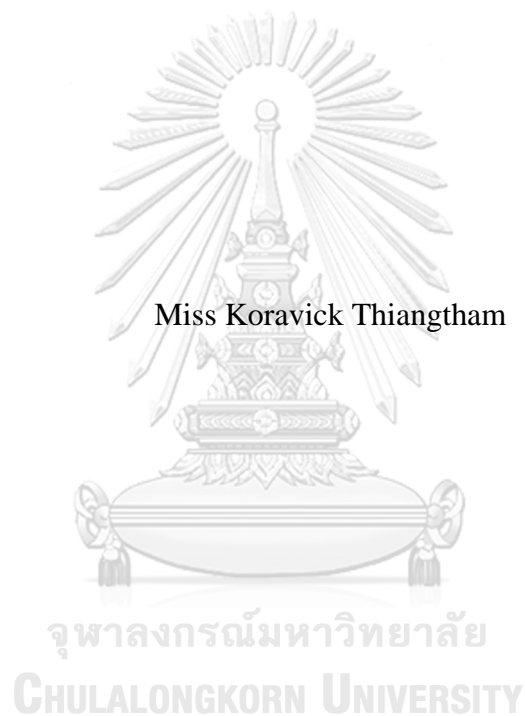


WILLINGNESS TO COMMUNICATE IN ENGLISH
OF THAI UNDERGRADUATE STUDENTS IN
ONLINE ENGLISH CLASSROOMS



Miss Koravick Thiangtham

A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Education in Teaching English as a Foreign Language
Department of Curriculum and Instruction
Faculty of Education
Chulalongkorn University
Academic Year 2023

ความเต็มใจที่จะสื่อสารเป็นภาษาอังกฤษของนักศึกษาระดับปริญญาตรี
ในห้องเรียนภาษาอังกฤษแบบออนไลน์



วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาครุศาสตรมหาบัณฑิต
สาขาวิชาการสอนภาษาอังกฤษเป็นภาษาต่างประเทศ ภาควิชาหลักสูตรและการสอน
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Thesis Title WILLINGNESS TO COMMUNICATE IN ENGLISH
 OF THAI UNDERGRADUATE STUDENTS IN
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ในห้องเรียนภาษาอังกฤษแบบออนไลน์. (WILLINGNESS TO COMMUNICATE IN ENGLISH
OF THAI UNDERGRADUATE STUDENTS IN ONLINE ENGLISH CLASSROOMS)

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วัตถุประสงค์ของการวิจัยแบบผสมผสานนี้คือ 1) สำรวจระดับความเต็มใจที่จะสื่อสารภาษาอังกฤษ (WTC) ในนักศึกษาปริญญาตรีไทย และ 2) สำรวจความสัมพันธ์ของสภาพแวดล้อมห้องเรียนออนไลน์ทางภาษาอังกฤษกับระดับความเต็มใจที่จะสื่อสารภาษาอังกฤษของนักศึกษาปริญญาตรีไทย ด้วยการวิจัยแบบขั้นตอนเชิงอธิบาย การศึกษาถูกแบ่งเป็น 2 ระยะ ได้แก่: 1) ระยะของการวิจัยเชิงปริมาณ กลุ่มตัวอย่าง ได้แก่ นักศึกษาปริญญาตรีจากสถาบันอุดมศึกษาในกรุงเทพมหานครจำนวน 402 คน โดยใช้แบบสอบถามที่ประกอบด้วยสองส่วน ได้แก่ ส่วน WTC และส่วนสภาพแวดล้อมห้องเรียนออนไลน์ทางภาษาอังกฤษ และ 2) ระยะของการวิจัยเชิงคุณภาพ กลุ่มตัวอย่าง ได้แก่ นักศึกษาปริญญาตรีจากสถาบันอุดมศึกษาในกรุงเทพมหานครจำนวน 7 คน ที่ถูกเลือกโดยตั้งใจจากผลลัพธ์ของการตอบคำถามในแบบสอบถามจากการวิจัยเชิงปริมาณ โดยใช้แบบสัมภาษณ์ชนิดกึ่งโครงสร้าง ข้อมูลเชิงปริมาณถูกวิเคราะห์เพื่อสถิติบรรยาย (ความถี่และค่าเฉลี่ย) และสถิติอุปทาน (สหสัมพันธ์) โดยใช้ซอฟต์แวร์สถิติ ข้อมูลคุณภาพถูกวิเคราะห์โดยใช้วิธีการวิเคราะห์เนื้อหา

ผลวิจัยสรุปได้ดังนี้ 1) นักศึกษาปริญญาตรีไทยมีความเต็มใจที่จะสื่อสารภาษาอังกฤษในสภาพแวดล้อมห้องเรียนออนไลน์ในระดับค่อนข้างสูง (3.11 /4.00) 2) พบความสัมพันธ์ที่มีนัยยะทางสถิติ ($p < .01$) ระหว่างระดับความเต็มใจที่จะสื่อสารภาษาอังกฤษของนักศึกษาปริญญาตรีไทยกับทุกองค์ประกอบของสภาพแวดล้อมห้องเรียนภาษาอังกฤษออนไลน์ ซึ่งได้แก่ ผู้เรียนออนไลน์ ผู้สอนออนไลน์ กิจกรรมในห้องเรียนออนไลน์ การมีปฏิสัมพันธ์ในห้องเรียนออนไลน์ การเข้าถึงระบบการจัดการเรียนการสอนออนไลน์ และการมีตัวตนของบุคคลต่อสังคมออนไลน์ 3) ระดับความเต็มใจที่จะสื่อสารภาษาอังกฤษมีความสัมพันธ์กับรายละเอียดของแต่ละองค์ประกอบของสภาพแวดล้อมห้องเรียนออนไลน์ทางภาษาอังกฤษดังต่อไปนี้ : ลักษณะของแรงจูงใจภายนอกของผู้เรียน การให้ข้อมูลย้อนกลับแบบทันทีในเชิงบวก (positive instant feedback) การใช้แนวคิดประเภทเกมมิฟิเคชันร่วมกับกิจกรรมกลุ่มที่สมาชิกมีระดับความสามารถแตกต่างกัน (heterogenous) การใช้งานระบบการจัดการเรียนการสอนออนไลน์ และ ความรู้สึกที่ได้รับ การยอมรับให้เป็นส่วนหนึ่งของชั้นเรียน

สาขาวิชา	การสอนภาษาอังกฤษ เป็นภาษาต่างประเทศ	ลายมือชื่อนิติ ลายมือชื่อ อ.ที่ปรึกษาหลัก
ปีการศึกษา	2566	

6388001327 : MAJOR TEACHING ENGLISH AS A FOREIGN LANGUAGE

KEYWORD: Willingness to Communicate, Thai undergraduate student, online classroom environment

Koravick Thiangtham : WILLINGNESS TO COMMUNICATE IN ENGLISH OF THAI UNDERGRADUATE STUDENTS IN ONLINE ENGLISH CLASSROOMS. Advisor: Asst. Prof. RUEDEERATH CHUSANACHOTI, Ph.D.

The purposes of this mixed-method study were to 1) investigate the level of WTC among undergraduate students in Thailand, and 2) investigate the relationship of English language online classroom environment and WTC among undergraduate students in Thailand. Following the sequential explanatory design, the study was divided into 2 phases 1) the quantitative phase which participants are 406 undergraduate students from universities in Bangkok area. The survey questionnaire which consisted of WTC section and English language online classroom environment section is deployed. 2) the qualitative phase, which the participants consisted of seven undergraduate students who were purposively selected from the WTC mean score. The semi-structured interview was conducted with the participant. The quantitative data were analyzed for descriptive statistics (frequencies and mean scores), and inferential statistics (correlation) using statistic software. The qualitative data were analyzed using the content analysis method.

The study revealed the following results: (1) Thai undergraduate students are willing to communicate in English at a moderately high level (3.11/4.00), (2) Statistically significant relationship ($p < .01$) were found between the WTC in English of Thai undergraduate students and all components of English online classroom environment, and (3) Online student's WTC are related to their extrinsic motivation, timeliness feedback from instructor, approach of gamification, quality of interaction, ease of use for LMS, and sense of belongingness through seeing members' facial expressions in online classrooms.

Field of Study:	Teaching English as a Foreign Language	Student's Signature
Academic Year:	2023	Advisor's Signature

ACKNOWLEDGEMENTS

When I embarked on this master's degree journey, little did I anticipate the profound changes that would unfold in my life over the next three years. The extensive journey proved to be not only one of the most significant milestones but also opened doors to unforeseen opportunities that I never thought I could explore.

Foremost, I consider myself incredibly fortunate to have had the opportunity to learn from two exceptional academic advisors: Asst. Prof. Jutarat Vibulphol, Ph.D. and Asst. Prof. Ruedeerath Chusanachoti, Ph.D. Their mentorship has been an invaluable asset to my academic and personal growth, and I am truly grateful for their dedication.

I would like to extend my deep gratitude to the members of my academic committee: Asst. Prof. Pornpimol Sukavatee, Ph.D. and Assoc. Prof. Sumalee Chinokul, Ph.D. as well as the three panel of experts: Assoc. Prof. Dumrong Adunyarittigun, Ph.D., Asst. Prof. Chansongklod Gajaseni, Ph.D., and Prof. Jintavee Khlaisang, Ed.D. for their time and constructive feedback that significantly enhanced the quality of this work.

My immense appreciation also goes to all the participants and interviewees who generously share their time and insights. Without their participation, the completion of this study would not have been possible.

I aspire that this study will serve as a valuable contribution to the field of English language teaching and learning. It is my hope that it becomes a significant resource for crafting future distance learning guidelines, empowering the next generation to access educational opportunities regardless of their geographical location in this vast world.

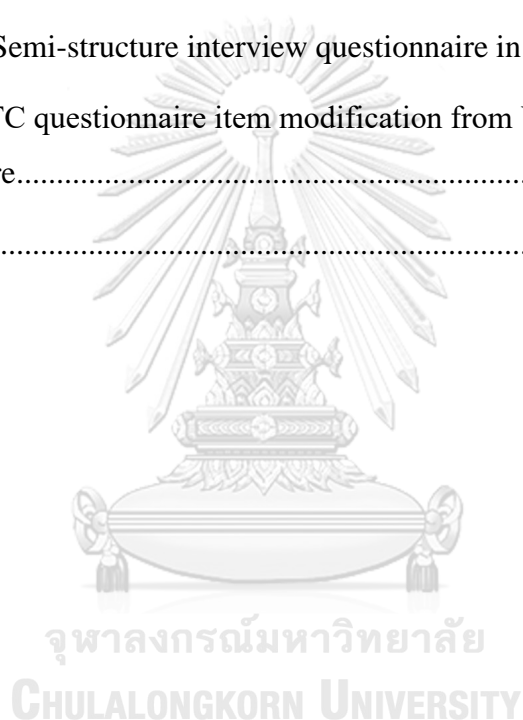
Koravick Thiangtham

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CHAPTER 1

INTRODUCTION

This chapter provides background of the study, statement of the problem, research questions, research objectives, scope of the study, the definition of terms, research framework and significance of the research.

Background of the study and Statement of Problem

Distance education and online education to compensate traditional classroom on the time of crisis has existed in education long before the COVID-19 pandemic incident (Hodges et al., 2020). Since March 2020 that online platform has become a mandatory classroom setting due to the pandemic outbreak (Bozkurt et al., 2020), a major paradigm shift has been addressed in education regarding the benefit of online learning. Online classrooms have become alternative choices for many universities to administer classes. There is a high tendency of the rise of technological-embedded language learning and distance learning (European Centre for Modern Languages of The Council of Europe, 2022; Pan & Tao, 2022) which requires the change in language teaching approach, class materials, and assessment method to be more compatible with the distance learning mode. More and more research has been geared towards finding the key success for online language learning including the investigation of learners' factors in online classroom.

One of the learners' factors that has piqued the interest of educators is willingness to communicate (WTC) in L2 since it could determine success in a learner's L2 language proficiency and academic life (Eskreis-Winkler et al., 2014; MacIntyre et al., 1998; Reinders & Wattana, 2014). It has also been considered as one

of the most crucial learner's factors in second language acquisition since it was introduced by MacIntyre and his associates in 1998. It plays a crucial role in language acquisition, serving as the essential step before learners engage in explicit verbal communication. (MacIntyre et al., 2001) The ultimate goal for any language programs, as proposed by MacIntyre et al. (1998), is for learners to seek out opportunities to communicate and for teachers to encourage learners to use the language.

L2 WTC is conceptualized to display dual characteristics at both trait and state levels (MacIntyre et al., 1998). Trait level reflects a stable predisposition within a person such as individual's communicative competence, or motivation, whereas state level is situated in specific contexts and can be fluctuated through different communication situations (Peng & Woodrow, 2010).

As per the state level, many studies have looked into different contexts that could effect of WTC (Cao, 2011; MacIntyre et al., 1998; Pattapong, 2015; Peng, 2012) such as classroom settings (Lee & Hsieh, 2019; Lee & Lee, 2019; Reinders & Wattana, 2014), types of classroom activities (Cao, 2009; MacIntyre et al., 2001; Pattapong, 2015), interlocutors (Cai, 2021; Cao, 2006; Kang, 2005; Liu & Zhu, 2021), and interaction between peers (Cao, 2014; MacIntyre et al., 2001; Pattapong, 2010). Among various contexts that may affect WTC in language learners, classroom environment is one of the situational contexts that has been investigated extensively (Kang, 2005; Khajavy et al., 2016; Peng, 2012; Peng & Woodrow, 2010; Riasati, 2012; Zhong, 2013). A model proposed by Peng and Woodrow (2010) has shown that classroom environment can predict WTC in language classroom.

Considering the different contexts between face-to-face (FtF) classrooms and online classrooms and the fluctuate nature of WTC in English, the relationship online classrooms environment with WTC may be different. This study is then designed to explore and explain the relationship between online classrooms environment and situational WTC. Until the present days, there has been no study that investigated the connection between these two factors in Thai educational context. Achieving the research objectives will not only uplift the effectiveness of online language learning in terms of increasing WTC among learners, but also prove beneficial for future distance learning during emergencies such as wars or natural disasters.

Research questions

This study attempts to answer the following three research questions:

1. What is the level of WTC in English of Thai undergraduate students in English language online classrooms?
2. Which component(s) of English language online classroom environment have a statistically significant relationship with level of WTC in English of Thai undergraduate students?
3. How does an English language online classroom environment relate to the WTC in English with Thai undergraduate students?

Research objectives

To align with the research questions, there are three research objectives of this study:

1. To investigate the level of WTC among undergraduate students in an English language online classroom.

2. To investigate the relationship between English language online classroom environment and WTC with undergraduate students.

Scope of the study

This study aims to investigate the level of WTC and its relationship with online classroom environment that are English language related courses only. Population of this study is Thai undergraduate students who are studying in universities within Thailand. The WTC is explored in the dimension of its situational-dependent characteristic rather than its personality traits characteristic.

Research Framework

This research framework is a synchronization of information comprised from review of the literatures. This study aims at investigating the relationship between two main variables: English language online classroom environment and WTC in English. In this framework, as shown in Figure 1, the English language online classroom environment has been divided into six components which are 1) Online Students, 2) Online Instructor, 3) Online Activity, 4) Online Interaction, 5) LMS, and 6) Social Presence.

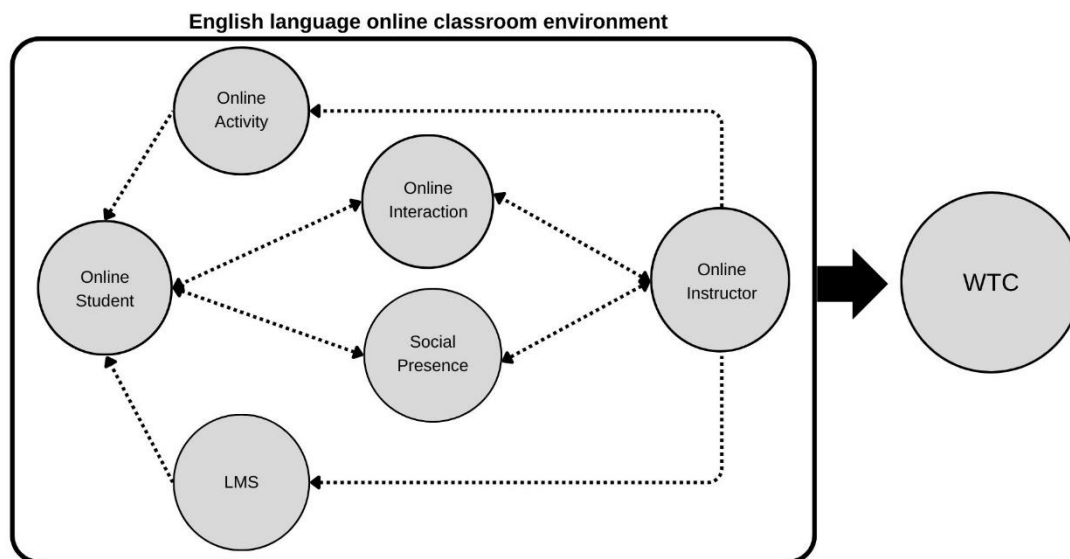


Figure 1 *Research Framework*

In this study, the population and the variables will be the following.

Definition of terms

Here are the definitions of terms that will be applied throughout this study:

1. Willingness to communicate in English (WTC)

WTC is undergraduate students' readiness to enter a verbal or written communication in English with their teacher or their classmates in English language online classroom. It also includes chat messages sent by students to replace verbal communication to interact with their peers or their teacher. In this study, WTC is explored in the dimension of its situational-dependent characteristic. It was measured by the WTC questionnaire adapted from Weaver (2005) and is also investigated further using a semi-structured interview.

2. English language online classroom environment

English language online classroom environment in this study is a social atmosphere, ambience, tone, or climate in institution-based formal education where the learning group is separated and when electronic media are used to connect learners, resources, and instructors (Butner, Smith, & Murray, 1999; Simonson et al., 2006) which in this study, means English language online classrooms through synchronous online meeting program.

According to review of literature of related studies (Dawn M Hathaway, 2009; Kaufmann & Vallade, 2022; Kreijns et al., 2022; Mashaw, 2012; Sojayapan & Khlaisang, 2017; Surapanyo, 2022; Templeton et al., 2015; Watson & Gemin, 2009), English language online classroom environment in this study consisted of six components: 1) Online Students, 2) Online Instructor, 3) Online Activity, 4) Online Interaction, 5) LMS, and 6) Social Presence.. Definition of terms for each component are as follows.

1) Online Student: Online student in this study is a language learner participating in English language online classrooms. These learners actively build knowledge by engaging with their peers, instructor, and course materials, utilizing technologies to achieve learning tasks and their academic goals. Online Student in this study is investigated in the aspect of self-regulation, self-motivation, degrees of being an active learners (Eom et al., 2006), and technological skill that enable them to navigate their own learning (Chen, 2014).

2) Online Instructor: Online instructor in this study is English language instructor in English language online classrooms whose role is a facilitator who establish presence in the online environment, facilitating classroom interaction and

collaboration, promote student success through meaningful engagement, and evaluating learning progress (Archambault et al., 2022). Online instructor's role in this study also extend to the aspect of motivating, stimulating, guiding, and challenging his/her students (Eom et al., 2006; Mashaw, 2012), and make sure that he or she provide accessibility for students to address their academic needs or seek for academic assistance.

3) Online Activity : Online activity in this study means teachers' instructional materials and resources curated or created by English language online instructors to engage students and to facilitate the achievement of learning goals (Archambault et al., 2022; Chen, 2014). It also includes online applications or websites that assist in facilitating interaction among online classrooms participants, for example, Kahoot, Mentimeter, or Padlet. Online activity in this study is investigated in the aspects of developing reciprocity and cooperation among students, foster active learning techniques, ability to give prompt feedback, emphasizing Time on Task, and respecting diverse talents and ways of learning (Puzziferro & Shelton, 2008).

4) Online Interaction: Online Interaction in this study means the extent to which students actively participate in an intellectual exchange with fellow students and the instructor (Chi & Van Lehn, 1991; Hathaway, 2009). Online interaction in this study is investigated within the area of opportunity, quality, promptness, and teacher presence.

5) LMS: LMS in this study stands for the Learning Management System which is the set of tools that houses course content and provides the framework for communication between students, and teachers (Watson & Gemin, 2009). LMS in this

study also involves the ease of ability for students to reach out for technology and technical support provided by a faculty when encounters with problems occur from computer, hardware and software that affect their online learning (Chen, 2014). LMS in this study is investigated in the aspects of availability, ease of use, immediacy of support, and availability of training.

6) Social Presence: Social Presence in this study means students' ability to engage socially with an online learning community (Joksimović et al., 2015) or, in this case, with their peers and their instructor in an English language online classrooms that they participated. Social presence in this study is investigated by employing Garrison's indicator of Social Presence (2011) which consisted of affective expression, self-disclosure, sense of humor, vocatives, and phatics, salutations.

3. Undergraduate students

Undergraduate students in this study means Thai undergraduate students in medium to large size universities in Bangkok who study in a regular program and enrolled in English language core subjects and have participated in English language online classroom through synchronous online setting within the last two years from the data collection date.

Population

The population of this study is undergraduate students who study English as a foreign language in universities in Thailand.

Participants

The participants of the present study are divided into two groups:

1. Participants for quantitative phase are 406 non-English major undergraduate students in a regular program and have experienced learning in online

English classes provided by government universities, Rajabhat universities, and private universities situated in Bangkok metropolitan area that are comparable in terms of size, learning outcomes of English subjects, and availability of online classes administered in the past two years from date of data collection. Participants were selected using multi-stage sampling method.

2. Participants for qualitative phase are seven participants who are purposively selected from their WTC mean scores obtained from the survey questionnaire administered in the quantitative phase and has agreed to take part in a semi-structured interview session

Variables

Two variables were investigated in this study which are (1) English language online classroom environment and (2) WTC in English.

Significance of the study

Despite the increased significance of online teaching, there are a scarce number of studies that investigated the relationship between English online classroom environment and WTC in Thai education context. Thai students and Thai education are different from other countries' context based on cultural difference and level of English proficiency among Thai students. Achieving the research objectives contributes new knowledge on how to create the desirable online learning environment that provide a positive learning experience to Thai English language learners that aligns well with Thai cultural context and Thai educational system.

Furthermore, the results and findings can prove beneficial in various scenarios, ranging from a Thai language learner who cannot participate in a traditional

classroom setting, to a national level during emergencies, such as civil wars or natural disasters. While global citizens hope to never face an incident of such loss and devastation like the COVID-19 pandemic again, we also hope for our upcoming generation to consistently find the most effective ways to learn, resilient in the face of any unexpected incidents that may occur, and support the success of language learners who cannot participate in a traditional classroom setting.



CHAPTER 2

LITERATURE REVIEWS

This chapter outlines theoretical frameworks related to the study. WTC in L2 and English language online classroom environment. Each factor is reviewed under the topic of definition, development, and measurement. Related studies are also reviewed.

This chapter's outline encompasses three major parts as follows:

1. WTC in L2

- 1.1 Definition and development
- 1.2 Factors affecting WTC.
- 1.3 WTC in Thai EFL classrooms
- 1.4 Measurement of WTC

2. Online Classroom

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 - 2) Online Instructor
 - 3) Online Activity
 - 4) Online Interaction
 - 5) LMS
 - 6) Social Presence

3. Related studies

1. WTC in L2

1.1 Definition and development

WTC in L2 is defined as “a readiness to enter into discourse at a particular time with a specific person or persons, using an L2” (MacIntyre et al., 1998, p. 547). The construct originally evolved from the concept of unwillingness to communicate proposed by Judee Burgoon (1976, as cited in McCroskey & Baer, 1985), concept of predispositions toward verbal behavior from Mortensen, Arntson, and Lustig (1977), and McCroskey and Richmond’s (1982) concept of shyness. The construct of unwillingness to communicate proposed that the areas of anomie, alienation, introversion, self-esteem, and communication apprehension could indicate some regularity in the amount a person communicate (Burgoon, 1976, as cited in McCroskey & Baer, 1985). The shyness predisposition work from McCroskey and Richmond’s (1982) described this trait-like predispositions as the tendency to be timid, reserved, and talk less which may resulted from many elements such as communication apprehension, social introvert, or skill deficient. While the two mentioned work centered around the predisposition that discouraged communication. Another work from Mortensen, Arntson, and Lustig (1977) try to prove the consistency in verbal behavior in an individual as it moves from impression formation to steady state (Mortensen et al., 1977) and argued that such behavior tend to be consistent from one social situation to another (McCroskey & Baer, 1985). In all, the three works shared similarity in focusing on the presumed trait-like predisposition towards verbal communication.

Later in 1990, the work from McCroskey and Richmond introduced the construct of WTC in the first language. It was defined as “A global, personality-type

orientation which has a major impact on cognitive choices regarding interpersonal communication in a wide variety of environment” (McCroskey & Richmond, 1990, p. 34). Their work proposed the behavioral antecedents of the WTC predisposition such as introversion, self-esteem, communication competence, communication apprehension. Although the writing still centered around the trait-like perspective, they accepted that WTC is, to a major degree, can be situationally dependent (McCroskey & Richmond, 1990). Later in 1998, the construct was finally developed into WTC in foreign language (L2) by MacIntyre, Dörnyei, Clément and Noels, from the work of Charos in 1994 (MacIntyre et al., 1998). The group of scholars argued that the predisposition of WTC in L1 and L2 were not correlated; even more, WTC in L2 would be in a more complex manner due to the complexity of factors underlying individual’s communication in L2. Exploring these factors has become one of the major fields in second language research that has been extensively conducted until the present days.

1.2 Factors affecting WTC.

According to Zarrinabadi and Tanbakooei (2016), the research on WTC and its variables can be categorized into three groups: biological variables, psychological variables, and educational or linguistic variables.

Biological variables that have been explored under WTC construct are age and gender. MacIntyre, Baker, Clément, and Donovan conducted a cross-sectional study among 7th-9th grade students and found that their perceived competence and frequency in communication increased with age, while regarding gender, boys were reported to show more anxiety than girls, thus, led to less WTC in boys (MacIntyre et al., 2003). However, another study in the same vein from Donovan & MacIntyre (2004), found

that when boys became men, their WTC would gain through the increase of their self-perceived communication proficiency, whereas when girls became women, their communication apprehension might get lower, hence, led to a lower WTC.

Psychological variables can influence second language acquisition through WTC predisposition as well. Apart from anxiety and perceived competence that have been proven to be the strongest predictor of WTC in L2 (MacIntyre et al., 2003; MacIntyre et al., 1998), an area of psychological variable that has been extensively explored is motivation. Many studies have supported an influence motivation has on WTC which led to a better chance of acquiring L2 (Dörnyei, 2001; Hashimoto, 2002; Kang, 2005). Recent research has focused on other psychological variables such as emotion (Dewaele & Dewaele, 2018) and classroom anxiety (Dewaele & Pavelescu, 2021). The study from Dewaele and Dewaele (2018) found that teachers can boost WTC in language classroom by creating a positive emotional classroom climate. Later in 2021, Dewaele and Pavelescu (2021) discovered furthermore that apart from uniquely constructed emotions of Foreign Language Enjoyment, Foreign Language Classroom Anxiety can be a predictor of WTC in a language classroom as well. Linguistic variables that have been found to effect WTC in L2 classroom is language proficiency (Yashima, 2002); however, the correlation between the two is still weak (Pornapit & Hayo, 2021).

In an early time of its coinage, WTC was believed to be a stable, trait-like factor that could be predicted across various situations (McCroskey & Baer, 1985), until MacIntyre, Clément, Dörnyei, Kimberly and Noel (1998) discovered later that when WTC was extended to L2 situations, it carries a wider range of social and political implications that are not found in L1 use (MacIntyre et al., 1998). MacIntyre

and his associates, therefore, conceptualized the Heuristic Model of Variables Influencing WTC (Figure 2) which consisted of 6 categories represented in a pyramid shape exhibiting the combination of situational factors (social context) and personality factors (affective context) that lead to decision to communicate (L2 Use) with the more situational-base variables in the bottom 3 layers and the more stable, trait-like variables in the top 3 layers. This heuristic model has convinced, for the first time, that WTC could be influenced by situational variables as well.

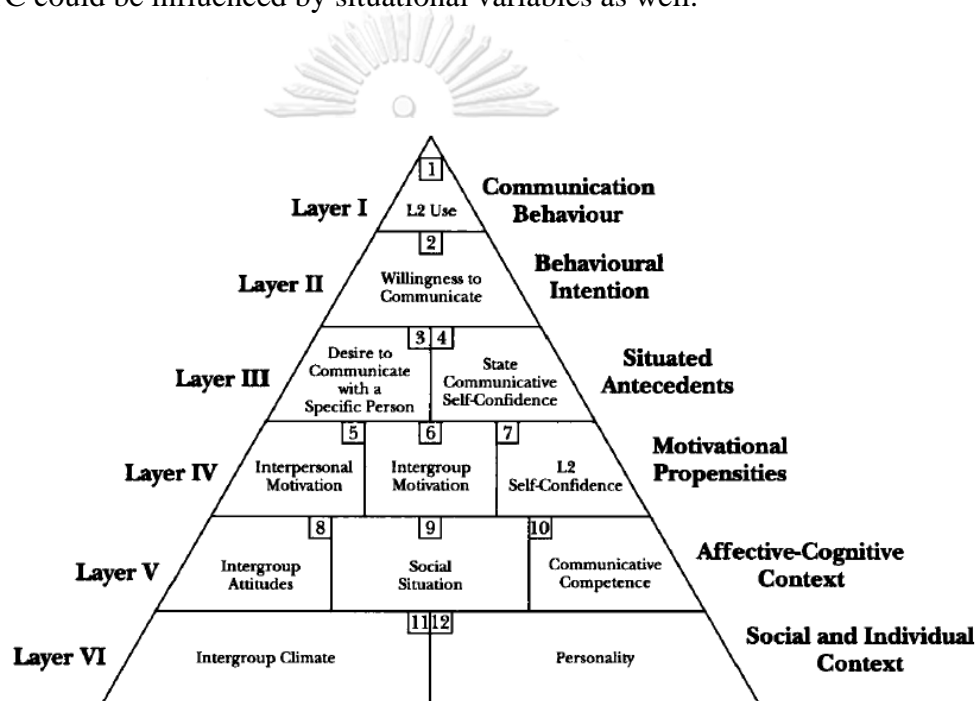


Figure 2 *Heuristic model of WTC in L2*

(MacIntyre et al., 1998)

Although in the present days, research findings have proved the fluctuate nature of WTC across different situation and contexts, many other findings have elaborated the importance of the trait-like perspective of WTC as these variables can predict WTC in an individual as well. One of the early studies that emphasized the importance of trait-like perspective of WTC is the study from MacIntyre and Charos

(1996) through the prediction of frequency of second language verbal interaction in a bilingual setting using variables from Gardner's socio-educational model and MacIntyre's WTC model. The result indicated that motivation, opportunity for contact, and perception of competence can predict WTC in a bilingual context.

Later, Hashimoto's study (2002) replicated the study of MacIntyre and Charos (1996) and confirmed that affective variables like motivation, perceived competence and L2 anxiety can predict WTC in L2. Another study that was a partial replication from MacIntyre and Charos's (1996) work is the study from Yu (2011) which proved effect that communication apprehensiveness and self-perceived communication proficiency have towards WTC in foreign language; on the contrary, motivation that did not show a direct effect statistically, can influence WTC through communication apprehension and their reflection on self-communication proficiency. A study from Lee (2018) which examined a short-term study abroad program influence on learner's L2 WTC found that one's perception of adjustment to new environment and one's perception toward international posture affect level of WTC. Recently, studies on WTC has extended to psychological-related predictor such as classroom anxiety (Dewaele & Dewaele, 2018), emotions (Dewaele & Pavelescu, 2021), and many other affective factors such as motivation, self-confidence, and grit (Lee, 2020; Lee & Drajeti, 2019; Lee & Hsieh, 2019). The findings still support the existence of roles that affective variables have towards WTC, for example, the right combination of emotions can boost learners' WTC in L2 (Dewaele & Dewaele, 2018), grit (perseverance of effort) and classroom enjoyment can predict WTC behavior in the classroom (Lee, 2020; Lee & Hsieh, 2019; Lee & Lee, 2019).

Apart from studies that have focused on the extent each variable distribute impact on WTC, there were many studies that centered on the replication of alternative models to explain the interconnection between variables underlying WTC in modern world. The fact that MacIntyre's heuristic model was developed under the western culture's influence led Wen and Clément to propose a conceptual framework of WTC among students in China (Wen & Clément, 2003). The framework, which is distributed in Figure 3, consisted of 4 factors; societal context, personality factors, motivational orientations, and affective perceptions which, according to the study, are positive affect related in the sense that they help build a positive communication environment – the promotion of engagement and reduction of anxiety.

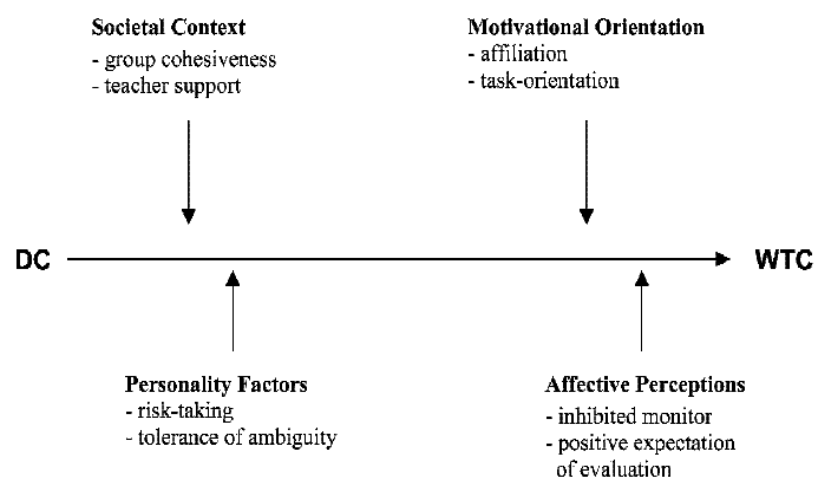


Figure 3 *Conceptual framework of WTC among students in China*
(Wen & Clément, 2003)

Another hypothesized model of WTC in EFL context was proposed by Peng and Woodrow (2010) which integrated WTC, confidence in communication proficiency, motivation, learner beliefs, and classroom environment. The model

showed the effect that classroom environment has toward WTC while confidence in communication proficiency, motivation and learner beliefs affect WTC through confidence. Peng and Woodrow's hypothesized model is shown in Figure 4.

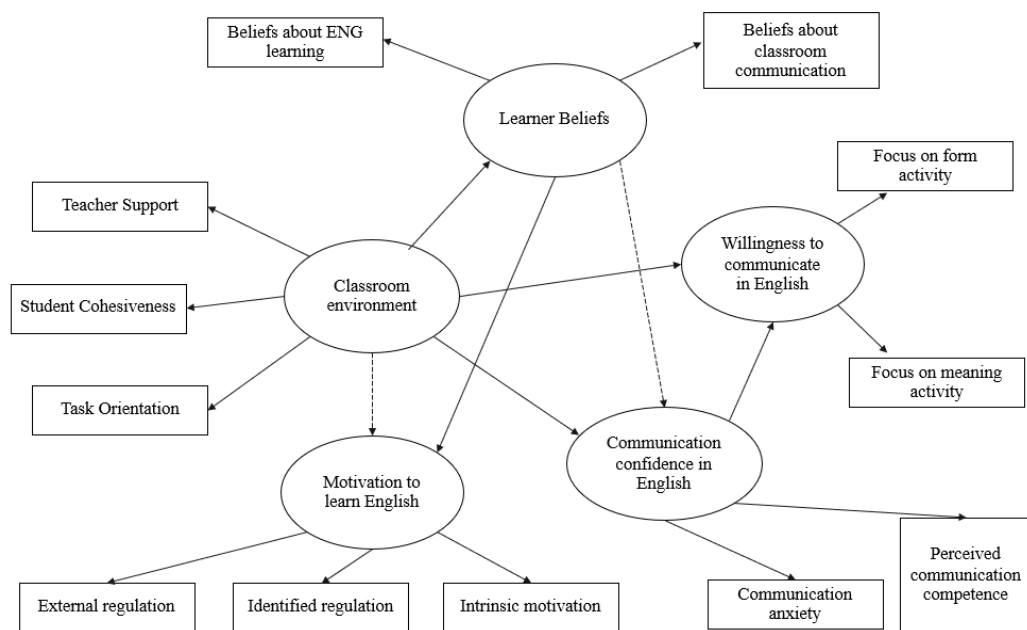


Figure 4 Structural model of WTC in English of Chinese EFL classroom
(Peng & Woodrow, 2010)

Centering on the fluctuating manner of situational WTC in a second language communication, Kang (2005) proposed a preliminary construct of situational WTC as seen in Figure 5.

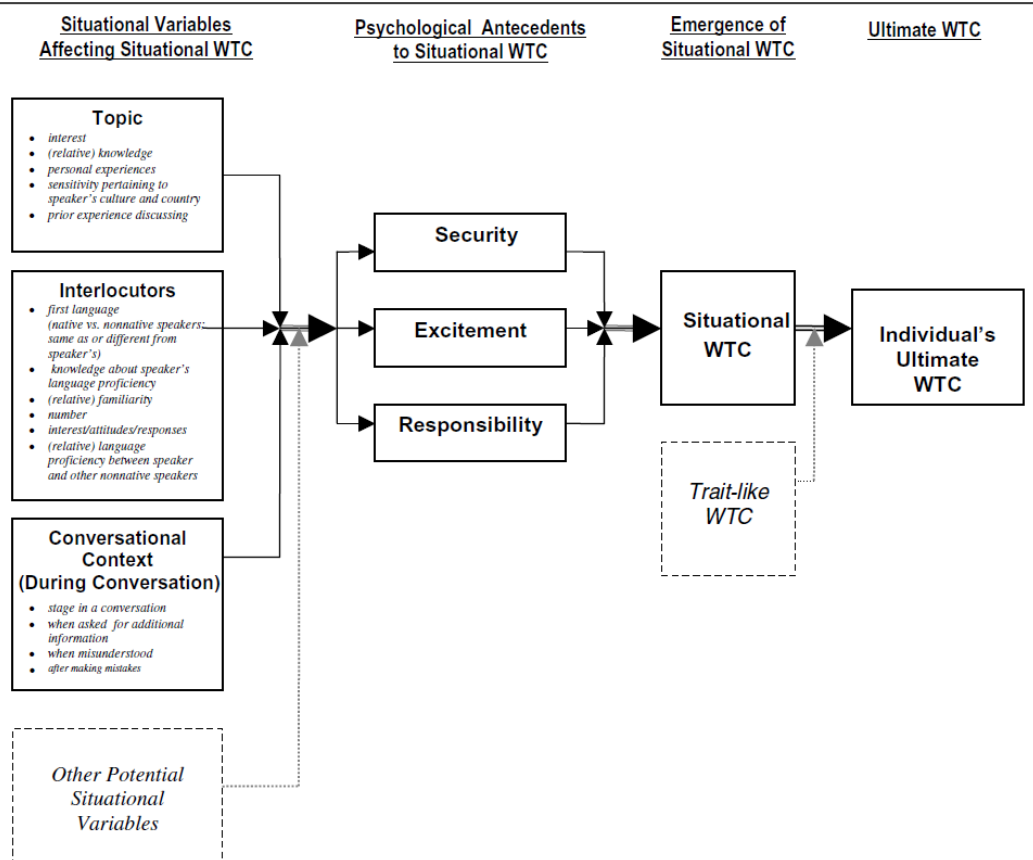


Figure 5 Preliminary construct of situational WTC

(Kang, 2005)

The finding from Kang's study suggested that combining the situational WTC with trait-like variables, we can predict an individual WTC. Another study from Peng (2014) also raised an importance of situational factors toward WTC and how dynamic each factor in influencing one another. Peng's study has inspired many studies afterwards. For example, the study from Pattapong (2010) and Yu (2011), which exhibited the importance of the interlocutors (teachers) in establishing WTC among learners. The study from Cao (2006) exhibited the emergence of situational WTC under the influence of both time and situational variables such as interactional context, task topic and interlocutor familiarity. Later in 2018, a qualitative study by

Syed and Kuzborska (2018) confirmed the effect of contextual factors (i.e., topic, teacher, classmate, task type, classroom atmosphere, physical location) on WTC among the group of participating students.

Another contextual factor that captured a lot of interest is classroom setting, especially digital classroom setting (Cao, 2006; Compton, 2004; Lee & Lee, 2019; Reinders & Wattana, 2014). Compton (2004) ran an experimental study on how chat message in computer-mediated communication tools can encourage students to communicate and found that participants who exchange chat message with their classmates took more turns to speak in an online classroom because they already constructed the sentence in the chat message, hence, helped them felt more prepared to talk. The study from Wattana and Reinders (2014) pointed out the importance of specific learning environments, and tasks conducive to the fostering of WTC in learners in digital setting. Another study from Lee and Lee in 2019 investigated the extent affective factors (i.e., motivation or speaking anxiety) and virtual intercultural experiences are linked to WTC in three different classroom settings (in-class, out-of class, and digital settings) (Lee & Lee, 2019). WTC has been continuously explored; new studies released from 2000 onwards have focused more on discovering other variables that might as well affect WTC.

A study conducted by MacIntyre, Baker, Clément, and Conrod (2001) proposed a hypothesis that argue the importance of instrumental and integrative orientations in supporting—and especially in giving direction to—language-learning motivation, believing that a more positive orientation taken by a student will tend to increase their WTC. Furthermore, the same study explored the affect that social support had on WTC since language acquisition is eminently bound to a social

context (Clément, 1986). Another study, conducted by MacIntyre himself in 2007, tried to investigate WTC as a volitional act which was an extension to the proven theory that WTC fluctuates rapidly as the situation changes. The study not only confirmed the importance of language anxiety and language learning motivation as main affects for a learner's WTC level; more importantly, MacIntyre proposed a new perspective of how WTC should be considered as a dynamic factor by considering a theory of converging forces on social interaction which was proposed in 1951 by Kurt Lewin. Lewin's theory issued the importance of two types of forces: driving forces or energy that is in the direction of the intended goal, and restraining forces or energy that impedes the achievement of a goal (Lewin, 1951). MacIntyre proposed that the volitional act of speaking requires the coordination of these two forces that may operate with or without the speaker's explicit awareness (MacIntyre, 2007).

Communication and second language acquisition are closely tied together (MacIntyre & Charos, 1996). It is agreed that one must use the language to develop one's proficiency. Extensive research has been continuously published to express new knowledge on WTC and its effect on second language acquisition. Observation of language learner's unwillingness to communicate found many factors to be involved including anxiety, fear, and other affective factors. These findings have let instructional context in second language learning to emphasize on task-based approach, project-based approach, open-ended work, negotiation of meaning, and a learner-centered climate to support long-term retention and intrinsic motivation (Brown & Lee, 2015).

1.3 WTC in Thai EFL classroom

Although WTC is a learner's factor that has been investigated extensively in other countries, there were not many studies discussing this factor in Thai educational context. Early studies that investigated WTC in Thai learners mostly involved the attempt to confirm the relationship among variables affecting WTC based on previous models and theories. For instant, the study from Thong-iam (2009) which explored WTC among Thai students found that their WTC related with three situational variables which are interlocutors, group cohesiveness, and topic familiarity. Another study from Jongsertrakool (2009) added the relationship path between international postures, L2 learning motivation, and confidence in English communication with WTC. Another study from Chanyoo and Darling (2018) confirmed MacIntyre's (1998) heuristic model of WTC that student who had spent time living or working in an English-speaking environment are more actively engaged in the situation that required communication in L2.

The studies from Pattapong (2010, 2015) were the first study attempting to produce model of WTC for Thai EFL learners with the association of Thai cultural aspect. Applying qualitative methods in both studies, Pattapong found that cultural practices had a great influence on Thai EFL students along with teacher's practices that reflected through instructions and tasks in the classrooms (Pattapong, 2010). Pattapong expanded her study further in 2015 and proposed the 4 variables that underlying WTC in Thai EFL learners which consisted of: cultural context such as High teacher status in Thai culture, "Kreng Jai" or the feeling of consideration upon another person's feeling", social and psychological context such as self-confidence, self-efficacy, and self-concept, classroom context such as interlocutors, task, and

classroom management, and social and individual context such as influences from social and from an individual.

WTC among Thai students has also been explored in the context of digital-based learning. The study from Reinders and Wattana (2014) which conducted language teaching and learning experiments through a digital game with Thai students found that online gaming could encourage WTC among students through the supportive environment and the anonymity status that made them felt safe and decrease their anxiety. Another study from Reinder and his associates (2016) extended the investigation to social media context with Thai university students and found that students demonstrated a statistically greater WTC in social media than in classroom. One of the recent experimental studies released in 2023 by Phakhawadee Chaisiri applied the technology-mediated oral tasks on the Flipgrid application in the virtual classroom and the result positively reflected that such intervention could promote Thai EFL learners' WTC in English; however, further studies on a larger sample size is encouraged.

Recent studies on WTC in Thai EFL context have focused more on the fluctuation nature of the factor in different context, along with psychological-related variables that influence WTC among Thai learners. A study from Bakoko and Waluyo (2022), which is the extent from the study of Lee and Lee (2019), investigated the relationship of WTC along with another three affective variables in three different learning contexts found that motivation was the only significant predictor to WTC while other affective variables such as self-confident, anxiety and grit did not represent as a significant predictor. The result indicated inconsistency in the study of affective variables surrounding WTC in different contexts which will remain a

challenge in measuring WTC in EFL context (Peng, 2007; Waluyo & Bakoko, 2022). Another study from Chanyoo and Suwongse (2022) attempted to quantitatively confirm Pattapong's (2010) theoretical framework. The study examined psychosocial and psychocultural variables contributing to WTC among Thai EFL students who studied in immersion programs and found that, based on Pattapong's (2010) framework, psychocultural variables of "Kwam Kreng Jai", fear of losing face, unity, and teacher status accounted for 78% of influencing variables on WTC among the participants (Suwongse & Chanyoo, 2022).

1.4 Measurement of WTC

The WTC measurement was first developed from a Verbal Activity Scale (VAS) which is a self-reported scale centered on the amount of talking people reported they do (McCroskey & Baer, 1985). The first WTC measurement developed by McCroskey & Baer (1985) was based on the construction of a personality-based, trait-like character predisposition. The measurement consisted of 20 items in a 5-point rate scale. Each question was designed to measure WTC in four different contexts that exhibit daily life conversation situations and interactions with different types of interlocutors.

Later in 2001, MacIntyre and his associates developed another measurement of WTC for classroom context (MacIntyre et al., 2001) which was a 54-item scale that aimed to measure WTC in four skills: speaking, reading, listening, and writing, both inside and outside the classroom. The questionnaire by MacIntyre was later questioned by Weaver (2005) about whether the items can really describe situations occurring in the language classroom. By applying the Rasch model with data collection from teachers and students, Weaver developed a scale measuring WTC in

L2 in speaking and writing that has been widely used later on (Pattapong, 2010). In conclusion, Weaver's WTC questionnaire effectively captured significantly variation in students' WTC through reliable, valid, and highly consistent questionnaire items that accurately depict activities and scenarios occurring in a foreign language classroom across all four skills (listening, speaking, reading, writing). Notably, these activities have remained largely consistent over the years since the questionnaire's inception.

2. Online Classroom

2.1 Definition and development

The concept of distance learning first started in 1840 when Sir Isaac Pitman, the English inventor, came up with an idea for delivering instruction for correspondence courses to a potentially audiences by mail. It was the first time that instructors and students were able to conduct teaching and learning activities while they remained geographically apart (Phillips, 1998). Later, with the invasion of technological advancement, the online classroom concept had been formed which is defined as institution-based formal education where the learning group is separated and when electronic media are used to connect learners, resources, and instructors (Butner et al., 1999).

Distance education has been defined in numerous ways. Garrison and Shale (1987) argued that it ought to imply that the majority of educational communication between (among) teacher and student(s) occurs non-contiguously, for the purpose of facilitating and supporting the educational process and must use technology to mediate the necessary two-way communication. Later, Moore (1990) expanded the

characterization to include instruction through any type of electronic communication or print media such as e-mail, threaded discussions, listservs, and video. Both Moore's and Garrison and Shale's definition agreed that distance education was defined as the delivery of instruction through all of the various forms of electronic media as well as the transportation of faculty to distance sites.

In the beginning of 21st century, when digital technology has fully invaded education field, the term "E-Learning" which sometimes referred to as online learning, web-based learning, virtual school, or technology-based learning has been widely adopted (Waight et al., 2002). Clark (2000) defined virtual school that has been defined as "a state approved and/or regionally accredited school that offers secondary credit courses through distance learning methods that include Internet-based delivery". Yoon (2003) argued that e-learning is sporadically used in higher education to describe online course environments in a corporate training context; while Russell (2004) defined virtual schools as "a form of schooling that uses online computers to provide some or all of a student's education" (p. 2).

Although the definition of online learning has been redefined and extended in numerous ways, they share the similarity of essential components such as the usage of the internet as a medium, the use of pedagogical tools that enabled by the Internet and Web-based technologies, and the purpose to facilitate learning and knowledge building through meaningful action and interaction between instructors and learners (Dabbagh & Bannan-Ritland, 2005).

Based on the broad definition of an online classroom, this study is required to concentrate solely on specific components related to this study. After related literature in online learning and online classroom have been extensively examined, Table 1

illustrates the common components of online classroom components from review of the literature that will be the primary focus of this study.

Table 1 *Online Classroom Components from Review of the literature*

Component	Supporting Literature					
	Templeton et al., 2015	Mashaw, 2012	Sojayaphan & Klaisang, 2017	Surapanyo, 2022	Watson & Gemin, 2009	Moore & Shelton, 2013
Online Student	√		√			√
Online Instructor	√	√	√			
Online Activity		√			√	
Online Interaction	√		√	√		
LMS	√				√	√
Social Presence	√	√				

2.2 Components of an English Online Classroom

1) Online Student: Online Students in online classroom setting require self-regulation to become an active learner which is a stark contrast compared to traditional face-to-face classroom. The core of self-regulated learning is self-motivation. It has been observed that successful students tend to be able to motivate themselves more regarding completing a certain task, setting learning goals, or self-rewards and self-control techniques (Chen, 2014).

2) Online Instructor: Instructor's role in distance learning embeds more various roles compared to traditional face-to-face classroom since the nature of distance learning can easily break a major assumption of objectivism that the instructor houses all necessary knowledge. Therefore, in distance learning classrooms, learning instructions becomes communication-oriented and the instructor becomes a discussion leader. Moreover, in an E-learning environments that demand a transition of the roles of students and the instructor. The instructor's role is to become a facilitator who stimulates, guides, and challenges his/her students via empowering students with freedom and responsibility, rather than a lecturer who focuses on the delivery of instruction (Huynh, 2005).

3) Online Activity: NSQOT Standard Instructional Design states that instructors in online classroom setting should be able to curate and create instructional materials and resources to engage students (Archambault et al., 2022; Watson & Gemin, 2009). According to Chen (2014), effective activity for online classroom should create a worry-free and seamless learning environment through scaffolding methods implication with various course materials and in-class activities. The tasks in online classroom settings should also foster both independent and collaboration activities

4) Online Interaction: Many past studies raised questions about the quality of interactions online. Wanstreet (2006) observed that research that reflects positively on online communication in college courses typically focuses more upon the quantity rather than quality. Zhang and Walls studied the degree to which online instruction addressed the previously described dimensions of instructional effectiveness developed by Chickering and Gamson. They found that the elements of "encouraging

cooperation among students and encouraging student-faculty contact were least frequently practiced” in online instruction (Zhang & Walls, 2006, p. 420). Mazzolini and Maddison (2005) noted that the frequency, timing, and nature (e.g., clarifying, posing questions, answering questions) of an instructor’s contributions to online postings and threaded discussions are negatively correlated with the frequency and length of student postings (Ward et al., 2010). Even though some research findings (e.g., Smith, 1996) show learners may prefer traditional face-to-face courses than the distance education courses, for they believe more interaction is present in face-to-face courses, distance education courses actually can foster more interaction than traditional courses, providing more personal and timely feedback to learners (Hirumi & Bermudez, 1996; Horn, 1994).

5) LMS: There is a certain level of technological skills required for both online students and instructors. Adequate technological skill can foster a less worry-free environment in online classrooms and create a more efficient interaction opportunity among students (Watson & Gemin, 2009). By offering technological support through different channels such as hotline call center, guidebook on instructional manual, and workshop session prior to the use of LMS are critical for online classroom participants. It is also being seen that these technological support should be promoted and effective. Peer-to-peer support or receiving support from online instructor are also beneficial (Moore, 1990)

6) Social Presence: The concept of Social Presence has been seen as a social interaction between learners who provide social support to each other (Vygotsky, 1978). Therefore, the social presence in classroom context is considered a response to an individual’s psycho-emotional needs. To respond to these needs, a

classroom is acted as a community formed by groups of learners and teachers that trust and support each other. According to Conrad (2005), [Community in the online environment] is a general sense of connection, belonging, and comfort that develops over time among members of a group who share purpose or commitment to a common goal. Not surprisingly, the perception of loneliness does not diminish in online courses; in fact, online students report higher levels of perceived loneliness than their peers taking similar FtF courses (Ali & Smith, 2015). Further, students in these mediated classes lament how their learning experiences are lacking overall interpersonal connections (Driver, 2018) Students report loneliness as a hindrance to their learning (Sit et al., 2005) and are more likely to drop out or withdraw from the course (Angelino et al., 2007). Thus, this lack of connection with peers may have negative impacts on students' experiences with online learning.

3. Related studies

The study from Peng and Woodrow (2010) proposed and tested a hypothesized model integrating WTC in English, confidence in communication proficiency, motivation, learner beliefs, and classroom environment. It was the first study that tested the interrelationship between WTC in English and classroom environment. The study was an extension to the previous study from Peng (2007) which qualitatively identified two contexts that influenced L2 WTC in English of Chinese students. The two contexts are individual context which comprised of communication competence, language anxiety, risk-taking, and learners' beliefs, and the social context which comprised of classroom climate, group cohesiveness, teacher support, and classroom organization. In Peng's (2007) previous study, language

learning classroom was viewed through an ecological perspective which described the relationship between the components or actors in the language classroom, mainly the teacher, learners, and tasks where in Peng and Woodrow's study (2010), the components of environment were conceptualized as teacher support, student cohesiveness, and task orientation following Moos (1973) and Fraser (2003). The hypothesized model in Peng and Woodrow's (2010) study was quantitatively tested using structural equation method modeling. The structural model showed the regression coefficient among each variable in the study is shown in Figure 6.

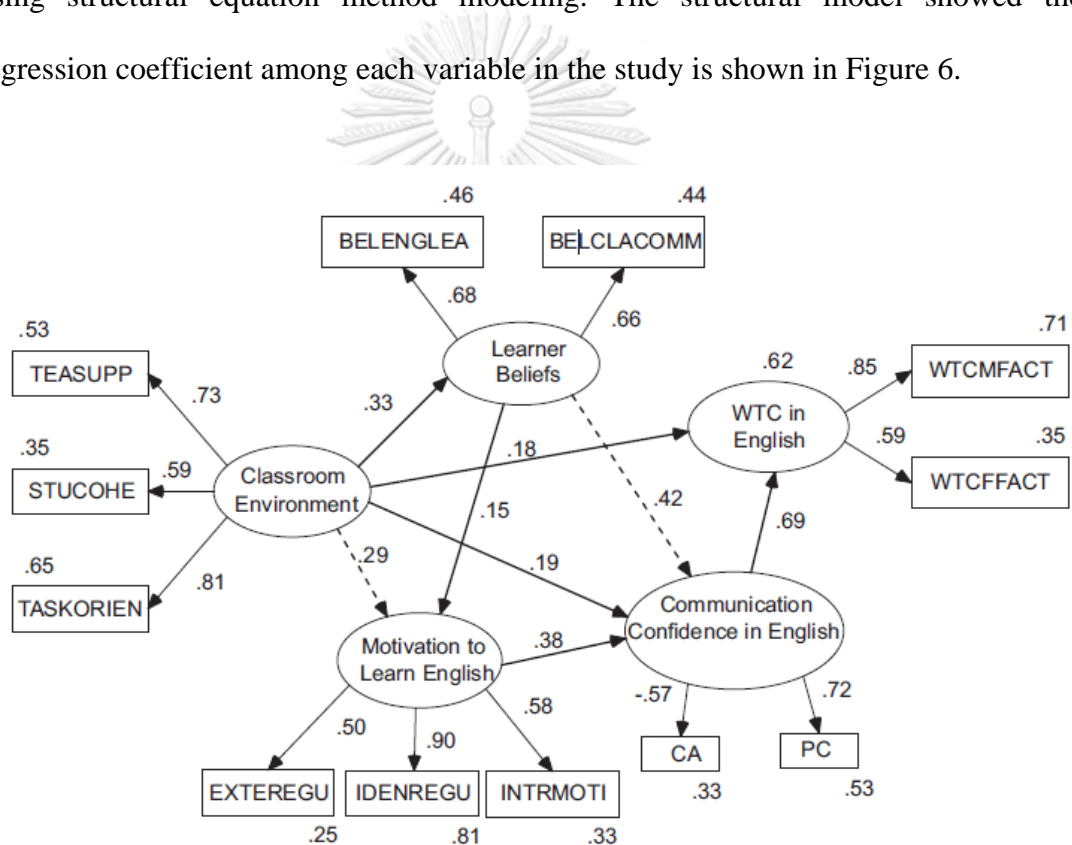


Figure 6 Structural model of WTC in English, confidence in communication proficiency, motivation, learner beliefs, and classroom environment
(Peng & Woodrow, 2010)

From the Figure, classroom environment directly influenced WTC in English, the impact was both direct and indirect through learner's beliefs, confidence, and motivation.

The study from Pattapong (2010) was the first study that proposed a theoretical framework of WTC of Thai university students using triangulation method. The framework was based on the WTC model by MacIntyre et al. (1998) and Wen and Clement (2003). The model is as shown in Figure 7.

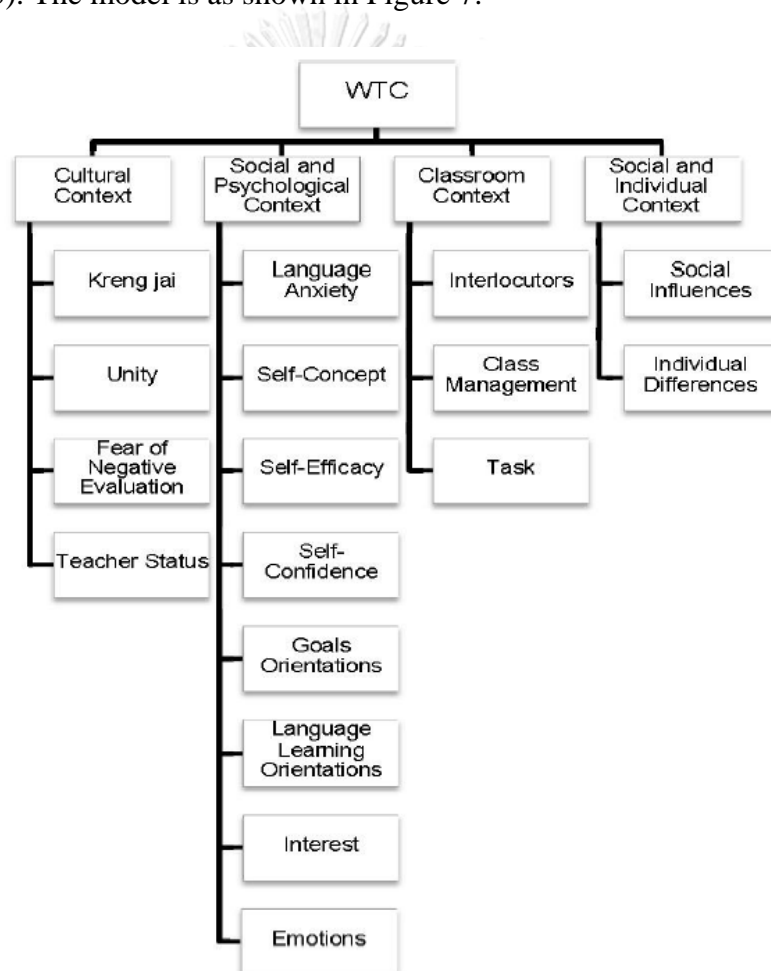


Figure 7 The four variables underlying WTC in English of Thai university students (Kamlaitip Pattapong, 2010)

According to Figure 7, the four variables under the cultural context exhibited the cultural context of Thai society, which are the perception to maintain the

hierarchical system and to maintain good relationship with other people in the society. In the social and individual context category, WTC in English also depend on an individual's personality traits and their educational experiences.

In this study, the WTC questionnaire that will be used to measure WTC in English level among participants is adapted from the study of Weaver (2005) that use Rasch measurement to study the psychometric properties of a 34-item questionnaire designed to measure WTC in English of Japanese university students. Weaver's (2005) study was based on the study from McCroskey and Richmond (1982), and MacIntyre et al. (1998). In the previous study from McCroskey and Richmond (1982), the first WTC scale measurement was proposed which composed of 12 items that combines three types of interlocutors with four types of communication contexts in verbal form (public speaking, talking in meetings, talking in small groups and talking in dyads). Later in 1998, the study from MacIntyre and his associates (1998) suggested that the scope of WTC measurement should be extended to willingness to write, read and comprehend a second language. However, Weaver suggested that the measurement items proposed by both previous studies which heavily based on out-of-the-classroom situations such as "talking to a friend while standing in line", or "a stranger enters a room you are in, how willing would you be to have a conversation if he talked to you first" did not occur as frequently as inside-the-classroom situations such as "willingness to speak to your teacher about your homework assignment", or "speak in a group about your summer vacation". The questionnaire items in Weaver's study were designed from a two-step process. First, an extended list of speaking and writing tasks/situations which occur in university English classes was compiled through a series of interviews with students, foreign and Japanese instructors of

English and an examination of the textbooks used in the different English classes. Then the list was narrowed to 34 items before using the Rasch model to identify whether the questionnaire items can measure WTC of Japanese university student, which the result has confirmed the usefulness of the 34-item questionnaires in measuring WTC of Japanese university students inside their classroom.



CHAPTER 3

RESEARCH METHODOLOGY

To answer the following research questions:

1. What is the level of WTC in English of Thai undergraduate students in English language online classrooms?
2. Which component(s) of English language online classroom environment have a statistically significant relationship with level of WTC in English of Thai undergraduate students?
3. How does an English language online classroom environment relate to the WTC in English with Thai undergraduate students?

This chapter presents the research methodology employed in this study to explore WTC level among Thai undergraduate students in English language online classrooms and how English language online classroom environment is related to the students' WTC. This chapter includes research design, participants, research instrument, research instruments validity and reliability process, and research procedures.

Research Design

The method implemented in this study was a mixed method, sequential explanatory design which combines quantitative and qualitative approaches sequentially in a two-phase process. Two variables focused in this study are WTC in English and English language online classroom environment. In the first phase, the level of WTC and its relationship with English language online classroom environment were obtained using a survey questionnaire. The qualitative data were

collected afterwards through a semi-structured interview on selected participants from their WTC mean score to find an explanation for the nature of relationship between the two variables.

Population

The population of this study comprises of 772,301 Thai undergraduate students who study English as a foreign language in 174 universities in Thailand (Ministry of Higher Education Science Research and Innovation, 2021).

Participants

The participants of this study are undergraduate students in government, private, and Rajabhat universities in Bangkok.

Regarding the mixed method research approach, participants in this study were divided into two groups: (1) participants in quantitative phase, and (2) participants in qualitative phase. The following section describes participants' context and the selection process of each group.

1. Participants in quantitative phase

The Participants in qualitative phase are 406 undergraduate students in government, private, and Rajabhat universities in Bangkok. who study in a regular program and have participated in English language classroom through synchronous online setting.

2. Participants in qualitative phase

In the qualitative phase, seven undergraduate students from government, private, and Rajabhat universities in Bangkok participated. They were purposively

selected based on their WTC mean scores obtained from the survey questionnaire. All participants willingly agreed to take part in the interviews.

Participants Selection

The following section explains the process of participants selection for quantitative phase and qualitative phase respectively.

1. Participants in quantitative phase

To obtain a good representation of the population, the number of participants for quantitative phase was calculated using Yamane's formula (Mackey & Gass, 2016). If the population number is greater than 100,000, a sample size of 400 is needed to reach a 95% confidence level and a 5% precision level. Considering the total number of Thai university students, which is approximately 780,000 (Open Government Data of Thailand, 2019), the minimum of 400 participants were then obtained.

To achieve the economics of budget and time available for this study, list of universities nationwide was screened to obtain the shortlist government universities, Rajabhat universities, and private universities located in Bangkok metropolitan area that are comparable in terms of size, learning outcomes of English subjects, and availability of online classes administered in the past two years. Then, the number of participants needed for each type of university is calculated based on the proportion of undergraduate students. Table 1 shows the summary of number of undergraduate students by university types, calculated number of participants by university types, and number of participating universities.

Table 2 Summary of number of undergraduate students by university types, calculated number of participants by university types, and number of participating universities (Ministry of Higher Education Science Research and Innovation, 2021).

University type	The number of participated universities	The number of participants collected from each university
1. Government Universities	3	134
2. Rajabhat University	1	147
3. Private University	2	125
Total	6	406

2. Participants in qualitative phase

Table 2 below shows details of the seven participants who took part in the quantitative phase through semi-structured interviews.

Table 3 List of participants in qualitative phase

Group	Gender	Type of university	WTC mean score*
High	Female	Private	3.88
	Female	Private	3.82
	Female	Rajabhat	3.76
	Male	Rajabhat	3.12
Low	Other	Private	2.24
	Female	Government	2.12
	Female	Government	2.06

*full score = 4.00

From Table 2, participants in qualitative phase consisted of one male student, five female student, and one student who did not prefer to state gender. Two participants were studying in Rajabhat universities, two were from government universities, and another three were from private universities. Four of them were participants who received the highest WTC mean score who agreed to be interviewed, whereas another three were participants who received the lowest WTC mean score who have agreed to be interviewed.

To select participants for qualitative phase, a purposive sampling method, which is a selection of information-rich cases for the purpose of illuminating the questions under study (Patton, 2002), was employed. The following processes explain the purposive sampling method employed in this study.

1) Upon responding to the survey questionnaire in quantitative phase, participants were asked for their consent to participate in the interview phase if they were selected. Only participants who gave consent were included in the sampling for this phase.

2) The mean score for WTC section from the survey questionnaire was analyzed. Then, the list of potential participants was organized, ranging from the highest to the lowest WTC mean score.

3) Contacting participants for interview appointments was conducted in a systematic manner to ensure equal distribution between participants with high and low WTC. Starting from a participant with the highest WTC mean score, then proceeded to a participant with the lowest WTC mean score, before returning to the top-ranked participant again.

4) In case participants could not be reached or decided to withdraw their consent, the participant would be skipped and the next participant on the list would be contacted.

Research Instruments

To respond to the research questions, two research instruments were developed; namely (1) Survey questionnaire, and (2) Semi-structured interview questions. The following section explains the rationale for the instrument selection, the instrument development process, and the validity and reliability test process for each of the instruments respectively.

1. Survey questionnaire

To respond to research questions 1 and 2, a survey questionnaire comprised of two sections was developed. Namely, (1) WTC section and (2) English language classroom environment section. The following section explains the rationale for the instrument selection, the instrument development process, and the validity and reliability test process.

1.1) WTC section

The section was adapted from the WTC questionnaire from Weaver (2005) which has been widely used in many studies investigating WTC in classrooms. The original questionnaire consisted of 34 items representing tasks or situations that occur frequently in language classes and would elicit a wide range of willingness from the student population.

This study selects to adapt the instrument from Weaver's for the following three reasons: Firstly, the questionnaire was developed within the Japanese cultural

context, which share similarities with the Thai cultural context. Secondly, the questioning items specifically addressed situations and tasks within a classroom setting rather than daily life contexts. Thirdly, the questioning items were designed to measure WTC in speaking skills. These three factors collectively made Weaver's questionnaire the most suitable choice, aligning well with the objectives of this study.

Since the original instrument was developed under the context of traditional face-to-face classroom. Therefore, changes are made to comply with the context of this study. The changes include translation from English to Thai, 17 unrelated items deletion, and 5 item modifications. The full details of items modification can be found in Appendix D. This adapted WTC section maintains the 4-point-rating scale from the original instrument to eliminate neutral responses. The scale ranged from 1 = Definitely not willing, 2 = Probably not willing; 3 = Probably willing; and 4 = Definitely willing.

Table 4 shows sample items from the questionnaire.

Table 4 *WTC section sample items* วิทยาลัย

Item no.	Sample item
7	Sing a song in English.
9	Tell someone in English about the story of a TV show you saw.
14	Ask in English the meaning of a word or how to pronounce a word
16	Give a short self-introduction without notes in English.

1.2) English language classroom environment section

This section questioning items was adapted from review of the literatures. The section included a total of 30 items where students were asked to determine the frequency of which each situation in an English language online classroom occur using a 5-point rating scales ranked from 1 = Rarely to never, 2 = Seldom; 3 = Sometime, 4 = Often; and 5 = Almost always. The questioning items were organized into five categories representing each component of an online classroom which are: Online Student, Online Instructor, Online Activity, Online Interaction, LMS and Social Presence. Each component was thoroughly explored in the relevant literature to gather definitions and constructs related to measuring their effectiveness. The rationale behind the inclusion of each set of questions is described as follows.

1.2.1) Online Student

Online students in this study is investigated in the aspect of self-regulation, self-motivation, degrees of being an active learner, and a certain level of technological knowledge and skill adequate to support their own learning. The questioning item was adapted from an Online Learning Quality Inventory from the study of Dawn M. Hathaway (2009) and the Elements of Online Learning Quality from the study of Nathan R. Templeton (Templeton et al., 2015). The five questioning items for assessing the online student component are listed in Table 5.

Table 5 *The Online Student component questioning items*

Item no.	Item	Component assessed
1.1	Getting a certain amount of work done would be important to me.	Self-Regulation
1.2	I am ready to start this class on time.	Self-Regulation
1.3	I know what I am trying to achieve in this class	Self-Motivation
1.4	I pay attention during this class.	Active Learner
1.5	I know how to use my computer/ electronic device/ software to navigate my own learning	Students' background knowledge for technology

1.2.2) Online Instructor

Online Instructor in this study is investigated in the aspects of facilitating classroom interaction and collaboration, evaluating learning progress, motivate, stimulate, guide, and challenge, and provide accessibility for students to address their academic needs or seek for academic. The questioning item was adapted from an Online Learning Quality Inventory from the study of Dawn M. Hathaway (2009) and the Components of Online Learning Quality from the study of Nathan R. Templeton (Templeton et al., 2015). The five questioning items for assessing the Online Instructor component are listed in Table 6.

Table 6 The Online Instructor component questioning items.

Item no.	Item	Component assessed
2.1	The online instructor encourages me to talk	Facilitating classroom interaction and collaboration
2.2	My online instructor always available when I have trouble with my work	Accessibility
2.3	The online instructor provides helpful feedback	Evaluating learning progress
2.4	My online instructor pay attention to my problems	Accessibility
2.5	The online instructor questions help me understand	Motivate, stimulate, guide, and challenge

1.2.3) Online Activity

Online Activity in this study is investigated in the aspects of developing reciprocity and cooperation among students, foster active learning techniques, ability to give prompt feedback, emphasizing Time on Task, and respecting diverse talents and ways of learning. The questioning item was adapted from the iNACOL's National Standards for Quality of Online Courses (Watson & Gemin, 2009). The five questioning items for assessing the activity component are listed in Table 7.

Table 7 *The Online Activity component questioning items*

Item no.	Item	Component assessed
3.1	Online activity in class requires me to use problem-solving skills to seek answers	Developing reciprocity and cooperation among students
3.2	Online activity in class requires me to use problem-solving skills to seek answers	Foster active learning techniques
3.3	The online instructor encourages peer feedback evaluation during or after class online activity	Foster active learning techniques
3.4	I know how much time I have to complete each class activity or task.	Emphasizing Time on Task
3.5	I feel that my classmates with different skills or efficiency can collaborate equally in most of class online activity.	Respecting diverse talents and ways of learning

1.2.4) Online Interaction

Online Interaction in this study is investigated within the area of opportunity, quality, promptness, and Online Instructor presence. The questioning item was adapted from an Online Learning Quality Inventory from the study of Dawn M. Hathaway (2009). The five questioning items for assessing the interaction component are listed in Table 8.

Table 8 *The Online Interaction component questioning items*

Item no.	Item	Component assessed
4.1	The online instructor monitors me and my classmate while we are discussing.	Online Instructor presence
4.2	Online class activity provides me and my classmates opportunities to discuss/ brainstorm/ negotiate together.	Opportunity for interaction
4.3	When me and my classmates discuss/ brainstorm/ negotiate, I rarely have to wait for others to respond	Promptness of interaction
4.4	I can feel that my classmates participate in our discussion actively and eagerly.	Quality of interaction
4.5	The online instructor participates with me and my classmates with our discussion	Online Instructor presence

1.2.5) LMS

LMS in this study is investigated in the aspects of availability, ease of use, immediacy of support, and availability of training. The questioning item was adapted from the iNACOL's National Standards for Quality of Online Courses (Watson & Gemin, 2009). The five questioning items for assessing the accessibility component are listed in Table 9.

Table 9 *The LMS component questioning items*

Item no.	Item	Component assessed
5.1	The faculty provide me training and guideline to use technologies for online learning	Availability of training.
5.2	I know where to find support in case of facing technical problems	Availability of tech support
5.3	The faculty provide me prompt assist whenever I need.	Immediacy of tech support
5.4	Online classroom medium provided for the classroom is easy to use.	Ease of use
5.5	LMS provided for the classroom is easy to use	Ease of use

1.2.6) Social Presence

Social presence in this study is investigated by employing Garrison's indicator of Social Presence which consisted of affective expression, self-disclosure, sense of humor, vocatives, and phatics, salutations. The questioning item was adapted from an Online Learning Quality Inventory from the study of Dawn M. Hathaway (2009). The five questioning items for assessing the social presence component are listed in Table 10.

Table 10 *The Social Presence component questioning items*

Item no.	Item	Component assessed
6.1	The online instructor and my classmates open their cameras	Affective Expression
6.2	The online instructor and my classmates talk about life outside of university in class	Self-disclosure
6.3	The online instructor and my classmates tell jokes to each other	Sense of humor
6.4	The online instructor addresses me and my classmates with our names or nicknames	Vocatives
6.5	The online instructor and my classmates greet each other before class and farewell each other after class.	Phatics, Salutations.

2. Semi-structured interview questions

The instrument was established for the purpose of data triangulation with the quantitative data responded to research question 1 and 2. Questions in the interview were based on the six English language online classroom components. The questioning items from the English language online classroom section that showed significant relationship with online student's WTC level were incorporated into the questions to further explore these specific items. In conclusion, the interview questions consisted of the following eight parts.

2.1) Student's background information

2.2) Online English learning experience

2.3) How students reflect themselves in English language online classrooms in terms of self-regulation, self-motivation, degrees of being an active learner, and a certain level of technological knowledge. How their reflection relates to their WTC.

2.4) Online student's perception towards their instructor in English online classroom and how it relates to their WTC.

2.5) How online student's perception towards activities in English online classroom and how it relates to their WTC.

2.6) How student's perception towards interaction opportunity and quality in English online classroom and how it relates to their WTC.

2.7) How student's perception towards the LMS issues in English online classroom and how it relates to their WTC.

2.8) How student's perceive social presence in English online classroom and how it relates to their WTC.

The last process for all instruments development was the translation process. The back-translation method was used to ensure accuracy between the original questionnaire items in English and the translated items in Thai. The Back-Translation method involves the following four processes:

- 1) Translation of questions in the source language into the target language by one translator.
- 2) Retranslation back into the source language by a second translator
- 3) Comparison of the two source language questionnaires
- 4) When notable differences in the two appear, working with one or both translators to adjust the target language of the problematic questions

The final version of all instruments is then processed onwards to the step of Validity and Reliability check which is discussed in the following section.

Validity and Reliability Process

To ensure all research instruments obtained a reliable quality, two activities were conducted which are (1) Validity test, and (2) Reliability test. The following section describes the detailed process of each step.

1. Validity test

To ensure all research instruments obtained a valid quality, three expert validators who are experienced scholars with proven records and knowledge in related field to this study were invited to complete the Item Objective Congruence (IOC) form. According to the traditional index of IOC Values, the items with score not less than 0.5 were validated, while items with score less than 0.5 were adjusted or deleted. The following shows the result obtained from the IOC form.

1. The survey questionnaire - WTC section received 0.76 mean score from the IOC form which indicates that the questioning items are acceptably valid.

2. The survey questionnaire - English language online classroom environment section received 0.67 mean score which indicates that the questioning items are acceptably valid.

3. The semi-structured interview questions received 0.56 mean score from the IOC form which indicates that the questioning items are acceptably valid with some revision and suggestions needed.

All instruments were revised based on the feedback and suggestions provided by the experts. The acknowledged comments and suggestions encompassed recommendations for rephrasing to enhance clarity of meaning, editing word choices for greater specificity, and shortening items that were excessively long.

2. Reliability test

Reliability tests for the quantitative instrument were carried out through the pilot test, when thirty students who share the same qualifications as the study's participants were asked to complete the survey questionnaire. Data obtained from the questionnaire were calculated using Cronbach's Alpha value. The following is the result.

1) WTC section yielding the total result of 0.954 indicates a high level of reliability of the questioning items.

2) English language online classroom environment section yielding the total result of 0.961 which proves the high level of reliability of the items.

Research Procedure

The research procedure of this study was divided into two phases which are the Qualitative phase and the Quantitative phase. The following section explains the research procedure carried out in each phase.

1. Quantitative phase

Starting with participants selection, the multi-stage sampling approach was applied. After three mediums to large-sized universities in Bangkok were randomly selected, permission for data collection was requested and obtained. The survey questionnaires were distributed to the participants with the assistance of the respective faculties and language institutions. At the end of the data collection period, 467 responses were received. A total of 61 questionnaires were excluded from the analysis due to not meeting the qualification, resulting in 406 completed questionnaires for data analysis.

2. Qualitative phase

Began with participants selection from the WTC mean score obtained from the quantitative phase, then each potential participants were approached and appointed for the interview session. Participants were given the flexibility to choose their date and time of convenience. They were also informed about the brief topic of the interview, approximate duration, and their privacy protection guidelines. The interview was conducted individually in Thai language. This is to provide the interview subject comfort and security, encouraging them to share information more freely. The interviews were also facilitated through synchronous online meeting application (Zoom Meeting) to alleviate participants from the inconvenient of travel burden. Prior to starting the interview, participants were once again informed about their rights as a research subject, identity protection, and asked for their permission to be recorded while giving the interview. A total of seven students were successfully approached and interviewed.

Data Analysis

The following section explains the data analysis method applied to each of the research phases.

1. Quantitative phase

The quantitative data were analyzed for descriptive statistics (frequencies and mean scores), and inferential statistics (Pearson's Coefficient value) using statistic software.

2. Qualitative phase

The qualitative data were analyzed using the content analysis method to identify the significant pattern of the data (Merriam & Tisdell, 2016). All interview recordings were transcribed into Thai language which is the language used for interviews. The coding scheme was created from data saturation. The following shows the process of content analysis conducted in this study.

1) The transcribes were read and re-read to make sense of the data retrieved from the interviews.

2) The coding scheme for each English language online classroom component was created to deduct the information that are similar for the researcher to better get the senses out of the massive information (Merriam & Tisdell, 2016). The technique used for the creation of a coding scheme was data saturation, where repetitive words and connotations are counted manually to form a mutually exclusive category. For example, the coding scheme under the component of Online Activity consisted of the following keywords: “เกมส์” (game), “กิจกรรม” (activity), “งาน” (task), “งานกลุ่ม” (group task, group work, group activity), which were words and connotations that were most frequently detected from the interviews.

3) Intra-coder reliability process was applied to ensure reliability of the coding. Time interval was applied for the coder to allow some time to pass before reviewing and composing the second round of coding without referring to the coding scheme obtained from the first round. Then, conduct the comparison for both versions before revision for the final version.

In summary, data analysis of this study is divided into two phases to respond to the three research questions. The first phase is data analysis for quantitative data obtained from the survey questionnaire deployed in the quantitative phase. Quantitative data analysis employed descriptive statistics to obtain mean score of WTC and English language online classroom components, also use the Pearson's Correlation analysis for inferential statistic in order to look into the relationship between WTC and English language online classroom components. For qualitative phase, after interview recordings were transcribed, content analysis was conducted to create coding schemes using data saturation technique. The reliability of the coding schemes was obtained through the intra-coder reliability process.

Table 11 elaborate detailed explanation for each research question by outlining the corresponding research instruments and the assessment criteria to address each of the research questions.

Table 11 *Summary of research instrument and assessment criteria for the research questions*

Research question	Research instrument	Assessment criteria
1. What is the level of WTC in English of Thai undergraduate students in English language online classrooms?	WTC questionnaire	WTC mean score and the Interval range

Table 11 *continued*

Research question	Research instrument	Assessment criteria
2. Which component(s) of English language online classroom environment have a statistically significant relationship with level of WTC in English of Thai undergraduate students?	-WTC questionnaire -English language online classroom environment questionnaire	- Use Pearson's Coefficient value to identify the present of relationship between WTC and each English language online classroom environment components
3. How does an English language online classroom environment relate to the WTC in English with Thai undergraduate students?	-WTC questionnaire -English language online classroom environment questionnaire -Semi-structure interview questionnaire	-Use mean score for WTC to purposively select interview participants. - Incorporate English language online classroom environment questioning items that showed relationship with WTC into the semi-structure interview questions

Ethical Consideration

To comply with the principle of conducting research involving human subjects, this study applied the Belmont (Department of Health, 1978) Ethical Principle and Guideline for Research Involving Human. The guideline consisted of the principles of respect for persons, beneficence and justice.

For the principle of respect that stated the importance of a subject person being treated as autonomous agents entitled to protection, this study provided a written statement for participant's identity protection at the beginning of both quantitative questionnaires. Participants must select the option "Acknowledge and agree to participate" under the identity protection statement before able to start responding to the first question. Interview participants in qualitative phase also being verbal informed about their identity protection and being asked to give consent for the interview to be recorded. It is entirely their decision whether to open a camera or not. They are also assured that the purpose of recording the interview is solely for research purposes and will not to be publicly disclosed or published anywhere.

In adherence to the principle of beneficence which emphasizes the importance of respecting a person's decisions, the instrument validation process by experts through IOC form has demonstrated that all components in the instruments used in this study have been adapted or formulated without adding any personal opinion, bias, or judgement. Participants in both quantitative and qualitative phase can choose to skip any questions that they feel uncomfortable giving response to. Participants who took part in semi-structured interview sessions were informed that they had the right to stop or pause the interview at any point. Additionally, they retained the right to terminate their consent to participate in the interview.

Lastly, to respond to the principle of justice which emphasize that each person should be treated with fairness, participants in qualitative phase were carefully screened during the selection process to ensure that they have no personal connection to the researchers conducting this study. This precautionary measure is implemented to prevent potential bias that may arise.

In summary, strictly following the Belmont's principles ensures an enhanced quality of the study by eliminating potential bias and promoting a comprehensive understanding of the information provided by all participants.



CHAPTER 4

RESEARCH FINDINGS

This chapter aims to present the report findings of this study which were obtained from the survey questionnaires and the semi-structured interviews. The results are presented in order to answer the following research questions as follows:

1. What is the level of WTC in English of Thai undergraduate students in English language online classrooms?
2. Which component(s) of English language online classroom environment have a statistically significant relationship with level of WTC in English of Thai undergraduate students?
3. How does an English language online classroom environment relate to the WTC in English with Thai undergraduate students?

Research Question 1: What is the level of WTC in English of Thai undergraduate students in English language online classrooms?

In order to explore the level of WTC, average mean score from all the 17 WTC questioning items were retrieved. Table 12 elaborates the result from the analysis and compare the mean score with the interval scale range. The range for the four-point rating is: 1.00-1.75 = Low willingness, 1.76-2.50 = Fairly low willingness willing, 2.51-3.25 = Fairly high willingness, and 3.26-4.00 = High willingness.

Table 12 *WTC mean score*

WTC mean score	Mean	SD	Meaning
	3.11	0.66	Fairly high willingness

As shown in Table 12, Thai undergraduate students are willing to communicate in English at a fairly high level. The mid-point on the mean score from the WTC questionnaire is 3.11.

In order to better understand Thai undergraduate student's WTC level, the descriptive statistic for each of the items within the questionnaire has been provided. The following Table 13 below shows the overall mean score and standard deviation value for each of the WTC questioning items.

Table 13 *Descriptive of Mean score– WTC questionnaire items*

Questionnaire Items	Mean	SD	Meaning
Thanks someone in English	3.57	0.66	High willingness
Greet someone in English.	3.52	0.64	High willingness
Read aloud two-way dialogue in English from the textbook.	3.29	0.72	High willingness
Ask someone in English to repeat what they just said in English because you didn't understand.	3.22	0.77	Fairly high willingness

Table 13 *continued*

Questionnaire Items	Mean	SD	Meaning
Give a short self-introduction (without notes) in English.	3.21	0.79	Fairly high willingness
Do a role-play in English with your classmates (e.g. ordering food in a restaurant)	3.2	0.74	Fairly high willingness
Ask someone in English how to pronounce a word in English.	3.2	0.74	Fairly high willingness
Ask in English the meaning of an unknown word	3.17	0.81	Fairly high willingness
Ask someone in English how to say a Thai phrase in English	3.12	0.76	Fairly high willingness
Give a direction to a place in English	3.1	0.8	Fairly high willingness
Give a short description about your hometown in English	3.04	0.76	Fairly high willingness
Interview someone in English using questions from the textbook.	3.04	0.79	Fairly high willingness
Interview someone in English using your own questions.	2.95	0.78	Fairly high willingness
Translate a spoken utterance from Thai into English.	2.93	0.85	Fairly high willingness
Do a role-play in front of the class in English (e.g. ordering food in a restaurant).	2.83	0.85	Fairly high willingness
Sing a song in English.	2.76	0.98	Fairly high willingness
Tell someone in English about the story of a TV show you saw.	2.76	0.84	Fairly high willingness

From various activities that could happen in an online English classroom, the top three activities with the highest mean scores are “Willing to thank someone in English” ($M=3.57$, $SD=.66$), “Willing to read aloud two-way dialogue in English from a textbook” ($M=3.29$, $SD=.72$), and “Willing to greet someone in English” ($M=3.52$, $SD=.64$).

Considering another side, three activities that received the lowest willingness level are: “Do a role-play in front of the class in English” ($M=2.83$, $SD=.85$), “Tell someone in English about the story of a TV show that they saw” ($M=2.76$, $SD=.84$), and “Sing a song in English” ($M=2.76$, $SD=.98$). It is worth noticing that the three lowest mean score activities show slightly higher standard deviation values which indicate a wider level of willingness among students.

Research Question 2: Which component(s) of English language online classroom environment have a statistically significant relationship with level of WTC in English of Thai undergraduate students?

In order to reveal the relationship between WTC level and English language online classroom environment, Pearson correlation analysis was performed and the findings are presented in Table 14 and Table 15. The effect of the correlation specifies the effect sizes of the correlation coefficients (r) as follows: $r=.10$ small effect size, $r=.30$ medium effect size and $r=.50$ large effect size.

Table 14 *Correlation between WTC mean score and online classroom environment variables*

		Online Student	Online Instructor	Online Activity	Online Interaction	LMS	Social Presence
WTC mean	Pearson's Correlation	.340**	.343**	.403**	.373**	.318**	.356**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000

**p < .01

As seen in Table 14, the results indicate that Thai undergraduate students' willingness to communicate level significantly and moderately related to their perception of each components of the online classroom environment. Put it differently, the more positively the online students perceive their online classrooms, the more willing they are to communicate in English.

Table 15 *Correlation between WTC mean score and online classroom environment questioning items categorized by component*

Questioning Item	Pearson Correlation	Sig. (2-tailed)
Component: Online Student		
Getting a certain amount of work done would be important to me.	.351**	.00
I know how to use my computer/ electronic device/ software to navigate my own learning	.318**	.00

Table 15 *continued*

Questioning Item	Pearson Correlation	Sig. (2-tailed)
I pay attention during this class.	.236**	.00
I am trying to achieve completing tasks in class	.216**	.00
I am ready to start this class on time.	.154**	.00
Component: Online Instructor		
The teacher's questions help me understand	.321**	.00
The teacher provides helpful feedback	.306**	.00
The teacher pay attention to my problems	.275**	.00
The teacher encourages me to talk	.265**	.00
My teachers are always available when I have trouble with my work	.259**	.00
Component: Online Activity		
I feel that my classmates with different skills or efficiency can collaborate equally in most class activities.	.366**	.00
I know how much time I have to complete each class activity or task.	.364**	.00
Activities in class requires me to use problem-solving skills to seek answers	.348**	.00
Activities in class require me to discuss/ brainstorm/ negotiate with my classmates	.301**	.00
The teacher encourages peer feedback evaluation during or after class activities	.288**	.00

Table 15 *continued*

Questioning Item	Pearson Correlation	Sig. (2-tailed)
Component: Online Interaction		
When my classmates and I discuss/ brainstorm/ negotiate, I rarely have to wait for others to respond	.347**	.00
Class activities provide me and my classmates with opportunities to discuss/ brainstorm/ negotiate together.	.334**	.00
I can feel my teacher's presence when my classmates and I are discussing/negotiating/ brainstorming.	.323**	.00
I can feel that my classmates participate in our discussion actively and enthusiastically.	.270**	.00
The teachers participate in our discussion.	.269**	.00
Component: LMS		
Online classroom program/ application is easy to use.	.320**	.00
LMS provided for the classroom is easy to use	.314**	.00
I know where to find support if I face technical problems.	.234**	.00
The institute provides me with training and guideline to use technologies for online learning.	.231**	.00
The institute provide me with prompt assistance whenever I need.	.203**	.00

Table 15 *continued*

Questioning Item	Pearson Correlation	Sig. (2-tailed)
Component: Social Presence		
In online classroom, I am a part of the class and I feel belong with my classmates	.377**	.00
The teacher turns on his/ her camera	.309**	.00
The teacher recognizes me and my classmates	.289**	.00
The teacher and my classmates tell jokes to each other	.196**	.00
My classmates turn on their cameras	.123*	.01

* p < .05

**p < 0.01

Examining each of the questioning items, those with notably higher correlation comparing to other items are: “In online classroom, I am a part of the class and I feel belong with my classmates” (correlation power =.377, “I feel that my classmates with different skills or efficiency can collaborate equally in most class activities” (correlation power =.366), “I know how much time I have to complete each class online activity or task” (correlation power =.364), and “Getting a certain amount of work done would be important to me” (correlation power =.351). While almost all items exhibit moderately strong degree of correlation, it s worth nothing that there is only one item with a relatively low correlation, which is “My classmates turn on their cameras” (correlation power=.123).

Research Question 3: How does an English language online classroom environment relate to the WTC in English with Thai undergraduate students?

Content analysis from the qualitative semi-structured interviews was established for the purpose of data triangulation with the quantitative data responded to research question 1 and 2. The result for question 3 is presented in six parts, aligning with the six components of English language online classroom.

1. Online Student

The statistic relationship in a medium level ($r=.30$) were found between WTC mean score and student's self-regulation, also with the technological background knowledge of a student. Combining this with content analysis, it was found that all seven participants has agreed on the importance of self-regulation for online learning. For example, a female participant with high WTC mean score from Rajabhat university expressed that comparing online classrooms to FtF classrooms, she found online environments more distracting from her home-setting. Consequently, she needed more time and self-regulation to prepare and stay concentrated during each class. This was particularly evident in her English subject online classes where she felt less proficient.

Regarding the technological background knowledge, 5 out of 7 students believed that they obtained strong technological skills that enable them to navigate their own online learning. When asked how their technological skill enhance their WTC in English online classes, 3 participants linked their responses to the use of multiple devices. They highlighted that using multiple devices can assist their learning which enable them to concentrate better during class. Following is a statement from a male participant with high WTC mean score who studied at a Rajabhat university:

“...because I am not good at English grammar, it helps when I use multiple devices in English online class. I access Zoom meeting from my laptop and use iPad for note-taking. This way it’s easier for me to comprehend on the lesson compared to relying on just one device that you need to switch back and forth between the zoom meeting and note-taking application.”

2. Online Instructor

Following the quantitative correlation analysis result which indicates a fairly strong relationship between instructor’s helpful feedback and instructor’s question and student’s WTC level, the qualitative content analysis found the following findings:

Regarding instructor’s useful feedback in English online classrooms, 3 out of 7 participants talked about their past experiences involving how a positive instant feedback from their English language instructor help encouraged them to be more willing to communicate with the instructor. The similarity between the three responses are about using kind expression (such as “you did great”, “just improve this and it will be perfect”, using sense of humor to correct student’s error, and prompt respond to student’s question. Following is a statement from a female government university student with low WTC mean score.

“I remembered mispronouncing an English vocabulary. The instructor teased me joking that my pronunciation might change the meaning to something inappropriate (I cannot recall the specific vocabulary) and the whole class laughed. Instead of feeling humiliated, I felt more comfortable to talk to this instructor.”

Concerning instructor's questions that help students understand, 4 out of 7 participants indicated a preference for instructors who consistently ask questions to check their knowledge comprehension. This applied to English online classrooms when instructors introduced new set of vocabularies or unfamiliar grammar rules. 2 out of these participants also mentioned that it is more important for instructors to regularly check their understand in in online classrooms because it was harder for them to concentrate compared to FtF classrooms, makes such check even more crucial.

Furthermore, additional information found in qualitative data indicated that all three students with low WTC mean score prefer to communicate with instructors who are able to translanaguaing between their L1 and English. This is because they feel less intimidated when need to ask questions in Thai.

3. Online Activity

According to the quantitative result, the correlation analysis indicates a fairly strong relationship between awareness of online student on online activity timing and activities that allow students with diverse skills to collaborate with each other.

Concerning the awareness of online students on online activity timing, the result from content analysis found that 3 out of 7 students emphasized the increase significance of having adequate for various group activities in English online classrooms. Examples of such activities include composing a short English role-play based on assigned topic, or solving problems to be presented in English in front of class. Since students are geographically apart, collaborating in group activities became more challenging, causing the feeling of anxiety and nervousness. These emotions hindered their comfort level in communicating.

Regarding activities that allow students with diverse skills to collaborate with each other, all participants mentioned gamification approach in English online classroom. Examples of such activities include vocabulary charades and circles of words. When participants were probed about how gamification approach help encouraging them to communicate more in online classrooms, all participants expressed their difficulty in concentrating during online sessions. Engaging in games, however, help them stay more alert and the sense of competition associated with these activities gave them the feeling to achievement. The following is a statement from a male with high WTC mean score from a government university.

“In on-site classrooms I can concentrate more because I know that the teacher is keeping an eye on us, but in online classrooms we can do anything or even sleep...There was a time that I was placed in a group with more proficiency students, we played game that whichever team created the funniest sentence won. It helped me engaged to the class more comparing to just listening to lectures”

4. Online Interaction

The correlation analysis from the quantitative indicates a fairly strong relationship of availability of online interaction opportunities in English online classrooms and quality of the online interaction to WTC level of online students.

To analyst this further, a content analysis from the qualitative phase revealed that in terms of online interaction opportunities, all 7 participants agreed that they prefer to participate in conversation with others when one of the three circumstance is met: first, the online instructor gives an opportunity for students to talk; second, when there are less number of students in the class; third, when all class members are

familiar with each other. 4 of these participants further elaborated that they hesitate to raise their hands in online classroom (using the 'raise hand' function in Zoom meeting) or open a microphone to interrupt the instructor with questions. This is in contrast with FtF classrooms since they felt that doing such would bring a bigger spotlight to themselves. However, if the online class contains less students, or they are friends with most of the students, then they would feel more at ease to communicate.

Another point is the relationship between quality of the online interaction and level of WTC. All participants expressed that it is vital for online communication in English classrooms to be more fruitful and in continuous manner compared to FtF classroom. An LGBTQ participant with low WTC mean score from a private university shared that when she cannot see their classmates' facial expression during class discussion, she was uncertain about their engagement in the conversation. The following is her statement.

“When we are in onsite classroom, it's easier to interact with each other because you can also communicate from facial expression or body language. Comparing to online classrooms that everyone turn off their camera, the interaction is a lot slower and quitter. I guess it might be because we are not sure if another person is still in front of their device or not”.

5. LMS

The only item that the correlation analysis showed moderately connection power with is the LMS ease of use. Regarding qualitative analysis, all participants informed that they can use their universities' LMS and online meeting application fluently without needing support from their faculty or institute. When asked about the

importance of LMS and online meeting applications in boosting their communication, a female participant from a government university with low WTC mean score shared that the easier these application can be navigated, the less concern she has about class preparation and participation. This, in turn, enable her to focus more on active participation in class discussions. The following is her statement.

“...when I first learn to use Microsoft Team, I remembered my frustration and noticed that I loss my concentration in class more often because I was constantly tried to find some functionality. There was one time that I had a problem trying to connect my headset to the application’s sound system, so I could not communicate to anyone the whole class”.

6. Social Presence

Following the correlation analysis result which indicates a fairly strong relationship between sense of belongingness and WTC level in online students, the content analysis found that sense of belongingness in English online classrooms is not fundamentally different from other subjects’ classrooms. This sense of belongingness stems from the ability to see the online instructors’ and their classmates’ facial expression through cameras, the support from peers, and the sense of humor from classmates or instructors. The following are statement from 2 participants sharing their past experiences regarding peer support and sense of humor in online classrooms.

“Sometimes I was struggling trying to answer the instructor’s question and a classmate message me an answer in the chatbox. That moment I felt belong (to the class).” (Female, Private university, High WTC mean score).

“...some little smiling moments in online classrooms like someone forgot to turn off their microphone or their camera and they got caught eating. The instructor didn’t take it seriously and make a joke out of it...” (Female, Government university, Low WTC mean score).

Regarding the ability to see the online instructors’ and their classmates’ facial expression through cameras, although from the quantitative data analysis result shows a relatively low relationship between ability to see their classmates’ facial expressions and WTC level, 4 participants expressed that being able to see their peers through a camera can encourage them to speak more in class since this visual connection creates an atmosphere that resembles onsite classrooms providing a sense of familiarity and comfort.

Summary

WTC level of Thai undergraduate students in English language online classrooms

From this study Thai undergraduate students expressed a moderately high level of WTC in English language online classrooms, with the mean score of 3.11 (Interval range between 2.51-3.25 = Probably willing).

From various activities that could happen in an online English classroom, the top three activities with the highest WTC mean scores are “Willing to thank someone in English” ($M=3.57$, $SD=0.66$), “Willing to read aloud two-way dialogue in English from a textbook” ($M=3.29$, $SD=0.72$), and “Willing to greet someone in English” ($M=3.52$, $SD=0.64$);

Component(s) of English language online classroom environment with significant relationship to WTC in English of Thai undergraduate students?

From the result of the correlation analysis, all of the English language classroom environment components show significant relationships with Thai undergraduate students' WTC level with medium correlation power ($r=.30-.49$). The result can be implied that the more positively the students perceive their English language online classrooms, the more willing they are to communicate in English.

Questioning items with medium correlation power towards WTC are: “In online classroom, I am a part of the class and I feel belong with my classmates” (correlation power =.377), “I feel that my classmates with different skills or efficiency can collaborate equally in most class activities” (correlation power =.366), “I know how much time I have to complete each class activity or task” (correlation power =.364), and “Getting a certain amount of work done would be important to me” (correlation power =.351).

How English language online classroom environment relate to the WTC in English with Thai undergraduate students

From the content analysis result, there are three notably findings related to the component of Online Instructor, Online Activity, and Social Presence

For the component of Online Instructor, there is a preference for instructors who consistently ask questions to check their knowledge comprehension. This applied to English online classrooms when instructors introduced new set of vocabularies or unfamiliar grammar rules. Additionally, constantly asking questions would help encouraging students to stay engaged in online class which is more challenging than in onsite classrooms

For the component of Online Activity, the content analysis revealed that students prefer to collaborate with students who are more advanced or obtain different skills that they believe they are lack of. Furthermore, the implication of a gamification approach can motivate students to engage in more communicate as it adds an entertaining element and foster a sense of competition.

For the component of Social Presence, the content analysis discovered that students feel more at ease to communicate when they feel belong to other members of the online classroom through frienliness athmosphere. The sence of belongningness is fostered by familiarity between members of the online classroom, act of recognition and expression of sense of honor from members of the online classroom.

CHAPTER 5

SUMMARY, DISCUSSIONS, AND RECOMMENDATIONS

This section comprises of four sections which include a summary of the research findings, the research discussion, the implications, the limitation of the study, and suggestions for future research drawn from the study.

Summary

This study aimed to 1) investigate the level of WTC in English language online classroom among Thai undergraduate students and 2) explore how English language online classroom environment relate with WTC in Thai undergraduate students. The result from the study revealed significant relationship each component of English online classroom has on encouraging students to communicate with their peers and their instructors in English. The results also shed light on how each English online classroom components relate to students with different level of willingness to communicate.

Research Question1: What is the level of WTC of Thai undergraduate students in English language online classrooms?

From this study Thai undergraduate students expressed a fairly high level of WTC in English in English language online classrooms, with the mean score for all questioning items is 3.11 (Interval range between 2.51-3.25 = Probably willing).

From various activities that could happen in an online English classroom, the top three activities with the highest WTC mean scores are “Willing to thanks someone in English” (M=3.57, SD=0.66) , “Willing to read aloud two-way dialogue in English

from a textbook” ($M=3.29$, $SD=0.72$), and “Willing to greet someone in English” ($M=3.52$, $SD=0.64$);

Research Question 2: Which component(s) of English language online classroom environment have a statistically significant relationship with level of WTC in English of Thai undergraduate students?

From the result of the correlation analysis, all the English language classroom environment components show significant relationship between Thai undergraduate students’ WTC level with medium correlation power ($r = .30-.49$). The result can be implied that the more positively the students perceive their English language online classrooms, the more willing they are to communicate in English.

Questioning items with medium correlation power towards WTC are: “In online classroom, I am a part of the class and I feel belong with my classmates” (correlation power =.377), “I feel that my classmates with different skills or efficiency can collaborate equally in most class activities” (correlation power =.366), “I know how much time I have to complete each class activity or task” (correlation power =.364), and “Getting a certain amount of work done would be important to me” (correlation power =.351).

Research Question 3: How does an English language online classroom environment relate to the WTC in English with Thai undergraduate students?

From the content analysis result, there are three notably findings related to the component of Online Instructor, Online Activity, and Social Presence

For the component of Online Instructor, there is a preference for instructors who consistently ask questions to check their knowledge comprehension. This applied

to English online classrooms when instructors introduced new set of vocabularies or unfamiliar grammar rules. Additionally, constantly asking questions would help encouraging students to stay engaged in online class which is more challenging than in onsite classrooms

For the component of Online Activity, the content analysis revealed that students prefer to collaborate with students who are more advanced or obtain different skills that they believe they are lack of. Furthermore, The implication of a gamification approach can motivate students to engage in more communicate as it adds an entertaining element and foster a sense of competition.

For the component of Social Presence, the content analysis discovered that students feel more at ease to communicate when they feel belong to other members of the online classroom through friendliness atmosphere. The sence of belongningness is fostered by familiarity between members of the online classroom, act of recognition and expression of sense of honor from members of the online classroom.

Discussion

The discussion of this study was subdivided into six parts according to the findings found on each of the English language online classroom environment components.

1. All six components of English language online classroom environment proposed in this study relate to the level of WTC in Thai undergraduate students.

One of this study's research question is to find out whether there is a relationship between English language online classroom environment and the level of

WTC in Thai undergraduate students. The statistical result has confirmed the significant relationships each component has on the level of WTC. The result has confirmed findings from many previous studies including Peng and Woodrow's (2010) which prove that teacher's supportive behavior and cohesiveness among students can foster WTC in English language classrooms. The connection between WTC level and activity in online classroom environment has been proven positive in Reinder and Wattana's (2014). The implication suggestion from the study pointed out that game-based and other collaborative gaming activities give greater opportunity for target language interaction and make learner feel more willing to seize the opportunity of the language use. The significant connection between LMS and WTC is also in line with many previous studies. One of which stated that smooth online learning system gave student and instructor a worry-free environment. Such environment can increase WTC indirectly through the reduction of anxiety (Hara & Kling, 2001). Social presence is the only component in this study that although the result from this study confirmed significant relationship with WTC, some previous studies have shown opposite results that students might prefer less social presence in an online classroom as it imparts a less face-threatening feeling (Head & Lim, 2020; Van Le et al., 2018).

2. In English online classrooms, students feel more at ease to communicate when there is a flexibility in terms language used as a medium and opportunity to use code-switching.

The finding revealed a notable point about online instructor's feedback regarding the incorporation of L1 usage to offer explanations or clarification when students face difficulties understanding the lesson. One of the previous study that support significant relationship between online instructor's code-switching between

L1 and L2 and learner's affective support is from Ahmad and Jusoff (2009). Their study revealed that instructors who can offer feedback in their native language (L1) are noted to positively influence students' learning effectiveness by fostering an environment where students feel comfortable asking for clarification without any unnecessary anxiety. To further support this discussion, the study from Putri, Fitriati, and Sakhiyya (2022) discovered that the role of code-switching in online classroom can go far beyond pedagogical functions. Code-switching is observed to be applied not only for interpersonal functions through establishing classroom rapport and negotiating socio-cultural identities, but also for instructional purposes. This includes motivating, encouraging students to participate and contribute, disciplining and complimenting, as well as negotiating classroom and task instructions.

3. Variety of activities that applies gamification approach can increase WTC in English online classroom

Among various English online classrooms activities, it was found that gamification approach in English online classroom, for example, charades, group quiz, or other games that make use of online application can encourage students' WTC in English with their peers and their instructor. This is achieved through the competitive aspect, a student-centered approach, and the overall enjoyment of the activities. With many previous studies that support the effectiveness of gamification in online classrooms, the study from Wang and Sun (2011) elaborated benefits of implementing gamification approach with reward system through mobile communication technologies. The study found that the reward system makes the game more enjoyable, arouses curiosity, and builds social connections among players. Janu, Satiman, Thammetar, and Autthawuttikul's (2022) study is one of the recent studies

that support the effectiveness of gamification approach in online learning. When comparing students with intrinsic and extrinsic learning motivation, gamification approaches have a greater impact on students with extrinsic learning motivation. This is because the approach provides the sense of success. However, the relationship is minimal as it cannot outweigh other needs such as achieving a good grade or passing the course.

Under the language learning context, the study from Barreto and Maritza (2018) discovered that combining gamification approach with mobile technology would not only motivates students to work collaboratively with their classmates but would also help fostering their language skills through social interaction, which had a positive effect while exchanging meaningful experiences.

4. Familiarity between members in English online classrooms play a vital role in encouraging students to communicate in English among each other.

The findings from this study emphasis the positive impact of social presence that help encouraging students to communicate more. Social presence in synchronous online classrooms includes recognition from instructors and classmates, ability to observe facial expressions of others through online cameras. This part of the findings emphasises the importance of Social Presence like many other studies such as Ali and Smith's (2015), which stated that lack of social presence, or social isolation in online classrooms can affect ngatively on student's academic performance. Joksimović and associates (2015) also emphasised on similar finding. The study explained that students who engaged in more social interaction in online classrooms tend to sought help more when facing difficulties or struggles in their learning. On the other hand, those who has less engagement was found to be more likely to withdraw from class.

Familiarity among students in online classrooms also found to have significant relation to their WTC level. Students who reported to be close or have known their classmates out of online classrooms are more willing to communicate in online classrooms with the same group of peers; whereas students who feel unfamiliar with others in the online classrooms would choose to communicate less. This finding is similar to the study from Kaufmann and Vallade (2022) which discussed that student-student rapport and connectedness play a more integral role in reducing perceptions of loneliness in the online classroom than interactions and connections with the instructor.

Implications

The result of this study had several practical implications for instructors in conducting English online classrooms.

Based on the findings, apart from applying a student-centered learning approach, online instructor's role in English language online classroom should include ensuring a seamless and worry-free experience to students. This can be achieved through a more flexibility environment in terms of language used for teaching and learning medium, as well as provide opportunities for code-switching. This would be especially beneficial for online students with lower English proficiency to feel more at ease to communicate with others.

The worry-free, anxiety-free classroom environment can also be attained through the assurance that teachers and students can promptly solve technical issues they encountered or seek immediate assistance when needed; therefore, an online instructor should acquire the necessary skills to effectively manage their online

teaching and utilize their LMS. This is not only to ensure the smooth operation of their sessions but also enable them to assist students when required.

Although gamification approach is found to be one of the most effective methods in promoting students' engagement and increase their WTC level, an EFL online instructor cannot simply implement a gamification activity without a carefully planned and technological-integrated approach. With an incorporation of various online tools such as Kahoot, Padlet, or Mentimeters, students can better grasp and visualize the progression of the activities. This aids in recreating the atmosphere of an FtF classroom which enhances the positive experience in online learning. Regarding activities that require students' performance, such as verbal presentation, incorporating the PPP teaching method (Presentation, Practice, and Production) provides students with the opportunity to practice and prepare their communication skills. This, in turn, enhances their confidence and contributes to a greater WTC.

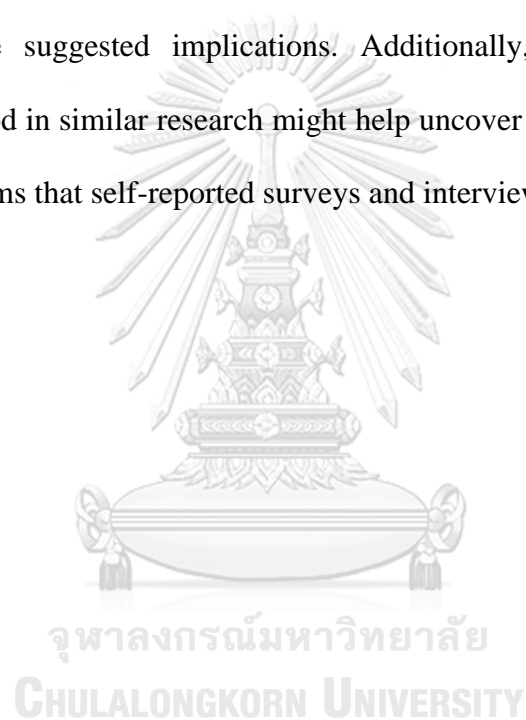
Limitations

This study, like many others, has several limitations. Firstly, the proposal of the study occurred in 2021, while data collection took place almost two years later. During this time gap, some students reported that they had not participated in any online classes for 2 consecutive years. This might raise questions about their ability to recall specific details about the online classroom experiences. Secondly, it is possible that certain participants may not have encountered real experiences related to specific tasks or situations mentioned in certain questionnaire items. In such a case, their responses might rely on their perception, potentially leading to less accurate assessments. Lastly, while the study employed sequential explanatory design that

connects quantitative data and qualitative data, it cannot guarantee an increase in students' WTC even if the online classroom environment closely resembles what they desire.

Recommendations for future research

For future research recommendation, it is highly advisable to conduct experimental studies to validate the potential increase in students' WTC when implementing the suggested implications. Additionally, incorporating the class observation method in similar research might help uncover potential hindering factors in online classrooms that self-reported surveys and interviews alone may not uncover.



REFERENCES

- Abdel, L. (2022). Coping with COVID-19-related online English teaching challenges: teacher educators' suggestions. *ELT Journal*, 76(1), 20-33. <https://doi.org/10.1093/elt/ccab074>
- Akbana, Y. E., Rathert, S., & Ağçam, R. (2021). Emergency remote education in foreign and second language teaching. *Yabancı dil ve ikinci dil öğretiminde zorunlu uzaktan eğitim.*, 10(2), 97-124. <https://doi.org/10.19128/turje.865344>
- Ali, A., & Smith, D. (2015). Comparing social isolation effects on students attrition in online versus face-to-face courses in computer literacy. *Issues in Informing Science and Information Technology*, 12(1), 11-20.
- Allen, I. E., & Seaman, J. (2011). Going the distance: Online education in the United States. ERIC.
- Atmojo, A., Priyo, E., & Nugroho, A. (2020). EFL Classes Must Go Online! Teaching Activities and Challenges during COVID-19 Pandemic in Indonesia. *Register Journal*, 13(1), 49-76. <https://doi.org/10.18326/rgt.v13i1.49-76>
- Barbour, M. K., & Reeves, T. C. (2009). The reality of virtual schools: A review of the literature. *Computers & Education*, 52(2), 402-416. <https://doi.org/https://doi.org/10.1016/j.compedu.2008.09.009>
- Barreto, R., & Maritza, A. (2018). Motivating English Language Use by Using the Benefits of Technology. *GIST Education and learning research journal*, 16, 117-140.

- Bernacki, M. L., Greene, M. J., & Lobczowski, N. G. (2021). A Systematic Review of Research on Personalized Learning: Personalized by Whom, to What, How, and for What Purpose(s)? *Educational Psychology Review*, 33(4), 1675-1715. <https://doi.org/10.1007/s10648-021-09615-8>
- Black, S. (2020). *Covid-19 has given us the breathing space to fix our broken education system*. Daily Maverick. <https://www.dailymaverick.co.za/opinionista/2020-04-30-covid-19-has-given-us-the-breathing-space-to-fix-our-broken-education-system/>
- Blaine, A. M. (2019). Interaction and presence in the virtual classroom: An analysis of the perceptions of students and teachers in online and blended Advanced Placement courses. *Computers & Education*, 132, 31-43.
- Bozkurt, A., Jung, I., Xiao, J., Vladimirschi, V., Schuwer, R., Egorov, G., Lambert, S. R., Al-Freih, M., Pete, J., Olcott, D. J., Rodes, V., Aranciaga, I., Bali, M., Alvarez, A. V. J., Roberts, J., Pazurek, A., Raffaghelli, J. E., Panagiotou, N., de Coëtlogon, P., Shahadu, S., Brown, M., Asino, T. I., Tumwesige, J., Reyes, T. R., Ipenza, E. B., Ossiannilsson, E., Bond, M., Belhamel, K., Irvine, V., Sharma, R. C., Adam, T., Janssen, B., Sklyarova, T., Olcott, N., Ambrosino, A., Lazou, C., Mocquet, B., Mano, M., & Paskevicius, M. (2020). A Global Outlook to the Interruption of Education Due to COVID-19 Pandemic: Navigating in a Time of Uncertainty and Crisis. *Asian Journal of Distance Education*, 15(1), 1-126. <https://doi.org/10.5281/zenodo.3878572>

- Cao, Y. (2006). Temporal fluctuation in situational willingness to communicate in a second language classroom. *New Zealand studies in applied linguistics*.
<https://doi.org/10.1016/j.system.2011.10.016>
- Cao, Y. (2011). Investigating situational willingness to communicate within second language classrooms from an ecological perspective. *System*, 39(4), 468-479.
<https://doi.org/https://doi.org/10.1016/j.system.2011.10.016>
- Chaisiri, P. (2023). Promoting Thai EFL Learners' Willingness to Communicate in the Virtual Classroom Through Technology-Mediated Oral Tasks. *LEARN Journal: Language Education and Acquisition Research Network*, 16(1), 97-120.
<https://so04.tci-thaijo.org/index.php/LEARN/article/view/263435>
- Clément, R. (1986). Second Language Proficiency and Acculturation: An Investigation of the Effects of Language Status and Individual Characteristics. *Journal of Language and Social Psychology*, 5(4), 271-290. <https://doi.org/10.1177/0261927X8600500403>
- Compton, L. (2004, 01/01). From chatting to oral fluency: Using chat to improve self-confidence and increase willingness to communicate.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Sage Publications, Inc.
- Cunningham, U., & Watson, K. (2018). The relationship between willingness to communicate and social presence in an online English language course.
- Dabbagh, N., & Bannan-Ritland, B. (2005). *Online learning: Concepts, strategies, and application*.

- Dennen, V. P., Aubteen Darabi, A., & Smith, L. J. (2007). Instructor–learner interaction in online courses: The relative perceived importance of particular instructor actions on performance and satisfaction. *Distance Education*, 28(1), 65-79.
- Dewaele, J.-M., & Dewaele, L. (2018). Learner-internal and learner-external predictors of Willingness to Communicate in the FL Classroom. *Journal of the European Second Language Association*, 2(1), 24. <https://doi.org/10.22599/jesla.37>
- Dewaele, J.-M., & Pavelescu, L. M. (2021). The relationship between incommensurable emotions and willingness to communicate in English as a foreign language: a multiple case study. *Innovation in Language Learning and Teaching*, 15(1), 66-80. <https://doi.org/10.1080/17501229.2019.1675667>
- Donovan, L. A., & MacIntyre, P. D. (2004). Age and sex differences in willingness to communicate, communication apprehension, and self-perceived competence. *Communication Research Reports*, 21(4), 420-427. <https://doi.org/10.1080/08824090409360006>
- Eom, S. B., Wen, H. J., & Ashill, N. (2006). The Determinants of Students' Perceived Learning Outcomes and Satisfaction in University Online Education: An Empirical Investigation*. *Decision Sciences Journal of Innovative Education*, 4(2), 215-235. <https://doi.org/10.1111/j.1540-4609.2006.00114.x>
- Eskreis-Winkler, L., Angela Lee, D., Elizabeth, P. S., & Scott, e. (2014). The grit effect: predicting retention in the military, the workplace, school and marriage. *Frontiers in Psychology*, 5. <https://doi.org/10.3389/fpsyg.2014.00036>

- Fushino, K. (2010). Causal Relationships Between Communication Confidence, Beliefs About Group Work, and Willingness to Communicate in Foreign Language Group Work. *TESOL Quarterly*, 44(4), 700-724. <https://doi.org/10.5054/tq.2010.235993>
- Gao, Y., & Cui, Y. (2022). English as a Foreign Language Teachers' Pedagogical Beliefs About Teacher Roles and Their Agentic Actions Amid and After COVID-19: A Case Study. *RELC Journal*. <https://doi.org/10.1177/00336882221074110>
- Gunawardena, C. N., & Zittle, F. J. (1997). Social presence as a predictor of satisfaction within a computer-mediated conferencing environment. *American Journal of Distance Education*, 11(3), 8-26.
- Händel, M., Stephan, M., Gläser-Zikuda, M., Kopp, B., Bedenlier, S., & Ziegler, A. (2020). Digital readiness and its effects on higher education students' socio-emotional perceptions in the context of the COVID-19 pandemic. *Journal of Research on Technology in Education*, 1-13. <https://doi.org/10.1080/15391523.2020.1846147>
- Hara, N., & Kling, R. (2001). Student distress in web-based distance education. *Educause Quarterly*, 24(3), 68-69.
- Hashimoto, Y. (2002). Motivation and willingness to communicate as predictors of reported L2 use: The Japanese ESL context. *Second Language Studies*, 20(2), 29-70.

- Haßler, B. A., Khalayleh, M., Chris, T., & Adam Allier-Gagneur, Z. (2020). Who has what? Assessing who has access to what devices in the education response to the COVID-19 pandemic. *OPEN DEVELOPMENT & EDUCATION*. <https://opendeved.net/2020/05/11/who-has-what-assessing-who-has-access-to-what-devices/>
- Hathaway, D. M. (2009). Assessing quality dimensions and elements of online learning enacted in a higher education setting [George Mason University].
- Ho, W. Y. J., & Tai, K. W. H. (2021). Translanguaging in digital learning: the making of translanguaging spaces in online English teaching videos. *International Journal of Bilingual Education and Bilingualism*, 1-22. <https://doi.org/10.1080/13670050.2021.2001427>
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). *The Difference Between Emergency Remote Teaching and Online Learning*. EDUCASE. <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>
- Hrastinski, S. (2009). A theory of online learning as online participation. *Computers & Education*, 52(1), 78-82. <https://doi.org/10.1016/j.compedu.2008.06.009>
- Janu, S., Satiman, A., Thammetar, T., & Autthawuttikul, S. (2022). Development of a Model for Engagement in Online Learning Using Gamification Concept to Enhance Achievement Motivation and Programming Teamwork Skill of Undergraduate Students of Rajabhat University. *Journal of Yala Rajabhat University*, 17(3), 99-108.

- Johnson, S. D., & Aragon, S. R. (2003). An instructional strategy framework for online learning environments. *New Directions for Adult and Continuing Education*, 2003(100), 31-43. <https://doi.org/10.1002/ace.117>
- Jongsermtrakool, H. (2009). The relationship between affective variables, willingness to communicate in English, and English communication behaviors of Thai secondary school students. [Master of Education, Chulalongkorn].
- Juárez-Díaz, C., & Perales, M. (2021). Language Teachers' Emergency Remote Teaching Experiences During the COVID-19 Confinement. *Experiencias con la enseñanza remota de emergencia de docentes de lenguas durante el confinamiento por COVID-19*, 23(2), 121-135. <https://doi.org/10.15446/profile.v23n2.90195>
- Kang, S.-J. (2005). Dynamic emergence of situational willingness to communicate in a second language. *System*, 33(2), 277-292. <https://doi.org/10.1016/j.system.2004.10.004>
- Kaufmann, R., Sellnow, D. D., & Frisby, B. N. (2016). *The development and validation of the online learning climate scale (OLCS)*. *Communication Education*, 65(3), 307-321. <https://doi.org/10.1080/03634523.2015.1101778>
- Kaufmann, R., & Vallade, J. I. (2022). Exploring connections in the online learning environment: student perceptions of rapport, climate, and loneliness. *Interactive Learning Environments*, 30(10), 1794-1808. <https://doi.org/10.1080/10494820.2020.1749670>

- Khajavy, G. H., Ghonsooly, B., Hosseini Fatemi, A., & Choi, C. W. (2016). Willingness to Communicate in English: A Microsystem Model in the Iranian EFL Classroom Context. *TESOL Quarterly*, 50(1), 154-180. <https://doi.org/10.1002/tesq.204>
- Khajavy, G. H., MacIntyre, P. D., & Barabadi, E. (2018). ROLE OF THE EMOTIONS AND CLASSROOM ENVIRONMENT IN WILLINGNESS TO COMMUNICATE. *Studies in Second Language Acquisition*, 40(3), 605-624. <https://doi.org/10.1017/s0272263117000304>
- Kreijns, K., Xu, K., & Weidlich, J. (2022). Social Presence: Conceptualization and Measurement. *Educational Psychology Review*, 34(1), 139-170. <https://doi.org/10.1007/s10648-021-09623-8>
- Kuama, S. (2016). Is Online Learning Suitable for All English Language Students? *PASAA: Journal of Language Teaching and Learning in Thailand*, 52, 53-82.
- Kumtepe, A. T., Atasoy, E., Özlem, K., Serap, U., DİNÇER, G. D., ERDOĞDU, E., & AYDIN, C. H. (2019). An Interaction Framework for Open and Distance Learning: Learning Outcomes, Motivation, Satisfaction, and Perception. *AJIT-e: Bilişim Teknolojileri Online Dergisi*, 10(36), 7-26.
- Larose, R., & Whitten, P. (2000). Re-thinking instructional immediacy for web courses: A social cognitive exploration. *Communication Education*, 49(4), 320-338. <https://doi.org/10.1080/03634520009379221>
- Lee, J. S., & Dressman, M. (2018). When IDLE Hands Make an English Workshop: Informal Digital Learning of English and Language Proficiency. *TESOL Quarterly*, 52(2), 435-445. <https://doi.org/10.1002/tesq.422>

- Lee, J. S., & Drajati, N. A. (2019). Affective variables and informal digital learning of English: Keys to willingness to communicate in a second language. *Australasian Journal of Educational Technology*. <https://doi.org/10.14742/ajet.5177>
- Lee, J. S., & Hsieh, C. J. (2019). Affective variables and willingness to communicate of EFL learners in in-class, out-of-class, and digital contexts. *System*, 82, 63-73. <https://doi.org/10.1016/j.system.2019.03.002>
- Lee, J. S., & Lee, K. (2019). Affective factors, virtual intercultural experiences, and L2 willingness to communicate in in-class, out-of-class, and digital settings. *Language Teaching Research*, 24(6), 813-833. <https://doi.org/10.1177/1362168819831408>
- Leidner, D. E., & Jarvenpaa, S. L. (1995). The use of information technology to enhance management school education: A theoretical view. *MIS quarterly*, 265-291.
- Lewin, K. (1951). *Field theory in social science: selected theoretical papers* (Edited by Dorwin Cartwright.). Harpers.
- Lu, Y., & Hsu, C.-F. (2008). Willingness to Communicate in Intercultural Interactions between Chinese and Americans. *Journal of Intercultural Communication Research*, 37(2), 75-88. <https://doi.org/10.1080/17475750802533356>
- MacIntyre, P. D. (2007). Willingness to Communicate in the Second Language: Understanding the Decision to Speak as a Volitional Process. *The Modern Language Journal*, 91(4), 564-576. <https://doi.org/10.1111/j.1540-4781.2007.00623.x>

- MacIntyre, P. D., Baker, S. C., Clément, R., & Conrod, S. (2001). Willingness to Communicate, Social Support, and Language-Learning Orientations of Immersion Students. *Studies in Second Language Acquisition*, 23(3), 369-388. <https://doi.org/10.1017/s0272263101003035>
- MacIntyre, P. D., Baker, S. C., Clément, R., & Donovan, L. A. (2003). Sex and Age Effects on Willingness to Communicate, Anxiety, Perceived Competence, and L2 Motivation Among Junior High School French Immersion Students [Journal Article]. *Language Learning: A Journal of Research in Language Studies*, 53(S1), 137-166. <https://doi.org/10.1111/1467-9922.00226>
- MacIntyre, P. D., & Charos, C. (1996). Personality, Attitudes, and Affect as Predictors of Second Language Communication. *Journal of Language and Social Psychology*, 15(1), 3-26. <https://doi.org/10.1177/0261927x960151001>
- MacIntyre, P. D., Dörnyei, Z., Clément, R., & A., N. K. (1998). Conceptualizing Willingness to Communicate in a L2: A Situational Model of L2 Confidence and Affiliation [research-article]. *The Modern Language Journal*, 82(4), 545-562. <https://doi.org/10.2307/330224>
- MacIntyre, P. D., Gregersen, T., & Mercer, S. (2020). Language teachers' coping strategies during the Covid-19 conversion to online teaching: Correlations with stress, wellbeing and negative emotions. *System*, 94(102352). <https://doi.org/10.1016/j.system.2020.102352>

- Marsh, H. W. (1987). Students' evaluations of University teaching: Research findings, methodological issues, and directions for future research. *International Journal of Educational Research*, 11(3), 253-388. [https://doi.org/10.1016/0883-0355\(87\)90001-2](https://doi.org/10.1016/0883-0355(87)90001-2)
- Mashaw, B. (2012). A Model for Measuring Effectiveness of an Online Course. *Decision Sciences Journal of Innovative Education*, 10(2), 189-221. <https://doi.org/10.1111/j.1540-4609.2011.00340.x>
- McCroskey, J. C., & Baer, J. E. (1985). Willingness to Communicate: The Construct and Its Measurement. the Annual Convention of the Speech Communication Association,
- McCroskey, J. C., & Richmond, R. (1990). Willingness to communicate: A cognitive view.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research : a guide to design and implementation* (4th ed.) [Non-fiction]. Jossey-Bass. <https://chula.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=cat05085a&AN=chu.b2115559&site=eds-live>
- Milovic, A., & Dingus, R. (2021). HOW TO NOT DISAPPEAR COMPLETELY: USING VIDEO-BASED DISCUSSIONS TO ENHANCE STUDENT SOCIAL PRESENCE IN AN ONLINE COURSE. *Marketing Education Review*, 1-11. <https://doi.org/10.1080/10528008.2021.1943447>

- Ministry of Higher Education Science Research and Innovation. (2021). *Dataset: List of universities and colleges under the Ministry of Higher education, Science, Research and Innovation* https://data.mhesi.go.th/cs_CZ/dataset/higher-education
- Moore, J. C., & Shelton, K. (2013). Social and student engagement and support: The Sloan-C Quality Scorecard for the Administration of Online Programs. *Journal of Asynchronous Learning Networks*, 17(1), 53-72.
- Moore, M. G. (1989). Three types of interaction.
- Naqvi, S., & Zehra, I. (2020). Online EFL Emergency Remote Teaching during COVID 19, Challenges and Innovative Practices: A Case of Oman. *Arab World English Journal*, 17-35. <https://doi.org/10.24093/awej/MEC2.2>
- Pattapong, K. (2010). Willingness to communicate in a second language : a qualitative study of issues affecting Thai EFL learners from students' and teachers' point of view Sydney eScholarship. <http://hdl.handle.net/2123/9244>
- Pattapong, K. (2015). Complex Interactions of Factors Underlying Thai EFL Learners' Willingness to Communicate in English. *PASAA: Journal of Language Teaching and Learning in Thailand*, 49, 105-136.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Sage Publications, Inc.
- Peng, J.-E. (2012). Towards an ecological understanding of willingness to communicate in EFL classrooms in China. *System*, 40(2), 203-213. <https://doi.org/10.1016/j.system.2012.02.002>

- Peng, J. E. (2007). Willingness to Communicate in an L2 and Integrative Motivation among College Students in an Intensive English Language Program in China. *University of Sydney Papers in TESOL*, 2(1), 33-59. <https://chula.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edb&AN=55731135&site=eds-live>
- Peng, J. E. (2013). The Challenge of Measuring Willingness to Communicate in EFL Contexts. *Asia-Pacific Education Researcher (Springer Science & Business Media B.V.)*, 22(3), 281-290. <https://doi.org/10.1007/s40299-012-0053-x>
- Peng, J. E., & Woodrow, L. (2010). Willingness to Communicate in English: A Model in the Chinese EFL Classroom Context. *Language Learning*, 60(4), 834-876. <https://doi.org/10.1111/j.1467-9922.2010.00576.x>
- Phillips, V. (1998). Virtual classrooms, real education. *Nation's Business*, 86(5), 41-45.
- Pornapit, D., & Hayo, R. (2021, 09/01/). Willingness to Communicate and Second Language Proficiency: A Correlational Study [article]. *Education Sciences*, 11(517), 517-517. <https://doi.org/10.3390/educsci11090517>
- Puntularb, P., Yippikun, C., & Pinchunsri, P. (2021). The characteristics and self-regulation of undergraduate students in online English learning: A case study of a private university in Thailand. *International Journal of Higher Education*, 10(7), 34-44.
- Putri, A. J. T., Fitriati, S. W., & Sakhiyya, Z. (2022). Pedagogical, Interpersonal and Instructional Functions of Code-switching to Support Online Classroom Learning. *English Education Journal*, 12(2), 252-263.

- Puzziferro, M., & Shelton, K. (2008). A model for developing high-quality online courses: Integrating a systems approach with learning theory. *Journal of Asynchronous Learning Networks*, 12, 119-136.
- Reinders, H., & Wattana, S. (2014). Affect and willingness to communicate in digital game-based learning. *ReCALL*, 27(1), 38-57. <https://doi.org/10.1017/s0958344014000226>
- Richardson, J. C. (2001). Examining social presence in online courses in relation to students' perceived learning and satisfaction [State University of New York at Albany].
- Russell, G. (2004). Virtual schools: A critical view. In *Development and management of virtual schools: Issues and trends* (pp. 1-25). IGI Global.
- Sakulprasertsri, K. (2022). Device Ownership, Accessibility, and University Students' Perceptions of an Online Foundation English Course in Thailand. *PASAA: Journal of Language Teaching and Learning in Thailand*, 63, 123-147.
- Sojayan, C., & Khlaisang, J. (2017). Development of a flipped classroom model with online learning group investigation method to enhance team learning ability of upper secondary school student (Master's thesis) Chulalongkorn University, Bangkok.]. ThaiJo.
- Surapanyo, P. C. (2022). Online Active Learning and Teaching for Teacher Education. *Ratchaphruek Journal*, 20(1), 1-13.
- Syed, H., & Kuzborska, I. (2018). Dynamics of factors underlying willingness to communicate in a second language. *The Language Learning Journal*, 48(4), 481-500. <https://doi.org/10.1080/09571736.2018.1435709>

- Templeton, N. R., Ballenger, J. N., & Thompson, J. R. (2015). Examining the elements of online learning quality in a fully online doctoral program. *Online Journal of Distance Learning Administration*, 18(4), 1-9.
- Thong-iam, N. (2009). Effects of situational variables on willingness to communicate and English communication behaviors of ninth grade students [Master of Education, Chulalongkorn].
- Turk, M., Heddy, B. C., & Danielson, R. W. (2022). Teaching and social presences supporting basic needs satisfaction in online learning environments: How can presences and basic needs happily meet online? *Computers & Education*, 180(104432). <https://doi.org/10.1016/j.compedu.2022.104432>
- U.S. Department of Health and Human Services (HHS), and Welfare, & National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. (1978). *The Belmont report: ethical principles and guidelines for the protection of human subjects of research*. The Commission. <https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/read-the-belmont-report/index.html>
- UNESCO. (2022). The impact of the COVID-19 pandemic on education: international evidence from the Responses to Educational Disruption Survey (REDS). In S. F. Meinck & R. Julian Strietholt (Eds.). United Nations Educational, Scientific and Cultural Organization (UNESCO).
- Waight, C. L., Willging, P. A., & Wentling, T. L. (2002). Recurrent themes in e-learning: A meta-analysis of major e-learning reports. Academy of Human Resource Development Annual Conference,

- Wang, H., & Sun, C.-T. (2011). Game reward systems: Gaming experiences and social meanings. DiGRA conference,
- Ward, M. E., Peters, G., & Shelley, K. (2010). Student and faculty perceptions of the quality of online learning experiences. *The International Review of Research in Open and Distributed Learning*, 11(3), 57. <https://doi.org/10.19173/irrodl.v11i3.867>
- Watson, J., & Gemin, B. (2009). Management and Operations of Online Programs: Ensuring Quality and Accountability. Promising Practices in Online Learning. *International Association for K-12 online learning*.
- Weaver, C. (2005, 12//). Using the Rasch Model to Develop a Measure of Second Language Learners' Willingness to Communicate within a Language Classroom. *Journal of Applied Measurement*, 6(4), 396-415. <https://chula.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edo&AN=19032138&site=eds-live>
- Yashima, T. (2002). Willingness to Communicate in a Second Language: The Japanese EFL Context. *The Modern Language Journal*, 86(1), 54-66. <https://doi.org/10.1111/1540-4781.00136>
- Yesim, B. (2005). Turkish college students' willingness to communicate in English as a foreign language.
- Yoon, S.-W. (2003). Examination of member behaviors, group processes, and development-shaping forces of virtual learning teams. University of Illinois at Urbana-Champaign.

- Yu, M. (2011). Effect of communication variables, affective variables, and teacher immediacy on willingness to communicate of foreign language learners. *Chinese Journal of Communication*, 4(02), 218-236. <https://doi.org/10.1080/17544750.2011.565678>
- Zarrinabadi, N., & Tanbakooei, N. (2016, 01 / 01 /). Willingness to Communicate: Rise, Development, and Some Future Directions [Article]. *Language and Linguistics Compass*, 10(1), 30-45. <https://doi.org/10.1111/lnc3.12176>
- Zhang, J., Beckmann, N., & Beckmann, J. F. (2018). To talk or not to talk: A review of situational antecedents of willingness to communicate in the second language classroom. *System*, 72, 226-239. <https://doi.org/10.1016/j.system.2018.01.003>



APPENDIX

จุฬาลงกรณ์มหาวิทยาลัย
CHULALONGKORN UNIVERSITY

APPENDIX A

List of Experts

List of experts of validation the WTC questionnaire, the English language online classroom environment questionnaire, and the semi-structure interview questions was described below.

1. Associate Professor Dr. Dumrong Adunyarittigun
Faculty of Liberal Arts, Thammasat University.
2. Assistant Professor Chansongklod Gajasen, Ph.D.
Faculty of Education, Chulalongkorn university
3. Professor Jintavee Khlaisang, Ed.D.
Faculty of Education, Chulalongkorn university

APPENDIX B

Example of WTC Questionnaire in Thai

แบบสอบถามความเต็มใจที่จะสื่อสารในห้องเรียนภาษาอังกฤษแบบออนไลน์

แบบสอบถามส่วนนี้ประกอบด้วยสถานการณ์สมมติที่สามารถเกิดขึ้นได้ในการเรียนการสอนวิชาภาษาอังกฤษแบบออนไลน์ ขอให้นักศึกษาจินตนาการแต่ละสถานการณ์ แล้วระบุระดับความเต็มใจที่จะสื่อสารเป็นภาษาอังกฤษในแต่ละสถานการณ์ โดยการเลือกตัวเลขที่ตรงกับระดับความเต็มใจที่จะสื่อสารของตัวนักศึกษา โดยพิจารณาทั้งความเต็มใจที่จะสื่อสารแบบพูดผ่านไมค์โครโฟน หรือการพิมพ์ข้อความเพื่อโต้ตอบกับครูหรือเพื่อนร่วมชั้นเรียน โดยมีลำดับดังต่อไปนี้

1 = ไม่เต็มใจเป็นอย่างยิ่ง

2 = ค่อนข้างไม่เต็มใจ

3 = ค่อนข้างเต็มใจ

4 = เต็มใจเป็นอย่างยิ่ง

ข้อที่	สถานการณ์	ไม่เต็มใจเป็นอย่างยิ่ง	ค่อนข้างไม่เต็มใจ	ค่อนข้างเต็มใจ	เต็มใจเป็นอย่างยิ่ง
1	ทำกิจกรรมบทบาทสมมติ (Role play เช่น สั่งอาหารในร้าน เช็คอินในโรงแรม) เป็นภาษาอังกฤษกับเพื่อนร่วมชั้นภายในกลุ่มของตนเอง	1	2	3	4

ข้อที่	สถานการณ์	ไม่เต็มใจเป็นอย่างยิ่ง	ค่อนข้างไม่เต็มใจ	ค่อนข้างเต็มใจ	เต็มใจเป็นอย่างยิ่ง
2	ทำกิจกรรมบทบาทสมมติ (Role play เช่น สั่งอาหารในร้าน เช็คอินในโรงแรม) เป็นภาษาอังกฤษต่อหน้าทุกคนในชั้นเรียน	1	2	3	4
3	ถามครูหรือเพื่อนเป็นภาษาอังกฤษให้ช่วยพูดทวนอีกครั้งในสิ่งที่สน. ไม่เข้าใจ	1	2	3	4
4	บอกเล่ารายละเอียดสั้นๆ เกี่ยวกับจังหวัดบ้านเกิดของ นศ.	1	2	3	4
5	กล่าวคำทักทายเป็นภาษาอังกฤษ	1	2	3	4
6	อ่านออกเสียงภาษาอังกฤษจากเนื้อหาในหนังสือเรียน	1	2	3	4
7	ร้องเพลงภาษาอังกฤษ	1	2	3	4
8	ถามครูหรือเพื่อนเป็นภาษาอังกฤษเกี่ยวกับการออกเสียงคำศัพท์	1	2	3	4
9	เล่าเรื่องเกี่ยวกับรายการโทรทัศน์ที่ นศ. ได้รับชมมาเป็นภาษาอังกฤษ	1	2	3	4
10	ถามครูหรือเพื่อนเป็นภาษาอังกฤษเกี่ยวกับการแปลข้อความภาษาไทยเป็นภาษาอังกฤษ	1	2	3	4

ข้อที่	สถานการณ์	ไม่เต็มใจเป็นอย่างยิ่ง	ค่อนข้างไม่เต็มใจ	ค่อนข้างเต็มใจ	เต็มใจเป็นอย่างยิ่ง
11	สัมภาษณ์ครูหรือเพื่อน โดยใช้คำถามจากหนังสือเรียน	1	2	3	4
12	สัมภาษณ์ครูหรือเพื่อน โดยใช้คำถามที่ นศ. คิดเอง	1	2	3	4
13	กล่าวขอบคุณเป็นภาษาอังกฤษ	1	2	3	4
14	ถามคำถามด้วยภาษาอังกฤษเกี่ยวกับความหมายของคำที่ นศ. ไม่รู้	1	2	3	4
15	บอกทางเป็นภาษาอังกฤษ	1	2	3	4
16	แนะนำตนเองเป็นภาษาอังกฤษโดยไม่อ่านโน้ต	1	2	3	4
17	แปลบทพูดจากภาษาอังกฤษเป็นภาษาไทย	1	2	3	4

APPENDIX C

Example of English language online classroom environment Questionnaire

แบบสอบถามสภาพแวดล้อมในห้องเรียนภาษาอังกฤษแบบออนไลน์

แบบสอบถามส่วนนี้ประกอบด้วยข้อความสั้นๆ เกี่ยวกับสภาพแวดล้อมในห้องเรียนภาษาอังกฤษแบบออนไลน์ ขอให้ศึกษานักถึงระดับความถี่ของการเกิดแต่ละสถานการณ์ดังกล่าวที่เคยเกิดขึ้นในประสบการณ์การเรียนภาษาอังกฤษแบบออนไลน์ของนักศึกษาที่ผ่านมา โดยมีลำดับดังต่อไปนี้

1 = แทบไม่เคย ----- (0-10%)

2 = บางครั้ง ----- (11-35%)

3 = พอประมาณ ----- (36-65%)

4 = ส่วนมาก ----- (67-90%)

5 = เกือบทุกครั้ง ----- (91-100%).

ข้อที่	ข้อความ	ไม่เคยเกิดขึ้น	พบน้อย	พอประมาณ	ค่อนข้างบ่อย	บ่อย	เกิดขึ้นเป็นประจำ
1.1	การจัดการภาระงานให้เสร็จถึงระดับที่ตั้งใจไว้ เป็นเรื่องสำคัญสำหรับฉัน	1	2	3	4	5	
1.2	ฉันพร้อมที่จะเริ่มเรียนตรงเวลา	1	2	3	4	5	
1.3	ฉันมีเป้าหมายที่ชัดเจนในการเรียน	1	2	3	4	5	

ข้อที่	ข้อความ	คณาจารย์ประจำคณะศึกษาศาสตร์	คณาจารย์ประจำภาควิชา	คณาจารย์ประจำศูนย์	คณาจารย์	คณาจารย์ประจำคณะศึกษาศาสตร์
1.4	ฉันตั้งใจเรียน	1	2	3	4	5
1.5	ฉันรู้วิธีการใช้อุปกรณ์อิเล็กทรอนิกส์เพื่อการเรียนรู้	1	2	3	4	5
2.1	ครูคอยกระตุ้นให้ฉันสื่อสารในชั้นเรียน	1	2	3	4	5
2.2	ครูพร้อมให้คำปรึกษาเสมอเมื่อฉันมีปัญหาเกี่ยวกับการเรียน	1	2	3	4	5
2.3	ครูให้ข้อเสนอแนะที่เป็นประโยชน์	1	2	3	4	5
2.4	ครูตั้งใจรับฟังปัญหาของฉัน	1	2	3	4	5
2.5	คำถามของครูกระตุ้นให้ฉันคิดทบทวนด้วยตนเอง	1	2	3	4	5
3.1	กิจกรรมในชั้นเรียนกระตุ้นให้ฉันค้นหาหรือระดมความคิด / ตีรองความคิด กับเพื่อนร่วมชั้น	1	2	3	4	5
3.2	กิจกรรมในชั้นเรียนกระตุ้นให้ฉันต้องใช้ทักษะการแก้ไขปัญหาเพื่อหาทางออก	1	2	3	4	5
3.3	ครูสนับสนุนให้นักศึกษาให้คำแนะนำหรือติชมการทำงานของกันและกันระหว่างการทำกิจกรรมในห้องเรียน	1	2	3	4	5
3.4	ฉันรู้ว่าฉันมีเวลาแค่ไหนสำหรับการทำกิจกรรมแต่ละอย่างในห้องเรียน	1	2	3	4	5

ข้อที่	ข้อความ	เคยเห็น/เคยได้ยิน/เคยปฏิบัติ	เห็น/ได้ยิน/ปฏิบัติ	รู้/เข้าใจ/ปฏิบัติ	เคยเห็น/เคยได้ยิน/ปฏิบัติ	เคยเห็น/เคยได้ยิน/ปฏิบัติ
3.5	ฉันรู้สึกว่าเป็นเพื่อนร่วมชั้นที่มีทักษะที่แตกต่างกัน ก็ยังสามารถร่วมทำกิจกรรมหลายอย่างในชั้นเรียนด้วยกันได้อย่างไม่ติดขัด	1	2	3	4	5
4.1	ขณะที่ฉันและเพื่อนร่วมชั้นกำลังหาหรือ/ ระดมความคิด / ต่อรองความคิด ฉันรู้สึกได้ว่าครูคอยสังเกตการณ์พวกเราอยู่	1	2	3	4	5
4.2	รูปแบบกิจกรรมในชั้นเรียนช่วยเพิ่มโอกาสให้ฉันและเพื่อนร่วมชั้นได้หาหรือ/ ระดมความคิด / ต่อรองความคิด ร่วมกัน	1	2	3	4	5
4.3	เมื่อนั้นและเพื่อนร่วมชั้นต้องหาหรือ/ ระดมความคิด / ต่อรองความคิด ร่วมกัน การสนทนาของพวกเราแทบจะไม่มีช่วงที่เงียบ	1	2	3	4	5
4.4	เมื่อนั้นและเพื่อนร่วมชั้นต้องหาหรือ/ ระดมความคิด / ต่อรองความคิด ร่วมกัน ฉันรู้สึกได้ว่าทุกคนกระตือรือร้นที่จะแสดงความคิดเห็น	1	2	3	4	5
4.5	ครูมาเข้าร่วมการหาหรือ/ ระดมความคิด / ต่อรองความคิด ของฉันและเพื่อนร่วมชั้นด้วย	1	2	3	4	5
5.1	สถาบันการศึกษาของฉันมีการฝึกอบรมและคู่มือการใช้งานเทคโนโลยีต่างๆสำหรับการเรียนออนไลน์แก่นักศึกษา	1	2	3	4	5
5.2	ฉันรู้ว่าขอความช่วยเหลือจากช่องทางใดหากประสบปัญหาด้านเทคนิคจากการเรียนออนไลน์	1	2	3	4	5

ข้อที่	ข้อความ	คณาจารย์ ในคณะศึกษาศาสตร์	คณาจารย์ ในภาควิชา	คณาจารย์ ในภาควิชา	คณาจารย์ ในภาควิชา	คณาจารย์ ในภาควิชา
5.3	สถาบันการศึกษาของฉันทัดเตรียมการช่วยเหลือที่รวดเร็วเกี่ยวกับการเรียนออนไลน์	1	2	3	4	5
5.4	แอปพลิเคชันที่ฉันทัดใช้สำหรับเป็นห้องเรียนออนไลน์ (เช่น Zoom meeting, Microsoft Team, Google Meet) นั้นใช้งานง่ายไม่ยุ่งยาก	1	2	3	4	5
5.5	ระบบการจัดการเรียนรู้ (เช่น Google Classroom, Microsoft Team, Blackboard) ที่ฉันทัดใช้นั้นใช้งานง่ายไม่ยุ่งยาก	1	2	3	4	5
6.1	ครูมักจะเปิดกล้องเมื่ออยู่ในห้องเรียนออนไลน์	1	2	3	4	5
6.2	เพื่อนร่วมชั้นมักจะเปิดกล้องเมื่ออยู่ในห้องเรียนออนไลน์	1	2	3	4	5
6.3	เมื่ออยู่ในห้องเรียนออนไลน์ บางครั้งครูและเพื่อนร่วมชั้นก็พูดคุยกันเรื่องอื่นนอกเหนือจากเรื่องบทเรียน (เช่น เรื่องตลก ข่าวสารประจำวัน)	1	2	3	4	5
6.4	ครูจดจำฉันและเพื่อนร่วมชั้นได้	1	2	3	4	5
6.5	เมื่ออยู่ในห้องเรียนออนไลน์ ฉันรู้สึกเป็นส่วนหนึ่งของกลุ่มเพื่อน	1	2	3	4	5

APPENDIX D

Semi-structure interview questionnaire in Thai

แบบสอบถามเชิงคุณภาพสำหรับผู้เข้าร่วมวิจัยที่ได้รับคัดเลือก เพื่อการศึกษาผลกระทบของ
สภาพแวดล้อมในห้องเรียนภาษาอังกฤษแบบออนไลน์ต่อระดับความเต็มใจ
ที่จะสื่อสารเป็นภาษาอังกฤษ

คำชี้แจงก่อนเริ่มสัมภาษณ์:

เดี๋ยวเราจะมาพูดคุยกันเกี่ยวกับประสบการณ์การเรียนรู้วิชาภาษาอังกฤษในห้องเรียนแบบ
ออนไลน์กันนะคะ อยากให้ในศ. นึกถึงประสบการณ์ที่ผ่านมาของตนเองในช่วงที่เราเรียนใน
ระดับมหาวิทยาลัยนะคะ หากไม่เข้าใจคำถามศ. สามารถขอให้ครูช่วยชี้แจงหรือถามใหม่อีก
ครั้งได้ หากนศ. ต้องการหยุดพัก สามารถแจ้งครูได้เช่นกันค่ะ การสัมภาษณ์ครั้งนี้จะใช้เวลา
ประมาณ 30 นาที โดยจะมีการอัดเทปบันทึกการสัมภาษณ์ไว้เพื่อใช้ในการวิเคราะห์ข้อมูลต่อไป
ข้อมูลทุกอย่างที่นศ. กล่าวในการสัมภาษณ์ครั้งนี้จะถูกนำไปใช้เพื่อการวิจัยเท่านั้น ไม่มีผลกับ
เกรดวิชาใดๆ และจะไม่สามารถนำไประบุตัวตนของนศ. ได้ ทั้งนี้หากนศ. รู้สึกไม่สะดวกใจที่จะ
ตอบคำถามข้อใด สามารถเลือกที่จะขอข้ามได้ หากนศ. ต้องการยกเลิกการยินยอมให้ข้อมูล
หลังการสัมภาษณ์เสร็จสิ้น สามารถแจ้งครูได้ภายใน 7 วัน หลังวันสัมภาษณ์ค่ะ

จุฬาลงกรณ์มหาวิทยาลัย

CHULALONGKORN UNIVERSITY

Part 0: Personal Information & Ice-Breaking

- A. ชื่อเล่นของนศ. ชื่ออะไรคะ
- B. ปี / คณะ / สาขา ที่เรียน
- C. การเรียนภาษาอังกฤษที่ผ่านมาในมหาวิทยาลัยนศ. ได้เกรดอะไรบ้างคะ
- D. นศ. รู้สึกว่าการเรียนออนไลน์ แตกต่างจากการเรียนในห้องเรียนอย่างไรบ้างคะ

Part 1: The student's self-regulation, self-motivation, degrees of being an active learner and background of technological knowledge and skill.

1.1 อะไรคือเป้าหมายในการศึกษาระดับมหาวิทยาลัยของเราคะ

1.1a แล้วที่ผ่านมามาจนถึงตอนนี้เราได้ทำอะไรบ้างเพื่อให้เข้าใกล้เป้าหมายนั้นมากขึ้น

1.2 ก่อนเข้าเรียนออนไลน์ทุกๆคาบนศ. เตรียมตัวอย่างอะไรบ้างคะ (ไล่ตั้งแต่เปิดอุปกรณ์ฯ)

Part 2: The teacher's style of motivating, stimulating, guiding, and challenging the student.

2.1 อาจารย์วิชาภาษาอังกฤษแบบไหนคะ (บุคลิก/ วิธีการสอน/ วิธีการสื่อสารกับนศ.) ที่ทำให้ นศ. รู้สึกว่าอยากสื่อสารกับอาจารย์ เพราะเหตุใด

2.2 เวลาที่ นศ. มีคำถามอยากจะถามอาจารย์ในห้องเรียนออนไลน์นศ. ทำอย่างไรคะ

2.2a แล้วอาจารย์ตอบข้อสงสัยเราอย่างไรคะ

Part 3: Teaching and learning activities that had been applied to the student's English language online classroom.

3.1 เคยมีการทำกิจกรรมในห้องเรียนภาษาอังกฤษแบบออนไลน์ครั้งไหนไหมคะ ที่นักศึกษา รู้สึกว่าอยากมีส่วนร่วมในกิจกรรมนั้นด้วยความเต็มใจ

3.1a ช่วยเล่ารายละเอียดเกี่ยวกับกิจกรรมในครั้งนั้นให้ครู่ฟังหน่อยคะ (aided - หัวข้อ / สื่อการสอนที่อาจารย์ใช้ / Instruction / ลักษณะของกิจกรรม / ระยะเวลาในการทำกิจกรรม / จำนวนผู้เข้าร่วมกิจกรรม)

3.2 เคยพบปัญหาอะไรที่ทำให้การทำกิจกรรมในห้องเรียนภาษาอังกฤษแบบออนไลน์ของเราติดขัดบ้างไหมคะ หากมี ช่วยเล่าเหตุการณ์ให้ครู่ฟังคร่าวๆคะ

Part 4: Opportunity of interactions, quality of interactions, promptness of interactions, and teacher presence in interactions.

4.2 จังหวะไหนบ้างในห้องเรียนภาษาอังกฤษแบบออนไลน์ ที่ทำให้ นศ. รู้สึกอยากสื่อสารเป็นภาษาอังกฤษกับผู้อื่นคะ

4.2 คุณลักษณะของเพื่อนร่วมชั้นแบบไหน ที่ทำให้ นศ. อยากสื่อสารเป็นภาษาอังกฤษด้วยคะ

Part 5: Technical support and LMS availability, technical support and LMS's ease of use, immediacy of technical support, and availability of training for LMS and other related programs required for the online classroom.

5.1 เคยมีปัญหาทางเทคนิคใดๆ ที่เกิดขึ้นแล้วส่งผลกระทบต่อความต่อเนื่องของการเรียนออนไลน์ของเราไหมคะ หากเคย ช่วยเล่าประสบการณ์ให้ครูฟังคร่าวๆคะ

Part 6: Classroom participants' affective expression, classroom participants' self-disclosure, classroom participants' sense of humor, classroom participants' usage of vocatives, and classroom participants' usage of phatics and salutations.

6.1 โดยปกติแล้วเวลานศ. อยู่ในห้องเรียนภาษาอังกฤษออนไลน์ มีใครเปิดกล้องบ้างคะ

6.1a แล้ว นศ. เปิดกล้องหรือไม่คะ เพราะเหตุใด

6.2 บรรยากาศ หรือสภาพแวดล้อมในห้องเรียนออนไลน์แบบไหน ที่จะทำให้ นศ. รู้สึกมีตัวตน หรือ รู้สึกเป็นส่วนหนึ่งของกลุ่ม

6.2 มีเหตุการณ์หรือการกระทำอะไรบ้าง จากอาจารย์หรือเพื่อนในห้องเรียนออนไลน์ ที่ทำนศ. รู้สึกมีตัวตน หรือ รู้สึกเป็นส่วนหนึ่งของกลุ่ม

Appendix E

WTC questionnaire item modification from Weaver's WTC questionnaire

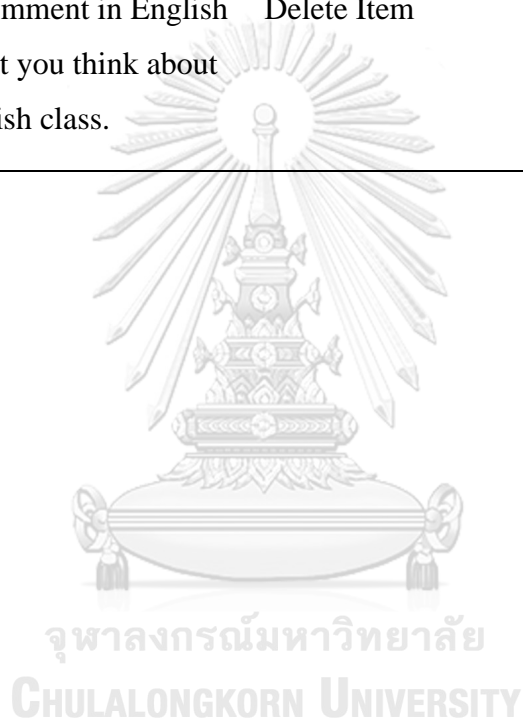
Item	Original	Modification	Reason
S1	Do a role-play in English at your desk (e.g. ordering food in a restaurant).	Do a role-play in English at your desk (e.g. ordering food in a restaurant).	Modify to comply with online context
S2	Sing a song in English.	-	-
S3	Ask someone in English to repeat what they just said in English because you didn't understand.	-	-
S4	Give a short speech in English about your hometown with notes.	-	-
S5	Greet someone in English.	-	-
S6	Read out two-way dialogue in English from the textbook.	-	-
S7	Do a role-play standing in front of the class in English (e.g. ordering food in a restaurant).	Do a role-play in front of the class in English (e.g. ordering food in a restaurant).	Modify to comply with online context

Item	Original	Modification	Reason
S8	Ask someone in English how to pronounce a word in English.	-	-
S9	Tell someone in English about the story of a TV show you saw.	-	-
S10	Ask someone in English how to say a phrase you know to how say in Japanese but not in English.	Ask someone in English how to say a phrase you know to how say in Thai but not in English.	Modify to comply with Thai context
S11	Interview someone in English asking questions from the textbook.	-	-
S12	Interview someone in English asking your own original questions.	-	-
S13	Say thank you in English when someone lends you a pen.	Say thank you in English	Modify to comply with online context
S14	Ask in English the meaning of a word you do not know.		
S15	Give a direction to your favorite restaurant in English	-	-

Item	Original	Modification	Reason
S16	Give a short self-introduction without notes in English.	-	-
S17	Translate a spoken utterance from Japanese into English.	Translate a spoken utterance from Thai into English.	Modify to comply with Thai context
W1	Write a postcard in English describing your last holiday.	Delete Item	The item does not comply with the objective of this study
W2	Write a self-introduction in English.	Delete Item	The item does not comply with the objective of this study
W3	Write in English a one-page explanation about university life in Japan.	Delete Item	The item does not comply with the objective of this study
W4	Write an explanation in English why you wanted to enter this university.	Delete Item	The item does not comply with the objective of this study
W5	Write a paragraph in English describing the cause and effect of something (i.e. how more cars cause global warming).	Delete Item	The item does not comply with the objective of this study
W6	Write an essay in English trying to convince someone that they should buy your favourite singer's CD.	Delete Item	The item does not comply with the objective of this study

Item	Original	Modification	Reason
W7	Write an account in English of your about future goals after graduating university.	Delete Item	The item does not comply with the objective of this study
W8	Write your opinion in English agreeing with a person's point of view.	Delete Item	The item does not comply with the objective of this study
W9	Write your opinion in English disagreeing with a person's point of view.	Delete Item	The item does not comply with the objective of this study
W10	Write a diary about your daily life in English.	Delete Item	The item does not comply with the objective of this study
W11	Write an email in English describing your favorite website.	Delete Item	The item does not comply with the objective of this study
W12	Write a short report in English about an article or book you read.	Delete Item	The item does not comply with the objective of this study
W13	Write instructions in English for how to make your favorite dish.	Delete Item	The item does not comply with the objective of this study
W14	Write a descriptive paragraph in English about a Japanese cultural event (i.e. summer festival or holidays like New Year.s).	Delete Item	The item does not comply with the objective of this study

Item	Original	Modification	Reason
W15	Write a short report describing your hometown in English.	Delete Item	The item does not comply with the objective of this study
W16	Translate a sentence from Japanese to English.	Delete Item	The item does not comply with the objective of this study
W17	Write a comment in English about what you think about your English class.	Delete Item	The item does not comply with the objective of this study



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