the learner constructs and affect learning directly.
		Language learning strategies are "specific actions
	Oxford	taken by the learners to make learning easier,
	(1990)	faster, more enjoyable, more self-directed, more
		effective, and more transferable to new situations"
	O'Malley	Language learning strategies are "the special
	and	thoughts or behaviors that individuals use to help
Overseas	Chamot,	them comprehend, learn, or retain new
	(1990)	information."
		Language learning strategies are "particular
		approaches or techniques that learners employ to
9		try to learn L2. They can be behavioral (for
	Ellis (1997)	example, repeating new words aloud to help you
	Ellis (1997)	remember them) or they can be mental (for
	'मिट्टानु	example, using the linguistic or the situational
		context to infer the meaning of a new word)"
		(Ellis, 1997, pp.76-77).
		Learning strategies are a choice that the learner
	Cook (2000)	makes while learning or using the second
		language that affects learning.

Table 2.2 Scholars' definitions of learning strategies (Cont.)

	Scholar	Definition
	Cohen	Language learning strategies are "conscious and
Overseas and		semi-conscious thoughts and behaviors used by
	Dornyei	learners with the explicit goal of improving their
	(2002)	knowledge and understanding of target language"
		(Cohen & Dornyei, 2002, p.178).
	Wen (2002)	Language learning strategies are the floorboard of
		learning concepts, management methods and
		learning methods.
China	Wu (2002)	Language learning strategies are applied to the
		train of thought and behavior, including both
		external speech acts and internal psychological
		process. It can participate in English activities
		directly or support for English learning indirectly.

Although different scholars have different definitions of learning strategies, we can still find some common elements among them. Learning strategies are a set of action techniques and steps that learners take to effectively facilitate learning, and usually include the cognitive strategies, meta-cognitive regulation strategies, communication strategies, affective strategies, compensatory strategies, resource strategies, etc.

2.4.2 Classification of learning strategies

When researchers have different perspectives and different research methods, their classifications of language learning strategies also vary widely. The following are three of the more popular classifications that are currently being used in China and abroad.

2.4.2.1 O' Malley & Chamot classification of learning strategies

O' Malley & Chamot (1990), based on the theory of information processing, classified learning strategies into three main categories: meta-cognitive strategies, cognitive strategies, and social / affective strategies.

The first category is cognitive strategies, which refer to "steps and activities to solve problems through direct analysis, transformation, or synthesis of learning materials. These strategies are operational and cognitive processing functions. Cognitive strategies specifically include "repetition," "note-taking," "translation," "reasoning," "deduction," and "cognitive processing, "deduction", "imagination", "transfer", etc., which are directly related to the completion of specific learning tasks; the second category is meta-cognitive strategies, which are mainly used to evaluate, manage, and monitor the use of cognitive strategies; the third category is social/emotional strategies, and this type of strategies refers to the ways in which learners communicate and cooperate with other learners and native speakers in language learning, with the aim of providing learners with more opportunities for exposure to and practice of the language.

Table 2.3 O' Malley & Chamot's classification

		Repetition, note-taking, detailed description,
		translation, grouping, inference, deduction,
Learning	Cognitive	recombination, imagination, auditory
strategies	Strategies	expression, key words, contextualization,
		transfer, etc.

Table 2.3 O' Malley & Chamot's classification(Cont.)

		Pre-organization, focused attention, delayed
	Meta-cognitive	expression, self-assessment, selective
Learning	Strategies	attention, self-monitoring, functional planning,
strategies		self-management, pre-preparation, etc.
	Social/Affective	Collaboration, questions, requests for
	Strategies	clarification, participation in group activities
		and exercises.

Source: Zhao, 2022

2.4.2.2 Oxford classification of learning strategies

Oxford (1990) classified strategies into two main categories based on their relationship to language material; direct strategies and indirect strategies. Direct strategies include memory strategies, cognitive strategies, and compensatory strategies; indirect strategies include meta-cognitive strategies, affective strategies, and social strategies.

Table 2.4 Oxford's classification

	i	9 V 61 9	None
			Use images and sounds
		Memory	Full review
		strategies	Use of movement
			Creating mental connections
Learning	Direct		Practice
Strategies	strategies		Receiving and sending messages
		Cognitive	Analyzing and reasoning
		strategies	Creating organizational structures for
			input and output information

Table 2.4 Oxford's classification (Cont.)

	Direct	Compensatory	Reasonable guesses
	strategies	strategies	Overcoming dilemmas in speaking and
			writing
		Meta-cognitive	Establishing Learning Priorities
		strategies	Organize planned learning
Learning			Evaluate learning effectiveness
Strategies	Indirect	Affective	Reduce anxiety
	strategies	strategies	Encourage yourself
		11/5	Understand your emotions
	4	Social	Ask questions
		strategies	Working with others
			Empathize with others

Source: Dong, 2009

Oxford's classification framework is considered to be one of the most easily understood and accepted classification methods, and the dozens of specific strategies listed by Oxford are even more popular (Cheng & Zheng, 2002). Among the many methods of classifying learning strategies, I tend to prefer Oxford's classification method of learning strategies. Therefore, Oxford's classification method was used as a reference in this study.

2.4.2.3 Cheng & Zheng's classification of learning strategies

Cheng & Zheng argued that classifying learning strategies according to the categories of cognitive processes and cognitive processes provided a better theoretical basis. Therefore, they classified learning strategies according to several classification frameworks of learning strategies in the context of English teaching in China (Cheng

& Zheng, 2002). Thus, learning strategies are classified into cognitive strategies, metacognitive strategies, affective strategies, and communicative strategies (Cheng & Zheng, 2002, pp.32-33).

Table 2.5 Cheng & Zheng's classification

		The strategies used by students to recognize,
Cognitive strategies		understand, keep and extract information
		effectively
		The strategies means cognition of cognition,
	Meta-cognitive	which is used under the guidance of
	strategies	meta-cognition
English	Affective strategies	The strategies used to train, adjust, and control
Learning		one's emotion during the learning process
strategies		All kinds of strategies used to smooth the
	Communicative	communication, ensure successful information
	strategies	exchange and keep the communication when
	5	encountered some problems during the process
	2481	of communication.

Source: Tan, 2017, pp.11 7087 Rangsit

2.4.3 Learning Strategies in Different Context : Overseas and Local

This section focuses on research related to learning strategies in different contexts overseas and in China.

2.4.3.1 Learning strategies in overseas

In the 1960s and 1970s, research on foreign language teaching methods began to come to a halt, while cognitive psychology was developing rapidly. In this context, the focus of foreign language teaching research shifted from how teachers teach to how students learn. Many scholars shifted the focus of their research to language learning strategies. Aron Carton was the first scholar who began to study learning strategies. In 1996, Carton first mentioned the phenomenon that different foreign language learners use different reasoning methods to learn foreign languages in The method of inference in foreign language study (Zhuang & Shu, 1994).

Overseas research on English learning strategies is divided into the following two main research directions: the first research direction focuses on the overall use of English learning strategies by learners. The second research direction is to study the learning strategies in combination with the learners' current level of English proficiency.

The overall use of English learning strategies: Ehrman (2003,pp.313-330) pointed out that cognitive strategies play a key role in the learning effectiveness in the process of foreign language learning. Cohen (2011, pp.681-698) conducted a study on second language Oxford (2011, pp.167-180) proposed the definition and characteristics of second language learning strategies from the perspective of information processing, etc.

Chan Min Kim's (2014) research study found that "among high and low subgroups, students in high subgroups are more knowledgeable about how to monitor and assess English learning and choose learning methods that suit their learning characteristics according to their English learning needs." Altunay (2014) conducted a study on the group of distance learning English and the results showed that these people lacked opportunities for face-to-face interaction with teachers, which led to a

lack of methods and skills in applying English learning strategies, and also the results of the study showed that this group used compensatory strategies as well as meta-cognitive strategies more frequently and used affective strategies relatively less. Sylvia (2014) investigated the relationship between English majors' speaking ability and learning strategies, and the results showed that "there is a strong relationship between the two and there are gender differences in the use of learning strategies between male and female students."

Park (1997) investigated the correlation between the use of learning strategies and academic performance of Korean students and showed that all six learning strategies were significantly correlated with students' academic performance. Similarly, Garavalia and Gredler's (2002) investigation showed that the use of learning strategies was significantly correlated with academic achievement.

Conversely, some scholars have also concluded that the use of positive learning strategies positively affects the learning outcomes of L2 English learners (Lodhi, 2019).

The results obtained from the above studies generally indicate that there is a correlation between learning strategies and academic performance, and both are positively correlated. In other words, learning strategies and academic performance are a two-by-two relationship that affects each other, with different findings on the extent to which each strategy specifically affects performance.

2.4.3.1 Learning strategies in local

Research on language learning strategies by Chinese scholars began in the 1980s and has yielded some results. Many researchers and scholars began to work on

this area of research. Based on Flavell's (1979) and other researchers' research on meta-cognition in the 1970s, Huang (1991) pointed out the role of learning strategies in practice and argued that students should use learning strategies wisely and use various learning techniques flexibly to get better learning results.

For teachers, it is also important to pay attention to the development and improvement of learning strategies. The monographs on English learning strategies by Chen and Zheng (2002) and those by Liu and Xiao (2006) have also given a strong impetus to the study of research on foreign language learning strategies in China.

Chinese scholars have paid more attention to the differences in learning strategies among learners with different traits. For example, Kong & Li (2008, p.174) investigated the use of meta-cognitive strategies and cognitive strategies among second-year English majors and found that successful foreign language learners were able to effectively use meta-cognitive strategies to decide whether to use or change specific cognitive strategies.

Hao & Fu (2006, p.243) introduced multiple intelligence theory into the study of learning strategies and investigated individual differences in foreign language learning factors among non-English majors' master's students and found that independent learning and memory strategies contributed to good performance in written objective exams.

In addition to the overall research on students' learning strategies, scholars have also conducted microscopic studies on students' learning strategies, dividing language learning strategies into different learning strategies according to different learning contents, for example, Li's (2006, pp.137-141) study on college students' English reading learning strategies; Zhang's (2001, p.449) study on vocabulary

strategies in English learning for master's degree students in English, and Wu & Liu's (2004, p.187) research on writing strategies based on meta-cognitive theory.

Although a great deal of research has been done by scholars on students' language learning strategies, with rich research content and remarkable research results, there are still some problems in the actual language learning application process, and the impact of the learning strategy guidance function in students' learning process is not significant.

In terms of research objects, some domestic scholars have studied English learning strategies from two major learning groups: college students and secondary school students:

Taking college students as the research object, Wang (2004, pp.7-8) conducted a survey and analysis of college students' English learning and found that cognitive strategies and compensatory strategies are two strategies that are currently applied more frequently, while memory strategies are applied less frequently, and in addition, college English test scores are highly correlated with several of the above-mentioned learning strategies. Hou (2004) used college students majoring in English as the research object and found that they used learning strategies from the situation that they had mastered some methods and strategies about English learning before starting college, but they lacked the cognition to use these learning strategies.

A study was conducted with middle school students to investigate how their English learning strategies affect their English performance. Jiang (2013) explored the relationship between junior high school students' English learning strategies and English performance, and the results showed that there was a correlation between the

two. Liu (2008) found through an investigation of middle school students' use of learning strategies that "middle school students used compensatory strategies most frequently and memory strategies least frequently, and the frequency of first-year students' use of cognitive strategies had a negative correlation with English achievement."

Some scholars have also conducted research on English learning strategies in online learning environments. Jiang (2004) pointed out that non-English majors used the memory, cognitive, compensatory, meta-cognitive, affective, and social strategies of Oxford's taxonomy in both traditional and online learning environments, but they used them less frequently, and they used them less frequently in online learning than in traditional learning. The frequency of strategy use varied among students with different levels of English proficiency. Successful learners always used learning strategies more often and more frequently in both traditional and online learning environments, and the frequency of strategy use was positively correlated with learning performance.

According to Li (2005), English classes in online learning environments use both direct and indirect strategies more than classes in conventional classroom learning environments. This suggests that online learners use more cognitive means to process information and deepen their understanding of language knowledge. The online classes were also more adept at using compensatory and social strategies. For example, overcoming difficulties in the learning process, actively asking questions, and cooperating with others.

Liu (2006) investigated learners' English learning strategies in "an online learning environment using a university's online English teaching system" as a case

study, and found that more than half of the students did not use meta-cognitive strategies, did not plan their online learning, and did not use the Internet to seek support from others for their learning.

The above findings on learners' strategies indicate that the online learning environment has a considerable impact on learners' strategies. In terms of individual strategies, learners in online learning environments used cognitive, meta-cognitive, compensatory, and social strategies more frequently than learners in conventional learning environments.

2.5 Conclusion

After continuous exploration, theoretical and empirical studies on online learning attitudes have provided rich research results, which have laid a solid theoretical foundation for the subsequent empirical studies. (Hu, 2022, pp.26-29) However, it is worth mentioning that there is an imbalance in the research on online learning attitudes at home and abroad.

First, the imbalance of research objects. Researchers at home and abroad have paid more attention to basic education than higher education, especially the research on college students' attitude toward online learning is very limited (Liu, 2018, pp.148-152).

Second, the number of studies at different stages in China is uneven. before 2020, there were few studies on attitudes toward online learning (Zhao, Chen, Wang & Li, 2021, pp.12-20). after 2020, due to the influence of Covid-19, online learning has gradually become the main way of learning, and students' attitudes and influencing

factors have become the focus of discussion among education experts and scholars, leading to a spurt of related studies.

In conclusion, research on attitudes toward online learning is more comprehensive and in-depth both domestically and internationally. The results of these studies can provide readers with a better understanding of teachers' and students' attitudes toward online learning, as well as show other scholars the general situation of online learning and provide some reference for future research work. However, there is still much room for exploration in the current research on attitudes toward online learning. For example, although domestic and international studies on English learning have mostly focused on secondary school students and college students, fewer studies have been conducted on college students' attitudes toward online English learning. In addition, direct research on online learning attitudes in China is limited.

The next Chapter sees the research methodology employed in this study.



Chapter 3

Methodology

This Chapter focuses on research methodology. It is divided into 8 parts: methodology, context of the study, research design, population and sample groups, research instruments, data collection and analysis, reliability and validity as well as ethics of the study are described.

3.1 Research Design

This study used a combination of quantitative and qualitative to answer two research questions. In the mixed methods research design, quantitative and qualitative research were combined and developed with each other, and the combination of qualitative and quantitative research increased the depth of the study and bridged information gaps and deficiencies (Johnson, 2016). To achieve the purpose of the study, a mixed method of semi-structured interviews and questionnaires was used in this study. This method was applied to this study because the primary data collected from the questionnaires were closed-ended responses, while the data collected from the interviews were open-ended, which would help the researcher understand and interpret the results of the primary data (Creswell, 2012).

3.2 Population and Samples

My participants are from the college of Foreign Languages. This college has

three English majors, Business English, English Education, and English (English-Thai orientation).

The population of the questionnaire was 50 sophomore students from English-Thai class at Trees University who were of similar age and learning environment and needed to study English listening, English reading, business English, general English, English grammar, and English writing.

The sophomores were chosen because, first of all, they have basically completed the transition from high school to college after their first year. They are familiar with the curriculum and learning atmosphere. Second, they have a more stable attitude toward English learning than freshmen. They experienced offline courses and took online courses during the COVID-19. Therefore, they had background knowledge of English and their attitudes toward learning English online were representative and informative. In addition, based on my experience working with them, I believe that choosing sophomores helps them learn more and be more motivated to focus on their studies.

The semi-structured interview's volunteers used a simple random sampling method to select 6 students from the class as participants out of 50 participants.

Table 3.1 Participants' backgrounds

		English		
Name	Gender	background	Student	English impression
		(year)	passion	
Candy	Female	5	Like	I think English is easy, I feel
				comfortable learning English and I
				want to get a higher score on my
				English exams. I want to make a lot

Table 3.1 Participants' backgrounds (Cont.)

		English		
Name	Gender	background	Student	English impression
		(year)	passion	
				of foreign friends, so I need to
				practice my English speaking and
				listening more.
Lucy	Female	3	Hate	I didn't like English, I couldn't always focus my attention in English class, and my English grades always made me feel frustrated and stressed.
Mike	Male	4	Enjoy	I like to listen to European or American songs, and often collect English content of interest on the Internet by myself. (e.g. TED, BBC, Netflix)
James	Male	2 Page 12	Dislike	I think English is really hard and requires a lot of memorization of words. I enrolled in this major because my parents wanted me to become a teacher. It's not because I like English myself.
Sherry	Female	5 5 5 7 9	Boring	Although I don't hate English that much, I am always doing questions in my regular practice and I find it boring to do so.
Merry	Female	5	Interesting	I love learning about the cultures of different countries. In the future, I plan to study abroad in a native English speaking country to experience their culture and customs, which makes me excited to think about it.

3.3 Research Instruments

This study employs a mixed-method design between quantitative and qualitative as mentioned above. There are 2 types of data I collected: the questionnaire and the semi-structured interview.

3.3.1 Questionnaire

The questionnaire of this study was designed with reference to the self-reported scale of learning attitudes of primary and secondary school students compiled by Tao (2001, pp.119-120) and the scale of English learning attitudes of junior high school students compiled by Guo (2010), and then designed with modifications according to the research purpose of this study.

The second part of the questionnaire was designed according to the three-dimensional structure of learning attitude theory, i.e., 3 dimensions of cognitive level, affective experience, and behavioral tendencies. The questionnaire uses the five-point Likert scale option method, where each question has 1, 2, 3, 4, and 5 options, and what the options represent are strongly disagree, disagree, neutral, agree, and strongly agree, respectively. For statistical purposes, each of these five options was assigned a score of 1-5.

The 33 questions in the questionnaire mainly investigated college students' attitudes toward online English learning on these 3 dimensions and 33 attitude factors. Before the questionnaire survey begins, a brief explanation of the questionnaire will be given. The author explains the purpose of the questionnaire survey to the research subjects and promises that the answers are not good or bad and will not cause any adverse effects on the research subjects, so I hope the research subjects will take it

seriously.

The questionnaire consisted of two parts.

- (1) basic information about the study population: class, and test scores.
- (2) The second part contains 33 questions. The first dimension of the questionnaire, the cognitive level dimension, has a total of 10 questions (Items 1-10). The second dimension of the questionnaire, the affective experience dimension, ranges from 12-22 questions, with a total of 10 questions. The third part of the questionnaire, the behavioral tendency dimension, runs from 23-33 questions, with a total of 11 questions.

3.3.2 Teacher's Journal

Bailey (1990) argues that "a teaching journal is one in which teachers authentically record meaningful events they encounter in their language learning or teaching practices, and then analyze how they would deal with the same events when they are confronted with them again". According to Wang (2005), "a teaching journal is a means for teachers to record their teaching activities, reflect on their own teaching problems, and then analyze and evaluate the teaching process."

The role of teacher journal as mentioned by Sanpatchayapong (2010) in her study is:

1) Find out about what is actually happening in the classroom when students work on their project, which may help me to better understand the language learning (or not) and their behavior in the class.

- 2) Investigate how much project-based teaching and learning encourage students the use of more spoken English in class through the use of the interviews, discussion, reports, and oral presentations.
- 3) Observe students' in-class language behaviors: how they share their common interests, why some students don't or don't want to talk in class, and how they work in groups, for example.
- 4) Determine the reasons for the lack of classroom engagement and find appropriate strategies to counteract them.
- 5) Evaluate the intervention strategies designed to promote students' in-class speaking interactions.
- 6) Identify students' problems in the classroom in order to give assistance and make suggestions to solve these problems.
 - 7) Observe the role of the teacher.
 - 8) Note the dynamics of teacher-student interactions in the classroom.
 - 9) Note down errors for later use in feedback sessions.

All in all, in my context, a teacher's journal is used to : .

First, store information and to keep abreast of reviewing student behavior in the classroom after class. Second, reasons for lack of classroom participation are identified and appropriate strategies are found to counteract these reasons. Third, Identify student problems in the classroom so that help can be given and suggestions can be made to address these problems. Fourth, Pay attention to the state of student-teacher interaction in the classroom and observe the level of student participation in the classroom. (e.g. why some students do not talk or do not want to talk in class, and how they work in groups, etc.)

3.3.3 Semi - structured Interview

The semi-structured interview is a form of interview that falls somewhere in between the unstructured and fully structured forms. It does not have to follow the exact content and structure of the interview, and the interview content can be extended according to the progress and content of the exchange, or the order of the interview questions can be changed according to the state of the exchange. Semi-structured interviews are often conducted in an exchange format (Zhang, 2013, p.123). The semi-structured interview method is a commonly used survey method with a wide range of adaptations for almost every type of educational research. The interview method functions much like a questionnaire, in the sense that the interview is a verbal questionnaire, except that instead of filling in the answers, the respondent verbally answers the questions being asked (Wang, 2002, p.32).

Zhou & Yao (2013, p.136) point out that semi-structured interviews are informal interviews conducted according to a rough outline. In this type of interview, the interviewer can flexibly make the necessary adjustments according to the actual situation of the interview. There are no specific requirements on the way and order of questions, the way the interviewees answer, the form of interview recording, and the time and place of the interview, and so on.

Shi (2012, pp.18-21) mentions semi-structured interview as one of the interview methods, in which there are certain topics in advance, but the actual questions are not specified, and the interviewer first asks a series of structured questions to the interviewee, and then asks some open-ended questions to make up for the lack of structured interviewing. The interviewer first asks the interviewee a series of structured questions, and then asks some open-ended questions to probe deeper into certain issues to make up for the lack of structured interviews.

Jiang (2004, pp.56-59) classifies the interview method into unstructured, semi-structured and structured interviews. The difference between the three lies in the interviewer's control over the degree of openness of the interview questions. From unstructured (open-ended) to structured (closed-ended) the interviewer's degree of control over the interview questions and interviewees is gradually increasing. In general, qualitative studies tend to use semi-structured, which complements the data from quantitative studies.

In my context, each interview lasted about 20-30 minutes, and the outline of the interview was prepared in advance. In addition, in a natural and relaxed state, the interviewees could provide much useful information. Merton (1946, pp.541-557) argued that the reliability of research requires diverse responses and that a sample size of 6-12 people is the optimal interview size. In this study 6 college students from the same class were interviewed separately one-on-one, in a private setting such as a private office, or semi-structured interviews such as voice in a public place or online. The discussions will be recorded by audio recording. This will allow the content of the recordings to be translated into text, and any missing parts of the transcripts to be proofread and added to ensure the integrity of the interviews. The purpose of this work is to provide the authors with more detailed information.

Table 3.2 Interview question

	Questions for Semi-structured interview	Design purpose
1.	Do you like online English learning? Why?	Affective strategies
2.	What is your advice for learning English online?	Cognitive strategies
3.	Do you plan or set learning goals when learning	Meta-cognitive strategies
	English in an online environment?	
4.	How do you cope when you encounter	Affective strategies, social
	difficulties in online learning?	strategies

Table 3.2 Interview question (Cont.)

	Questions for Semi-structured interview	Design purpose
5.	How do you learn English through the Internet ?	Memory strategies, social
		strategies, compensatory
		strategies

3.3.4 Validation and Reliability of the Questionnaire and Interview Questions

To investigate the attitudes of English majors toward online learning. This thesis uses questionnaires and semi-structured interviews as the research instruments, and uses both quantitative and qualitative methods to obtain accurate and valid data.

3.3.3.1 Questionnaire

First, Construct the instrument according to the research objectives and conduct the instrument design.

Second, Results of the modification of the Item-Objective-Consistency (IOC) step, i.e., three experts were invited to evaluate the questionnaire and individual interview questions.

In order to ensure the scientific validity and accuracy of this study, it was necessary to test the validity and reliability of the questionnaire. To address the validity of the questionnaire, I invited three experts to validate the questionnaire and derived the Index of Objective Consistency (IOC) of the items. In this research, each expert assessed each item in the questionnaire based on three options +1,0 and -1, which reflected their perceptions of the content validity of the questionnaire. Triwong (2005) argued that +1 is given when the question is clearly consistent with the

objective, 0 when the question is uncertain with the objective, and -1 when the question is clearly inconsistent with the objective. Mo (2020) argues that the item consistency index for each item must be no less than 0.5 and the final average result value must be higher than 0.7 for the item to be identified and accepted. The final average result must be higher than 0.7 for the project to be recognized and accepted. 7 items were verified by the three experts to be inconsistent with the objectives (see Appendix E), and I modified the questionnaire based on the suggestions of the three experts. For example,the questions were reclassified in three dimensions. E.g. the question "I like to communicate and discuss with my classmates online." was changed from Affective to Behavioral after expert advice.

By conducting a questionnaire with students in class, the questionnaire is operated in a certain real proportion, with the aim of understanding each dimension of English learning attitude in a quantitative way and presenting the current situation of English learning attitude among college students majoring in English. In order to ensure the validity of this questionnaire survey, the author will distribute 30 questionnaires for pilot study before the questionnaire is officially distributed.

After the IOC step, the questionnaire will be pilot tested before being used for the sample group. (See the sample questionnaire in Appendix 1).

After modified the questionnaire according to the suggestions of the three experts, it was necessary to test the reliability of the questionnaire, and I invited 30 students from other sophomore English major classes to conduct a pretest; all 30 participants volunteered to participate. Zhang (2020) concluded that the questionnaire was reliable when the Cronbach's coefficient reached 0.8. The researcher used SPSS software to analyze the Cronbach's coefficient of the 30 returned pilot study questionnaires, and the Cronbach's coefficient was 0.84 (see Table 3.3), indicating that

the questionnaire was reliable.

Table 3.3 Reliability analysis results

Number of Items	Sample of sizes	Cronbach'alpha coefficient
50	30	0.84

3.3.2 Interview Questions

Qualitative research refers to gaining keen insight by uncovering problems, understanding the phenomena of events, analyzing human behavior and perspectives, and answering questions. It is research that is based on a small, carefully selected group of sample individuals (Zhang, 2012, pp.109-110). Since it requires only answers about the nature of the research subject, it is analyzed and research conclusions are obtained using non-quantitative means. The study does not require statistical significance, but places more emphasis on experience and description, hence the name qualitative research. (Feng, 1998, pp.89-94)

All research requires that its results be reliable and valid, and that they conform to ethical guidelines in a given social context. Therefore, the credibility of the interview questions and the validity of the research results must be tested. To ensure the validity of the interview questions, I constructed the interview questions based on the results of the questionnaire through the IOC. The interview questions were closely focused on the topic and reflected the results of the questionnaire. The interview questions further questioned the results of the questionnaire. Therefore, the interview questions were valid.

3.4 Data Collection and Research Ethics Approval

There are two activities in this step.

- (1) For the quantitative data collection due to COVID-19, I posted 50 online questionnaires to the WeChat group via QR codes.
- (2) Six students were invited to participate in semi-structured interviews. During the interview process, I carefully recorded the useful information provided by the interviewees. At the same time, the conversations were recorded with the consent of the participants. In this way, I was able to transcribe the content of the recording into text, check and add any information missed during the recording, and ensure the integrity of the interview. This was done so that I could provide additional information and confirm other data sets.

For ethical considerations, the researcher has expressed them as follows: The study will receive a certificate of ethical review from the ethics committee of Rangsit University. As shown Appendix E. The researcher will take great care to protect the privacy of the students by not disclosing their names.

3.5 Data Analysis

The next part contains data analysis.

3.5.1 Quantitative Research Data Analysis

Through the online data processing and analysis platform SPSS 25.0, and interpreted according to the 5-rating Likert scale in Table 3.5

A mean value of 4.21-5.00 indicates that participants have a very high or positive attitude towards learning English online, a mean value of 3.41-4.20 indicates that participants have a high or positive attitude towards learning English online, and a mean value of 2.61-3.40 indicates that participants have a moderate attitude towards learning English online. A mean value of 1.81-2.60 indicates that participants have low or negative attitudes toward learning English online, and a mean value of 1.00-1.80 indicates that participants have very low or negative attitudes toward learning English online. The final results are presented in three ways: tables, figures, and text.

Table 3.4 The 5-Rating scale Interpretations

5 - Rating Scales	Interpretation
4.21 - 5.00	Strongly agree
3.41 - 4.20	Agree
2.61 - 3.40	Neutral
1.81 - 2.60	Disagree
1.00 - 1.80	Strongly disagree

3.5.2 Qualitative Research Data Analysis

The qualitative data were collected, compartmentalized, and triangulated using Strauss and Cobin's (2008) triangulation process: open coding, axial coding, and selective coding to obtain answers to the 2 research questions.

3.6 Conclusion

In sum, this chapter investigates second-year English majors' attitudes toward learning English online by using a combination of quantitative and qualitative research

methods. Data were collected in 2 ways: questionnaire,semi-structured interview from which the answers to two research questions were identified and analyzed to suggest appropriate solutions.



Chapter 4

Research Results

In this Chapter, all the data are analyzed to get the research results to the 2 research questions:

- 1) What are the students' attitudes towards online learning in this study?
- 2) What are the learning strategies students apply to their online English learning?

In the process, the Chapter focuses on the analysis of students' attitudes toward online English learning. The first section is devoted to the answers to the first research question on 'students' attitudes towards online learning. The second section contains the answers to the second research question and provides the 'learning strategies students apply to their online learning respectively.

4.1 Analysis of the Quantitative Data

This part presents the analysis of the quantitative data from the study's questionnaire, which was completed by 50 sophomore English class. It contains two sections:

1) Personal information.

2) Three dimensions of attitudes towards online learning.

4.1.1 Personal Information

Table 4.1 shows the personal information of the respondents containing the category, frequency, and its percentage.

Category		Frequency	Percentage		
Class	English (English - Thai)	50	100%		
	19	23	46%		
	20	15	30%		
Age	21	8	16%		
	Over 21	4	8%		
	Total	50	100%		

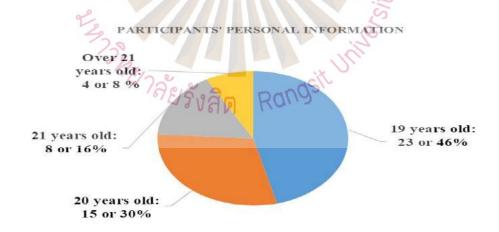


Figure 4.1 Participants' personal information

As shown in Figure 4.1, 50 students were from English(English-Thai) class. Also, for the age of the participants, 23 students were 19 years old (46%), 15 students were 20 years old (30%), 8 students were 21 years old (16%), and 4 students were

over 21 years old (8%).

4.1.2 Attitudes toward Online Learning

The questionnaire was administered to 50 students at Trees University. The results of the questionnaire analysis are shown in the following tables (Tables 4.2-4.5). The mean and SD were computed for all the statements. It contains the answers to the questionnaires on three dimensions of attitudes towards online learning: cognitive, affective, and behavioral.

4.1.2.1 Three dimensions of attitude (cognitive, affective & behavioral)

Table 4.2 Results of the student questionnaire on the three dimensions

Dimensions	Mean	SD	Interpretation
Cognitive	3.48	1.21	Agree
Affective	3.64	0.47	Agree
Behavioral S	3.41	1.05	Agree

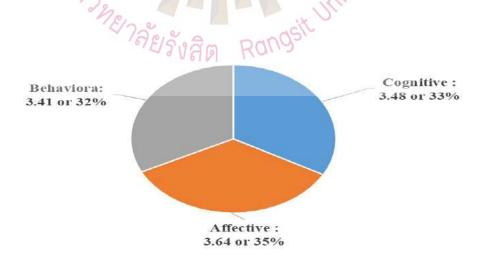


Figure 4.2 Results of the questionnaires in three dimensions

In comparison the three items indicate that affective domain gets the highest score among the three dimensions ($\bar{x}=3.64$). In contrast, the data of the behavioral dimension is lowest compared to the other two ($\bar{x}=3.41$). This phenomenon supports the findings in the interviews in the qualitative section.

Table 4.3 Cognitive level dimension

No.	Items	Mean	SD	Interpretation
1.	It is acceptable to learn English online.	3.58	1.21	Agree
2.	I believe that using online learning will	3.52	1.23	Agree
	improve the quality of my English learning.			
3.	It is a good idea to use online learning in my	3.5	1.22	Agree
	English course.			
4.	I have no difficulty in learning and	3.20	1.30	Agree
	understanding the classroom content in			
	online learning.			
5.	Online communication can facilitate deeper	3.23	1.32	Neutral
	learning.	10		
6.	I can fully grasp all the content of online	3.17	1.42	Neutral
	learning. Alsygn Rangs			
7.	I can learn effectively online.	3.38	1.30	Neutral
8.	Online learning is convenient.	4.38	0.59	Strongly agree
9.	I can adapt to online learning with no	3.60	1.22	Agree
	difficulty.			
10.	I can complete my study tasks in time when	3.3	1.35	Agree
	I study online.			
	Overall	3.48	1.21	

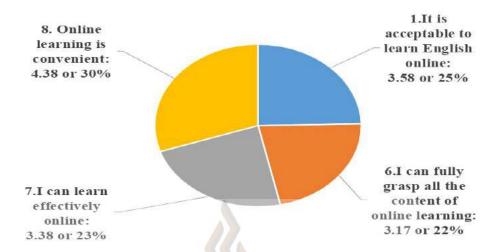


Figure 4.3 Cognitive dimension

In Figure 4.3, the overall mean of the cognitive level dimension is Agree (\bar{x} = 3.48), indicating that the subjects agree with online learning and have positive attitudes, but only in item 8, the subjects "strongly agree" (\bar{x} = 4.38) that online learning is convenient for them.

Students are receptive to online learning as an option (\bar{x} = 3.58). However, in item 6 (\bar{x} = 3.17) students do not feel confident in fully mastering the contents of online learning, and in item 7 (\bar{x} = 3.38) they are also neutral about the efficiency of online learning, with the overall mean of "neutral" indicating that the majority of participants chose either item 2 (disagree) or item 3 (neutral), which is an assessment of their mastery of the online learning content.

In all, students' attitude gears to be more positive than negative, with the scores greater than 3. This also indicates that students have a high level of recognition of the online English learning method and are able to generate positive online learning.

Table 4.4 analyzes students' attitudes toward online English learning in terms of the affective experience dimension, and the specific details of each item are written in the table.

Table 4.4 Affective findings

No.	Items	Mean	SD	Interpretati
				on
12.	When I study online at home, I feel happy.	3.86	0.86	Agree
13.	I like to collaborate with others to learn online.	3.63	1.24	Agree
14.	It is very easy to learn English in an online environment.	3.41	1.30	Agree
15.	I do not think there is a lack of supervision and restraint for students during online classes.	3.17	1.42	Neutral
16.	I do not agree that online learning makes me less productive and lazy.	4.1	0.70	Agree
17.	During the online learning process, my learning initiative and motivation have improved significantly.	3.46	1.22	Agree
18.	I prefer online learning than conventional learning.	3.38	1.30	Neutral
19.	I am enthusiastic about and have motivation to take online learning.	4.12	0.76	Agree
20.	I am satisfied with online learning.	4.14	0.72	Agree
21.	I feel unhappy when the device makes mistakes during online English.	3.40	1.17	Neutral
	Overall	3.64	0.47	

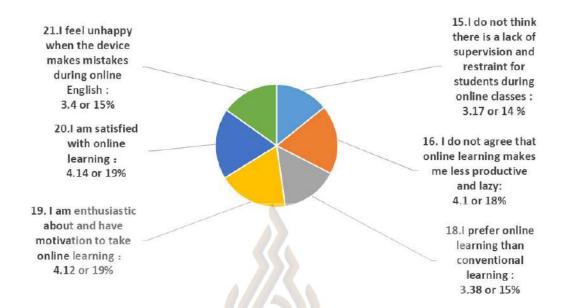


Figure 4.4 Affective dimension

As seen in Table 4.4, the overall mean of affective experience was the highest among the three dimensions ($\bar{x} = 3.64$), indicating that participants had a positive attitude towards online learning as a teaching method and were willing to use electronic devices for online learning.

Items 16, 19, and 20 show that participants felt that online learning did not make them inefficient and lazy (\bar{x} = 4.1), were motivated and enthusiastic about online learning (\bar{x} = 4.12), and despite this, participants were satisfied with online learning (\bar{x} = 4.14).

However, item 21 shows that when the electronic device malfunctioned, this affected the participants' motivation (\bar{x} = 3.40). Item 15 has the lowest mean score (\bar{x} = 3.17), and students' perceptions of the need for supervision and discipline in the online learning process varied, with some students choosing "disagree" or "neutral," implying that participants felt that students lacked supervision and discipline when taking classes online. This implies that the participants felt that students lacked supervision

and discipline from the instructor when taking classes online. For item 18, participants were neutral about whether they preferred conventional instruction or online learning (\bar{x} = 3.38), and although the data are close to unanimous, this also indicates that most participants chose 2 (Disagree) or 3 (Neutral).

Table 4.5 analyzes students' attitudes towards online English learning in terms of the behavioral tendency dimension, and the specific details for each item written in the table.

Table 4.5 Behavioral dimension

No.	Items	Mean	SD	Interpretation
22.	It is easy to have access to online learning	3.46	1.29	Agree
	software (e.g., registering, logging in,			
	joining a course, submitting assignments,			
	etc).			
23.	Learning English online is easy and doesn't	3.40	1.37	Agree
	take any more time. (e.g., pre-study before	1/2		
	class or review after class).	" The		
24.	I think that learning English online makes	4.13	0.55	Agree
	peer learning and group learning easier.			
25.	I like to communicate and discuss with my	3.24	1.43	Agree
	classmates online.			
26.	The existing equipment is more than	4.67	0.48	Strongly agree
	enough to support my online learning and			
	I don't need to spend money on additional			
	equipment.			
27.	I can concentrate and stay focused during	3.22	1.40	Neutral
	online classes.			

Table 4.5 Behavioral dimension (Cont.)

No.	Items	Mean	SD	Interpretation
28.	I like to seek help from teachers online.	3.38	1.30	Neutral
29.	I can have strong self-discipline and	3.32	1.27	Neutral
	self-control during online learning classes to			
	keep up with the flow of classes carefully			
	without supervision.			
30.	I always pre-study to improve online	3.32	1.42	Neutral
	learning.			
31.	I can complete my online assignments on	4.52	0.48	Strongly agree
	time.			
32.	I actively watch the course videos and read	3.72	0.79	Agree
	the course materials assigned by the			
	teachers.			
33.	I am actively involved and take part in	3.86	0.86	Agree
	online classes.		12/5	
	Overall	3.41	1.05	Agree

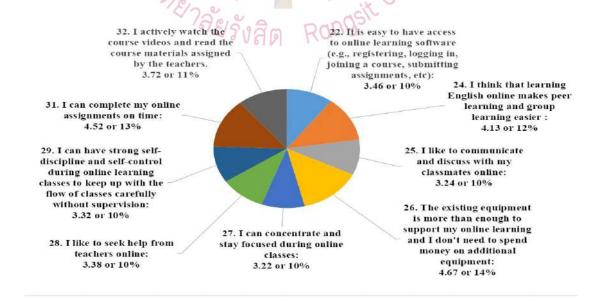


Figure 4.5 Behavioral dimension

Figure 4.5 shows that the overall mean of behavioral tendencies was lower among the three dimensions (\bar{x} = 3.41).

Item 22 indicated that participants had no difficulty using online English learning technology and that they could easily log into their accounts to access the class and submit assignments after class (\bar{x} = 3.46).

In items 24 and 25, the study shows that participants found online English learning easier for peer and group learning (\bar{x} = 4.13), and they enjoyed interacting and discussing with classmates online (\bar{x} = 3.24), which was more convenient than spending time in live meetings during COVID-19 and avoided more dangerous encounters. Item 26 shows that their existing equipment was sufficient to support their online learning without the need to purchase additional equipment (\bar{x} = 4.67).

Item 28 indicates that participants were neutral about seeking help from the instructor online (\bar{x} = 3.38). However, item 27 reflected participants were not confident in focusing and maintaining attention in the online classroom (\bar{x} = 3.22), and item 29 indicate that participants lacked self-discipline and self-control during online learning and required supervision to carefully follow classroom procedures (\bar{x} = 3.32).

Item 31 indicates that participants strongly agreed they could complete and submit online assignments on time, which was more convenient than submitting them in a traditional classroom (\bar{x} = 4.52). Even so, in item 32, participants still felt that they actively participated in the online classroom (\bar{x} = 3.72). In summary, students are more receptive to online English learning and are able to develop positive behavioral tendencies for online learning.

All in all, through a careful analysis of the 3 dimensions of the attitudes of sophomore English majors, it is clear that students' attitudes toward online learning are favorable, and most of them are receptive to online learning and can adapt to the new teaching methods. But, there are also phenomena such as students' lack of self-control and self-discipline in the process of learning online.

4.2 Analysis of the Qualitative Data

In this part, data were collected from semi-structured interviews, divided into five questions, in which 6 sophomore English majors from Trees University participated. Their ages ranged from 19 to 21 years old and they were from the same class.

4.2.1 Interviews about Attitudes toward Online Learning

The results of the 6 interviewees show that most of the participants felt positive about their attitudes toward learning English online.

"I like it. Online English makes it easier for me to get in touch with my friends abroad whenever I want." (Lucy, personal communication, March 12, 2023)

"I've enjoyed learning English since the beginning, and learning English online has made learning a foreign language more interesting." (Mike, personal communication, March 12, 2023)

"I like it very much, I can get in touch with the authentic English accent, and I can speak a sentence or two when I meet foreigners. Sometimes I feel a sense of accomplishment when I get a high score in English." (Candy, personal communication, March 12,2023)

"I like it. I think learning English online is interesting, it can expose me to another world, and I can learn about foreign cultures and exotic places by watching videos." (Merry, personal communication, March 12, 2023)

Only 2 participants had a negative attitude toward learning English online, and she shared her opinion that :

"Don't like it. Because my internet is not good, I miss a lot of information during the lessons." (Sherry, personal communication, March 12, 2023)

"I don't like it because I spend a lot of time memorizing the words and the grammar is difficult for me." (James, personal communication, March 12, 2023)

The second question is "What is your advice for learning English online?" . This question is posed to give teachers some insight into English learning according to students' needs. The ultimate goal is to help students develop a positive attitude toward online learning so that they can improve their English language skills through online learning.

Different students gave their 4 students thought that the teacher should stimulate students' interest in learning English online through humorous teaching methods.

"To stimulate students' interest in learning English online, to connect personal experience with the course and to increase the authenticity of the course." (Lucy, personal communication, March 12, 2023)

"I think the online English course should be designed to be rich and interesting and easy to understand." (Mike, personal communication, March 12, 2023)

Mike's response is consistent with Candy's statement that she wants teachers to have rich knowledge, a unique teaching style, and design interesting online English courses with clear lectures.

- "(1) The teacher has a unique teaching style; (2) The content of the lessons is clear and interesting; (3) The teacher is knowledgeable." (Candy, personal communication, March 12, 2023)
- "(1) Good supervision of the teacher; (2) Students' interest in online learning is stimulated through well-designed English courses." (Merry, personal communication, March 12, 2023)

"It is very important for teachers to publish lesson plans in advance, which can give students a clear idea about the class, among other things." Teachers should fully educate students about online learning and help them develop good beliefs about online learning so that effective implementation of online learning in English can be achieved." (James, personal communication, March 12, 2023)

In addition, Sherry pointed out that most teachers teach in English, without any native language, and speak too fast.

Therefore, she believes that "teachers should control the pace of teaching accurately, which not only requires teachers to slow down the speed of speech appropriately, but also gives students enough time to think: In addition, one of the most important factors determining the success of English e-learning is the interactivity of online learning, so teachers should ask students more open-ended and semi-open-ended questions to increase interactivity between teachers and students".

In addition, Candy and Sherry were two students who were concerned about the importance of educating students about e-learning. They both suggested that teachers should help students fully understand the advantages of online learning.

"There are two factors that need to be considered in order to keep the effective implementation of e-learning in English." The first is to popularize the benefits of online learning, which can stimulate students' interest and increase their confidence in learning English online; the second is that teachers should guide students to experience the e-learning model. It can help learners to get familiar with the operation of online learning tools, thus solving students' confusion about the online learning system." (Sherry, personal communication, March 12, 2023)

Only James emphasized the image of the teacher, saying,

"I think that besides teacher supervision and students' interest in online learning, a good teacher image can help students build a positive attitude towards online learning in English. The reason is that if a teacher pays attention to his image, it means he has a good teaching attitude." (James, personal communication, March 12, 2023)

4.2.2 Interviews on learning strategies

The interviews here are employed to showcase the learning strategies used by participants when they are engaged in online learning.

It was evident that four participants would develop a learning plan or establish learning goals when studying in an online environment.

"I think making a plan is very important for English learning. I usually set long-term goals and short- and medium-term goals for English learning and clock them on my mobile application." (Lucy, personal communication, March 12, 2023)

"It's very important to have a plan. I set an alarm for ten o'clock every night to remind myself to organize what I've learned online in English throughout the day, but there are times when I can't stick to it." (Mike, personal communication, March 12, 2023)

"Only after completing a small goal can I aim for a bigger one. I usually set how many words I memorize or how many texts I recite each day."

(Candy, personal communication, March 12, 2023)

"Goals are like directions and are very important. I will set a rough goal for myself, and after I finish my online English study, I will ask myself to organize my notes on what I have learned in class." (Merry, personal communication, March 12, 2023)

Two participants, on the other hand, did not think it was necessary to have a plan.

"I don't make detailed plans very often because I find it cumbersome and it makes me too concerned about time to concentrate on something." (Sherry, personal communication, March 12, 2023)

"I don't like to make plans. I will just complete the tasks assigned by the teacher on time." (James, personal communication, March 12, 2023)

6 participants, when they encountered difficulties in online learning, would not choose to give up, but would choose to seek help from their nearby classmates or teachers if they could not solve the problem by themselves.

"I try to figure out difficult problems by myself, for example, if I don't understand a word, I go online to find out the meaning of the word, and if it's a grammar problem, I look for relevant online classes to study. In short, I take my time to study and don't give up easily." (Lucy, personal communication, March 12, 2023)

"If I don't know a word, I turn to my cell phone dictionary, and if I don't understand a reading comprehension question, I ask my teacher for help." (Mike, personal communication, March 12, 2023)

"Since my reading speed is slow, I often set a time limit for myself to remind myself to speed up my reading. If I am not sure about a topic, I discuss it with my classmates online. Do not bow to difficulties easily." (Candy, personal communication, March 12, 2023)

"When I encounter difficulties, I will first look up the information on the Internet, and then ask my teacher for help if I really don't know how to do it." (Merry, personal communication, March 12, 2023)

"Check the information by myself, or ask my classmates." (Sherry, personal communication, March 12, 2023)

"For example, if I do poorly on an online test, I will ignore it for two or three days, but after a few days I will review it to see if it is because I am not familiar with the equipment or because I did not schedule it well." (James, personal communication, March 12, 2023)

Four of the six participants purposefully and intentionally searched the Internet for relevant listening materials for listening training.

"I usually play MP4 before the test to practice listening, and I usually listen to English songs." (Lucy, personal communication, March 12, 2023)

"Yes, I use my cell phone or computer to play English recordings for listening practice. I usually listen to them for about half an hour before I go to bed." (Mike, personal communication, March 12, 2023)

"I use a player to play English lectures and other listening materials, usually for half an hour every day. I like to listen to English songs or watch English movies." (Candy, personal communication, March 12, 2023)

"I will look for listening materials through the Internet, and listen to them several times a week, for about half an hour each time, because I can't listen to them if I listen to them for too long." (Merry, personal communication, March 12, 2023)

Two participants (Sherry & James), on the other hand, focused mainly on memorizing words.

"I don't study through the Internet very often, but I occasionally watch English movies and download mobile apps to remember words." (Sherry, personal communication, March 12, 2023)

"I will practice speaking with my classmates online and remember words through cell phone software." (James, personal communication, March 12, 2023)

4.3 Conclusion

Through the analysis of quantitative and qualitative research data, it is found that the data reflects both positive and negative attitudes. On the positive side, there are 4 findings: the excitement of online learning, the fondness of collaboration with friends and teachers, the curiosity of cultural backgrounds, and the love of reading. On the negative side, there are 3 findings: dissatisfaction of the instability of the Internet, dissatisfaction of the teachers and the materials.

Chapter 5

Conclusion, Discussion, and Recommendations

5.1 Introduction

This Chapter presents the conclusion of this study to answer the 2 research questions:

- 1) What are the students' attitudes towards online learning in this study?
- 2) In what ways do the students' attitudes influence their online English learning?

The Chapter, hence, is divided into 3 parts: conclusion, discussion, and recommendations.

5.2 Conclusion

This study employs a mixed-method between quantitative and qualitative methodologies to collect data and analyze them to find the answers to the 2 research questions mentioned above. The quantitative data were obtained through questionnaires from 50 students while the qualitative data were obtained from semi-structured interviews with 6 students. The analysis of the students' questionnaireand semi-structured interviews clearly show that there are two sides of

my participants' learning attitudes in English classes: positive and negative reactions. In terms of positive attitudes, there were four outcomes: students' excitement about learning online, their love of working with friends and teachers, their curiosity about cultural context, and their love of reading motivated students to find more learning strategies such as supportive online information, work more closely with teachers and friends, explore more knowledge, and articulate their learning in the classroom. In return, these attitudes led them to love reading, encouraging more vocabulary, content, and sources of knowledge. The in-depth occurrence of the six volunteers in this study also confirms the literature review proposed by Csizer and Dornyei (2005) that positive learning attitudes promote successful learning for learners.

On the contrary, the 3 negative attitudes toward the instability of the Internet, the dissatisfaction of teachers and materials make them tired of studying and thus, lose their motivation and attention in class. This incident needs teachers' facilitation and directive role to help them proceed with their language learning in the 'new normal' platform. The results of this study mentioned above are attributed to the institutions where the researchers work, to researchers in China and Thailand, and to the global learning community in the 21st century.

The problems and challenges encountered in online learning, the students' questionnaires and interviews mainly reflect the students' own problems, facing online, they do not have enough self-control to control their attention to learning, they are easily distracted, etc.

5.2.1 Responses to Research Question 1

The first research question, "What are the students' attitudes toward online learning?"

Students in this class had good attitudes toward online learning. Although the percentage of students with positive attitudes toward online English learning exceeded those with negative attitudes, the values were not high, and some students remained neutral. It can be seen in the affective domain that students with negative attitudes toward English online learning lack the skill in using technology. They took time to adjust themselves to learning online. Usun (2003) also agreed that "many students do not feel completely comfortable with using the Internet as an educational tool".

5.2.2 Responses to Research Question 2

For the second research question, "In what ways do the students' attitudes influence their online English learning?", there are 3 main findings, as follows.

The questionnaire found that the strongest factors influencing students' online learning were: Firstly, in the cognitive dimension, "It is convenient to learn online" (\bar{x} = 4.38). Secondly, in the affective dimension, "Satisfied with online learning" (\bar{x} = 4.14). Thirdly, in behavioral is "The existing equipment is more than enough to support my online learning and I don't need to spend money on additional equipment."(\bar{x} = 4.67)

Combining the questionnaires and interviews, it was found that the problems and challenges affecting students' online learning were mainly in the following areas: Firstly, students' lack of self-control and lack of supervision in the classroom.

Secondly, they are affected by online facilities. Thirdly, lack of interaction between teachers and students.

(1) Students lack self-control and supervision in the classroom

In the process of online learning, students have less self-control, which can easily lead to students' lack of concentration and low learning efficiency. Through questionnaires and interviews, it was found that students generally reflected that compared with offline classes, online teaching lacks a learning atmosphere, which is not conducive to creating a good learning atmosphere. Students can easily use other electronic devices or software while doing online learning, making it difficult to focus on online learning. Chen (2020) also conducted a questionnaire survey through teachers, parents and students, and the results showed that some students are not very receptive to online teaching, and both parents and teachers have little sense of self-discipline for students.

Therefore, online teaching students should be motivated to improve their self-study (Mahajan & Singh, 2020).

Students can establish study groups among themselves, make synchronized study plans, and improve their self-control by monitoring and helping each other in their studies (Yang, 2021). Teachers can increase student engagement by adding more classroom learning sessions and improve student supervision in online learning. (e.g., increase the number of questions, conduct in-class tests)

(2) Influenced by network facilities

According to Li (2020), the correlation between the fluency of teaching and overall satisfaction in online teaching is the greatest and cannot be separated from the hardware. Especially, the biggest problem nowadays is the delay and lag in live streaming and video conferencing due to the network speed. In addition, the online teaching platform is not good at assessing students' knowledge mastery, and online tests are not easy to operate.

Therefore it is also important for teachers to be proficient in how to use electronic devices for online teaching. Secondly, for students who miss the learning content when there are network lag and other situations during online learning, teachers can record the video while teaching is in progress and send it to students who need it after class.

(3) Lack of interaction between teachers and students

In online learning, it is difficult for students to communicate and interact with the teacher. It is more difficult for teachers to motivate and engage students in their teaching (Cai, 2021). Online students can only learn independently in front of a screen at home.

Teachers can increase their interaction with students by designing appropriate teaching sessions. For example, online instruction can enhance communication with students by having them share the screen to share their ideas, or by having online quizzes. At the end of the lesson, students can share what they have learned or what they are still unsure about. Bring the teacher and students closer together. Let the students become the leaders of the class.

5.3 Discussion

This section discussed responses to research questions, and the study had two questions.

They were:

- (1) What are the students' attitudes toward online learning?
- (2) In what ways do the students' attitudes influence their online English learning?

5.3.1 Responses to research question 1

"Personal attitudes are a major factor influencing individuals' use of information technology" (Liaw, Huang & Chen, 2007). Therefore, in this thesis, one of the research objectives was to determine students' attitudes toward e-learning in English.

The participants in this study were from English majors at Trees University who had a relatively good English language foundation at the time of enrollment, and the students had a high level of attention and participation in English learning. The students had positive attitudes towards online learning and developed a good psychological readiness to learn online. This result confirms Edumadze et al.'s (2017) study that students have positive attitudes and perceptions towards online learning and

that students are willing to participate in online learning activities. Thus, students' attitudes toward online learning are generally good.

Among the three dimensions of cognitive, affective, and behavioral intention, the highest score was in the affective domain, which showed that participants were enthusiastic about online learning, satisfied with the online learning environment, happy when learning online, and more willing to collaborate in online groups, and their initiative and motivation in the online learning process were greatly increased.

The second is the cognitive component, where students believe that online learning is very convenient, that it is easy for them to master, and that it improves the quality of their learning.

The behavioral intention data were lower than the other two, with some students perceiving themselves as not being able to actively overcome and resist difficulties and distractions from within and outside themselves, lacking teacher supervision in the online classroom, having less initiative and not planning well enough. This finding has been corroborated in previous studies, such as Tao (2001), who reached similar conclusions in his study and found that students performed poorly in planning and initiative in learning.

5.3.2 Responses to Research Question 2

The dimensions of attitude toward online learning are highly correlated and have a significant impact, which is manifested by improving college students' online learning identity and optimizing their learning experience, thus maintaining their active participation in online learning. Each learner has a different level of knowledge, experience and ability, and each learner has a different level of perception of the meaning of learning itself. If students perceive that the learning activity they are

engaged in has value to them, or if they can quickly see this value, this will influence their judgment and tendency to actively participate in learning. Similarly, learners' emotions and feelings about the learning experience are not static and are mobilized through the stimulation of external rewards, compliments, recognition, or achievements (Sha, 2004), and positive affective experiences can also promote learners' sustained engagement in learning activities. Therefore, I will analyze the cognitive affective, and behavioral separately.

(1) Cognitive

In the research, it was found that for most students, "I can fully grasp all the content of online learning." and "I can learn effectively online. " the mean score for this item was relatively low. Since online learning was only used on a large scale during the epidemic, some students' perception bias about accepting new ways of learning, as well as the courses offered, and the environment they were in, could have an impact on their attitudes revealed in the cognitive component.

The cognitive component is the basis of attitude (Liu, 2022), and the positive or negative attitude of students' learning largely depends on their awareness of online learning; those students who think English learning is important and has a great impact on them will hold a positive and aggressive learning attitude toward online learning, while those students who think English learning is irrelevant and have a pointless attitude toward English learning online will hold a negative attitude toward online learning.

The success of anything is the result of a combination of external and internal factors, so to achieve good learning results, it is not possible to learn on your own without this external environment (Zhu, 2010, pp.10-13).

First of all, to change students' attitudes towards online learning, it is necessary to first change their perceptions about learning English. These require persuasive education by teachers in order to change students' one-sided perceptions and thus their negative attitudes towards learning. Teachers need to adopt effective ways to provide good guidance to students.

Secondly, teachers can add fun competitions and group help sessions in online learning to strengthen students' online English learning environment, and give full play to the teacher's role in education and teaching, and improve the teacher's sense of responsibility in teaching, as the teacher's attitude can have a significant impact on students, which is reflected in all aspects of their learning lives, so teachers should help students maintain a good attitude towards English learning. This influence is reflected in all aspects of students' learning lives. Create a perfect external environment for students' learning, from external factors, to promote students' English learning.

(2) Affective

Students were satisfied with the online learning method and enjoyed the online collaborative learning. However, this affected students' satisfaction when there were problems with the equipment; some students expressed their lack of self-motivation in the online learning process. Because their opportunities to use the Internet to learn English were limited by their environment and because they were not used to learning English online before this, there is still room for further improvement in students' recognition of the value of the advantages of online learning and the positive and enjoyable learning experience.

Interest in learning is the most active factor in motivation to learn, and losing interest is losing motivation to learn (Wu, 2014, pp.27-45). In the semi-structured interviews, some students appeared a dislike mood, hated English learning and had no interest in learning English when English was mentioned.

To motivate students and further enhance their interest in learning English. Firstly, they should understand the importance and necessity of learning English (Cheng, 2008). Secondly, teachers, as the burden bearers of such tasks, should motivate students appropriately at the right time to help them clarify their learning goals and increase their motivation.

But for learning interest, it requires teachers to change their rigid teaching format, adopt a multi-form teaching method, use their own personalized teaching style, and always give students a sense of mystery and freshness in learning English. Besides creating a harmonious and passionate atmosphere, encouraging students to use their mouths more and express themselves well, so that they can keep increasing their interest in progress.

A good teacher-student relationship is the basis for forming a good classroom atmosphere (Li, 2018, pp.116-134). Every student should be treated equally, and students should not be treated differently because of their academic performance. It is important to communicate with students and understand their ideas during the teaching process.

Zhang (2021) pointed out that students' negative emotions in learning are negatively influenced by the difficulties and frustrations they encounter in learning that are difficult to solve and accumulate too much. Therefore, teachers should actively guide and increase students' interest in online learning through talks, games,

etc. And when there is a problem with the device, provide students with solutions to reduce the outside interference that reduces students' expectations of online learning.

In conclusion, in order to change students' learning attitudes, teachers should first treat them appropriately and correctly: when they encounter difficulties and setbacks related to English learning, teachers should actively help them, give them more help in learning, help them find out the reasons for their learning failures, and use them as a basis to improve their learning methods and find out solutions to their problems, so that they can regain their self-confidence and help them develop a positive learning attitude. Xue (2020) pointed out that the more students succeeded in their studies, the more positive and happy emotional experiences they had. This helps to gradually eliminate their negative emotional experiences due to failures and setbacks, thus transforming their negative learning attitudes.

(3) Behavioral

Students are happy to receive learning materials and course videos distributed by teachers through online learning, and can submit online learning tasks on time; online learning using electronic devices is easy and simple for them. However, some students felt that they lacked self-discipline in the online learning process and lacked supervision from their teachers.

Students are the main body of learning, but in Chinese education, students often lack initiative and always passively receive knowledge, neglecting the main position of students in learning (Cai, 2017, pp.78-102). This leads to students' inability to exert their subjective initiative and to form teacher-student interaction because they cannot develop their independent learning ability, which is what makes them feel the lack of teacher supervision and self-control in the online process.

First of all, teachers should change their teaching philosophy, in the teaching task, should respect the main position of students, take students as the main body, put their own experience as well as knowledge, using certain measures and methods, to build a meaningful bridge for students, to guide them to develop and think. Secondly, give full play to students' enthusiasm and creativity, inspire students' thinking, and give full play to their subjective role as much as possible, so that they can lead the teaching.

In addition to the improvement of teaching methods, we should also pay attention to the interesting nature of lectures and pay more attention to real-life examples and incorporate them into the classroom.

5.4 Recommendations

There are 3 recommendations for 3 different groups of the stakeholders of this study: the course designers, teachers, and future researchers.

5.4.1 Recommendation for course designers

This recommendation is aimed to give Trees University's course designers the findings so that they can adjust the course or use the findings as a base to discuss and improve the online courses. At Trees University, course designers are invited from 3 different groups of staff: the administrators, teachers, and researchers.

In the pre-course activities, course designers can use mind maps to guide students to preview the teaching contents. Visualize the teacher's teaching ideas.

In classroom activities, course designers should make full use of online resources to increase the interest and richness of the course; course designers should combine life experiences with teaching contents appropriately to increase the comprehensibility and authenticity of knowledge; course designers should increase the number of open questions and semi-open questions to give students enough time to think and increase the interaction and communication between teachers and students.

After-class learning tasks, course designers should flexibly assign homework, both basic learning tasks and interesting extension tasks, in order to stimulate students' interest in independent learning and improve their learning ability.

5.4.2 Recommendation for teachers

Based on the analysis and discussion of sophomore English majors' attitudes toward online English learning and their influencing factors, the results of this study have some implications for college English teachers and students.

Based on the results of the current study, the implications for college English teachers are as follows.

(1) Regularly survey students' attitudes toward English online learning

In implementing online learning in English, teachers should regularly survey students' attitudes. The reason for this is that knowing students' attitudes toward online learning can help determine the extent to which students have mastered using online learning (Ong & Lai, 2006). For example, teachers can optimize instructional effectiveness based on the results of students' attitudes. Specifically, teachers should guide those students with positive attitudes to cooperate with teachers to create a

favorable online learning atmosphere, thus encouraging students with neutral attitudes to participate in the classroom; at the same time, teachers should set role models for students with negative attitudes, pay attention to the emotional feelings they display during online learning, enhance their confidence in online learning, guide them to correctly understand the importance of online learning styles, and actively guide them to engage in positive learning behaviors. Teachers decide when and how to learn online in English courses with clearer goals based on students' attitudes.

(2) Use different methods to help students embrace English online learning

Do tailor teaching to different students and find the appropriate teaching methods for different students. Teachers should guide students with positive attitudes to make full use of the advantages of online learning and share online course resources, thus widening the learning channels and increasing the satisfaction of online learning. Teachers should help students with negative attitudes to understand online learning correctly, experience online learning modes, reduce their prejudice against online learning, and thus eliminate their resistance to online learning.

(3) Teaching the knowledge of English online learning

Teachers should convey information about English online learning objectively during the teaching process. In addition, teachers should regularly evaluate and monitor English online learning systems so that students can use the available online learning systems more effectively. Finally, teachers should fully understand students' needs for online learning technology and provide them with regular training on relevant online learning knowledge and technology.

In sum, I believe that a good online classroom should have the following characteristics: content that is both informative and interesting; a good balance between instructor control and learner autonomy; sufficient instructor-student and student-student interaction; and a course that is scalable and inspiring. The above statement is supported by Turula (2014), who provides some additional characteristics of a good online course: multiple sources of supplementation to the lecture content and easy access to the lecture notes by students after the class.

5.4.3 Recommendations for the future researchers

The results of the study can benefit other researchers in their professional work because other researchers can gain knowledge about online English learning and explore other topics in the field of English language teaching through this study. Also, it inspires other researchers to conduct research on online teaching and learning in different disciplines.

Other researchers can learn from this study what kind of attitudes college-level English majors have in online English learning. This study can provide a reference for Chinese universities to carry out online teaching activities during the epidemic period, and it can also help Chinese university English teachers to improve their online teaching methods and effectively improve students' online learning.

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Questionnaire

Dear Student:

Thank you very much for taking your valuable time to participate in this questionnaire, which is part of a postgraduate study at Rangsit University. The main purpose of this questionnaire is to understand the attitude of college students towards online English learning and to propose solutions.

This questionnaire consists of two parts: personal information and multiple-choice questions. The information and data obtained from the survey are only used as a reference for the study. There is no right or wrong answer, so please fill in the questionnaire according to your personal situation. Your opinion will be an important help to our research, once again the center thanks for your support and cooperation!

The questionnaire takes around 15 minutes to complete.

PART 1: Personal Information

Directions: Please put a	a "X" check mark in the box □.
Which class are you	
☐ Business English,	TAEISVAR Rangs
☐ English Education	n,
□ English (English-	Thai)
Your Score on the E	nglish test
□ 0-25	□ 26-50
□ 51-75	□ 76-100

PART 2: Students' attitudes towards online English learning

Directions: please tick "X" at the number that correctly reflects your opinion about the statement. Rate your response to each item on the scores of 1-5. The rating scores are as follows:

1-Strongly disagree 2- Disagree 3-Neutral 4-Agree 5-Strongly agree

No.	Statement	1	2	3	4	5
1	It is acceptable to learn English online.					
2	I believe that using online learning will improve					
	the quality of my English learning.					
3	It is a good idea to use online learning in my					
	English course.					
4	I have no difficulty in learning and understanding					
	the classroom content in online learning.	14/2				
5	Online communication can facilitate deeper	50				
	learning.					
6	I can fully grasp all the content of online learning.					
7	I can learn effectively online.					
8	Online learning is convenient.					
9	I can adapt to online learning with no difficulty.					
10	I can complete my study tasks in time when I					
	study online.					
12	When I study online at home, I feel happy.					
13	I like to collaborate with others to learn online.					
14	It is very easy to learn English in an online					
	environment.					

		1		
15	I do not think there is a lack of supervision and			
	restraint for students during online classes.			
16	I do not agree that online learning makes me less			
	productive and lazy.			
17	During the online learning process, my learning			
	initiative and motivation have improved			
	significantly.			
18	I prefer online learning than conventional			
	learning.			
19	I am enthusiastic about and have motivation to			
	take online learning.			
20	I am satisfied with online learning.			
21	I feel unhappy when the device makes mistakes			
	during online English.			
22	It is easy to have access to online learning			
	software (e.g., registering, logging in, joining a	Sity		
	course, submitting assignments, etc).	S		
23	Learning English online is easy and doesn't take			
	any more time. (e.g., pre-study before class or			
	review after class).			
24	I think that learning English online makes peer			
	learning and group learning easier.			
25	I like to communicate and discuss with my			
	classmates online.			
26	The existing equipment is more than enough to			
	support my online learning and I don't need to			
	spend money on additional equipment.			
27	I can concentrate and stay focused during online			

	classes.			
28	I like to seek help from teachers online.			
29	I can have strong self-discipline and self-control			
	during online learning classes to keep up with the			
	flow of classes carefully without supervision.			
30	I always pre - study to improve online learning.			
31	I can complete my online assignments on time.			
32	I actively watch the course videos and read the			
	course materials assigned by the teachers.			
33	I am actively involved and take part in online			
	classes.			





- 1. Do you like online English learning? Why?
- 2. What is your advice for learning English online?
- 3. Do you plan or set learning goals when learning English in an online environment?
- 4. How do you cope when you encounter difficulties in online learning?
- 5. How do you learn English through the Internet?







มหาวิทยาลัยจังลัก เมืองเอก n.wkaโยธิน จ.ปกุมธานี 12000

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STC.4800/0447

6 December 2022

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

Dear Assoc. Prof. Dr. Chamnong Kaewneam,

The Master of Bilingual Education, Suryadhep Teachers College at Rangsit University organized a Research Proposal Defense for Miss Lixu Pan Student Number 6305352 (Asst. Prof. Dr. Ubon Sanpatchayapong is her advisor) on September 6, 2022. Her research title is "Tertiary Level Students' Attitudes towards English Online Learning in a Chinese Context". Currently, she is in the middle of the instrument design phase and has come up with the instrument for her study.

Thus, the Program would like to invite you to be our IOC expert for examining the research instruments and we believe that you will give useful suggestions to improve our student's research by accepting our invitation. Suryadhep Teachers College truly appreciates the kind support you will give us.

Sincerely yours,

Malivan Praditteera, Ed.D.

Dean

Suryadhep Teachers College

Rangsit University

www.rsu.ac.th



มหาวิทยาสัยรับสัต เมือนเอก ก.พหลัยธี ข.ปทบรามี 12000 Rangsit University Moong-Aloe, Poholyothin Rid. Pathumthani 12000, Thalland 1. (66) 2997 2200-36 F. (60) 2791 5757 F. infollower th

STC.4800/0448

6 December 2022

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

Dear Dr. Boonsri Cheevakamjorn,

The Master of Bilingual Education, Suryadhep Teachers College at Rangsit University organized a Research Proposal Defense for Miss Lixu Pan Student Number 6305352 (Asst. Prof. Dr. Ubon Sanpatchayapong is her advisor) on September 6, 2022. Her research title is "Tertiary Level Students' Attitudes towards English Online Learning in a Chinese Context". Currently, she is in the middle of the instrument design phase and has come up with the instrument for her study.

Thus, the Program would like to invite you to be our IOC expert for examining the research instruments and we believe that you will give useful suggestions to improve our student's research by accepting our invitation. Suryadhep Teachers College truly appreciates the kind support you will give us.

Sincerely yours,

Malivan Praditteera, Ed.D.

Dean

Suryadhep Teachers College

Rangsit University

www.rsu.oc.th



Memorandum

STC.4800/0449

6 December 2022

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

Dear Assoc. Prof. Suchada Nimmannit,

The Master of Bilingual Education, Suryadhep Teachers College at Rangsit University organized a Research Proposal Defense for Miss Lixu Pan Student Number 6305352 (Asst. Prof. Dr. Ubon Sanpatchayapong is her advisor) on September 6, 2022. Her research title is "Tertiary Level Students' Attitudes towards English Online Learning in a Chinese Context". Currently, she is in the middle of the instrument design phase and has come up with the instrument for her study,

Thus, the Program would like to invite you to be our IOC expert for examining the research instruments and we believe that you will give useful suggestions to improve our student's research by accepting our invitation. Suryadhep Teachers College truly appreciates the kind support you will give us,

Sincerely yours,

Malivan Praditteera, Ed.D.

Dean

Suryadhep Teachers College

Rangsit University



Dear Expert,

AN INVITATION FOR VALIDATION OF RESEARCH INSTRUMENT

I wish to invite you to validate the following research instruments: questionnaire and semi-structured interview questions. This is to enhance a successful study on the topic: Tertiary Level Students' Attitudes towards English Online Learning in a Chinese Context

Please find below the research objectives, operational definition of key terms, directions, research plan and the instrument.

Research Objectives:

The objectives are to investigate:

- 1. the attitudes of English major's students in year 2 towards online English learning.
- 2. proposed learning strategies students apply to their online English learning.

Operational Definitions:

- 1. Chinese tertiary level students: Tertiary level students who study full-time at a general higher education institution for three to four years. In this study, they refer to year 2 students at Trees University.
- 2. Students' attitudes: In my context, they are students' opinions and reflections that affect their learning outcomes. These students sometimes do not feel like studying and are bored with it. As a result, their learning efficiency at this stage is low, which also has a negative impact on the next stage of learning. Thus, it is necessary to find ways to help students solve their problems.
- 3. English online learning: In my context, English online learning is done in real time through a one-to-many teacher, and students need to use electronic devices (e.g. TV, computer, iPad, mobile phone, etc) to login and access the online classroom at the appointed time. They study all subjects online every day or as often as five times a week. The teaching and learning process is made

more vivid and imaginative through various forms of information transmission such as multimedia maps, texts, sounds and images.

- 4. English teaching: In my context, English teaching is an EFL or English as a Foreign Language. English majors are usually required to learn the four English learning skills: listening, speaking, reading, and writing comprehensively. They also learn general knowledge of foreign literature, such as representative movies and novels. They also become familiar with the history, cultures and traditions of English-speaking countries.
- 5. Trees University: Trees University is a made-up name for the location of this research. The university has 72 majors of various types, including 33 undergraduate majors and 39 specialist majors.

Research Plan

For research objective 1, the main instrument is a questionnaire constructed based on the definition of attitudes toward learning English online.

For the research objective 2, qualitative research method will be mainly used. The instrument for the qualitative study will be questions for semi-structured interviews.

Directions:

Please tick (\checkmark) the item that corresponds to your opinion towards content validity.

Lixu Pan

Researcher

ITEM OBJECTIVE CONGRUENCE (IOC) FOR THE QUESTIONNAIRE

Part 1: Personal Information

		Е	XPERT	'S
	ITEMS]	REVIEW	V
		+1	0	-1
1.	Gender: Male Female			
2.	Your Score on the English test: □ 0-25 □ 26-50			·
	51-75 🗖 76-100			

Part 2: Students' Attitudes towards English Online Learning in a Chinese Context

Dimensions		E	XPERT	'S
of attitude	ITEMS		V	
towards		+1	0	-1
learning				
English	5			
online	32			
	1. I think it is acceptable to learn English online.			
	2. I believe that using online learning will improve			
	the quality of my English learning.			
	3. I think it is a good idea to use online learning in			
	my English course.			
Recognition	4. I think I am very happy to learn English online.			
	5. I think the class content in online learning is			
	vivid and interesting, and can stimulate my			
	interest.			
	6. I can clearly learn and understand the class			
	content in online learning.			
	7. I think online communication can facilitate			
	deeper learning.			

	8. I think there is too much content to fully grasp
	with online instruction.
	9. I think I can learn effectively online.
	10. I think online learning is convenient.
	11. I can adapt to online learning.
	12. I think I can't complete my study tasks in time
	when I study online.
	13. I get frustrated when I study online from home.
	14. I like to collaborate with others to learn online.
	15. I like to communicate and discuss with my
	classmates online.
	16. I like to seek help from teachers online.
	17. I will complete my online assignments on time.
Affective	18. I will actively watch the course videos and read
Affective	the course materials.
	19. I prefer online learning than traditional
	face-to-face learning.
	20. I am actively involved and take part in online
	classes.
	21. I am satisfied with online learning.
	22. I feel unhappy when the device makes mistakes
	during online English.
	23. I think online English learning technology is
	difficult to use (e.g., registering, logging in,
	joining a course, submitting assignments, etc. on
	online learning software).
	24. I think it takes a lot of effort to learn English
	online (e.g., pre-study before class or review
Behavior	after class).
	25. I think that learning English online makes peer
	learning and group learning more difficult.
	26. I think it is very difficult to learn English in an
	online environment.

27.	I think learning English online requires a lot of		
	money and technical support (e.g., I need to		
	spend money on equipment, etc.)		
28.	I can concentrate and stay focused during online		
	classes.		
29.	I do not think there is a lack of supervision and		
	restraint for students during online classes.		
30.	I can have strong self-discipline and self-control		
	during online learning classes to can keep up		
	with the flow of classes carefully without		
	supervision.		
31.	I will pre-study to improve online learning.		
32.	I do not think online		
	learning makes me less productive and lazy.		
33.	During the online learning process, my learning		
	initiative and motivation have improved		
	significantly.		
34.	I am enthusiastic about and have motivation to		
	take online learning.		

General Remarks

rks

Legister Value Rangsit University

Rangsit University

				S	Si	g	n	a	tı	11	·e



	IOC of Questionnaire										
NO.	Items	Expert	Expert	Expert	Average	Congruence					
		1	2	3							
Part 1: Personal Information											
1.	Gender	+1	0	+1	0.6	Congruence					
2.	Scores	+1	0	+1	0.6	Congruence					
Part	Part 2: Tertiary Level Students' Attitudes towards English Online Learning in										
		8	Chinese	Context							
1.	I think it is	+1	+1	+1	1	Congruence					
	acceptable to learn										
	English online.	A //									
2.	I believe that using	+1	+1	+1	1	Congruence					
	online learning will			7							
	improve the quality										
	of my English	100									
	learning.										
3.	I think it is a good	+1	+1	+1	1	Congruence					
	idea to use online		4								
	learning in my	All ni	100		7 2						
	English course.				S						
4.	I think I am very	+1	+1	+1	S 1	Congruence					
	happy to learn		V PA	" U							
	English online.	8100		agil							
5.	I think the class	4419	7 +Ra	+1	1	Congruence					
	content in online										
	learning is vivid										
	and interesting, and										
	can stimulate my										
	interest.										
6.	I can clearly learn	+1	+1	+1	1	Congruence					
	and understand the										
	class content in										
	online learning.										
7.	I think online	+1	+1	+1	1	Congruence					
	communication can										

	facilitate deeper learning.					
8.	I think there is too much content to fully grasp with online instruction.	+1	-1	+1	0.33	Incongruence
9.	I think I can learn effectively online.	+1	+1	+1	1	Congruence
10.	I think online learning is convenient.	+1	+1	+1	1	Congruence
11.	I can adapt to online learning.	+1	+1	+1	1	Congruence
12.	I think I can't complete my study tasks in time when I study online.	+1	+1	+1	1	Congruence
13.	I get frustrated when I study online from home.	+1	-1	+1	0.33	Incongruence
14.	I like to collaborate with others to learn online.	+1	+1	+1	115/01/	Congruence
15.	I like to communicate and discuss with my classmates online.	ยรังสิ	+1 Ro'	ugaji.	1	Congruence
16.	I like to seek help from teachers online.	+1	+1	+1	1	Congruence
17.	I will complete my online assignments on time.	+1	+1	+1	1	Congruence
18.	I will actively watch the course videos and read the	+1	+1	+1	1	Congruence

	course materials.					
19.	I prefer online	+1	+1	+1	1	Congruence
	learning than					
	traditional					
	face-to-face					
	learning.					
20.	I am actively	+1	+1	+1	1	Congruence
	involved and take					
	part in online					
	classes.					
21.	I am satisfied with	+1	+1	+1	1	Congruence
	online learning.					
22.	I feel unhappy	+1	-1	+1	0.33	Incongruence
	when the device			1		
	makes mistakes					
	during online	100	- //			
	English.					
23.	I think online	+1	-1	+1	0.33	Incongruence
	English learning		4			
	technology is	All mi	100		T A	
	difficult to use				5	
	(e.g., registering,			BA.	2	
	logging in, joining		V P A	" N.		
	a course,	81000	- Da	ndsir		
	submitting	4 JVA	9 Ru			
	assignments, etc.					
	on online learning					
24	software). I think it takes a lot	<u></u> _ 1	-1	1	0.22	Inconomicano
24.	of effort to learn	+1	-1	+1	0.33	Incongruence
	(e.g., pre-study before class or					
	review after class).					
25.	I think that learning	+1	-1	+1	0.33	Incongruence
23.	English online	'1	-1	'1	0.33	meongruence
	Luguon Omine					

	makes peer					
	learning and group					
	learning more					
	difficult.					
26.	I think it is very	+1	-1	+1	0.33	Incongruence
	difficult to learn					
	English in an					
	online					
	environment.					
27.	I think learning	+1	0	+1	0.6	Congruence
	English online					
	requires a lot of					
	money and	. 111				
	technical support			70		
	(e.g., I need to					
	spend money on	111				
	equipment, etc.)					
28.	I can concentrate	+1	+1	+1	1	Congruence
	and stay focused		4			
	during online	11100	100			
	classes.				į/S	
29.	I do not think there	+1	+1	+1	JE 1	Congruence
	is a lack of		N P A	11/1		
	supervision and	8100	Dal	agsit		
	restraint for	ujva	n Ru	119		
	students during					
20	online classes.		. 4	. 4		
30.	I can have strong	+1	+1	+1	1	Congruence
	self-discipline and					
	self-control during					
	online learning					
	classes to can keep					
	up with the flow of classes carefully					
	classes carefully without					
	supervision.					

31.	I will pre-study to	+1	+1	+1	1	Congruence
	improve online					
	learning.					
32.	I do not think	+1	+1	+1	1	Congruence
	online					
	learning makes me					
	less productive and					
	lazy.					
33.	During the online	+1	+1	+1	1	Congruence
	learning process,					
	my learning					
	initiative and		778			
	motivation have	900				
	improved					
	significantly.					
34.	I am enthusiastic	+1	+1	+1	1	Congruence
	about and have					
	motivation to take					
	online learning.					

Langsit University

Appendix F Certificate of Ethical Approval by Ethics Reviewed Board of Rangist University



RSU-ERB

COA, No. RSUERB2023-073

Certificate of Approval Ethics Review Board of Rangsit University

COA. No. RSUERB2023-073 COA. No.

Tertiary Level Students' Attitudes and Strategies in Learning English Protocol Title

Online at a Chinese University in China

Principle Investigator Pan Lixu

Co-investigator Asst.Prof. Ubon sanpatchayapong

Suryadhep Teachers College, Rangsit University Affiliation

How to review **Expedited Review**

1. Project proposal Approval includes

2. Information sheet

3. Informed consent form

4. Data collection form/Program or Activity plan

Date of Approval: 12 May 2023 Date of Expiration: 12 May 2025

The prior mentioned documents have been reviewed and approved by Ethics Review Board of Rangar University based Declaration of Helsinki, The Belmont Report, CIOMS Guideline and International Conference on Harmonization in Good Clinical Practice or ICH-GCP

(Associate Professor Dr. Pa

Chairman, Ethics Review Board for Human Research





Certificate of Approval Pu'er University , Administrative Department

Subject: Approval to collect data for M.Ed thesis Dear Sir/Madam,

I'm currently enrolled in the master of education in Bilingual Education and English Language Teaching, at Rangsit University, Thailand. I am conducting research on "Tertiary Level Students' Attitudes and Strategies in Learning English Online at a Chinese University in China."

This research requires Sophomore English major students to participate. The instruments involved a questionnaire and semi-structured interviews for obtaining the required data. Therefore, I would like to seek permission from the administration to allow me to collect data at this school where the names and identities of students will be kept confidential and undisclosed.

Thank you for your kind consideration.

Truly yours,

Lixu Pan

Rangsit University

Date March 10, 2023

Pu'er University, Administrative Department

Biography

Name Lixu Pan

Date of birth 13 January 1998

Place of birth Pu'er/Yunnan China

Education background Pu'er University, China

Bachelor of Foreign Languages in English

Studies, 2020

Rangsit University, Thailand

Master of Education in Bilingual Education and

English Language Teaching, 2023

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