

## The Effects of an Interactive Web-based Test of English for International Communication Tutoring Course on Thai Students' English Grammar Proficiency

**Orabudh Mayanondha**

Language Institute, Thammasat University  
Bangkok, Thailand

**Kittitouch Soontornwipast**

Language Institute, Thammasat University  
Bangkok, Thailand

### Abstract

There has been a range of online Test of English for International Communication courses in Thailand. However, the courses lack interaction, and learners do not have enough opportunities to contact tutors when they have problems. Therefore, the interactive web-based Test of English for International Communication tutoring course was developed in this study to promote interaction in online learning. This study investigates the effects of the course on students' English grammar proficiency and explores students' opinions on the course. The participants were 40 Thai students enrolling in the course. This research employed the mixed-methods approach. The effects of the instruction on grammar proficiency were assessed by pre- and post-tests. Students' opinions were explored through reflective journals, questionnaires, and semi-structured interviews. The results show that students' grammar proficiency significantly improved after taking the course. All students had a positive attitude towards the course. They perceived a high level of instructor-student interaction, leading to an increase in learning motivation and eagerness to complete the course. Although student-student interaction was in a slightly lower degree, the students had a positive impact on one another. Besides, considerable course flexibility facilitated active learning and increased students' satisfaction. This course also encouraged autonomous learning as the students perceived a sense of responsibility for their study. Extrinsic incentives effectively motivated students to become more active and participate in activities. This study provides a guideline of the teaching approaches to incorporate the concept of interaction into web-based instruction to improve students' grammar proficiency.

*Keywords:* English grammar, interaction, Thai students, Test of English for International Communication, web-based instruction

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## Introduction

Test of English for International Communication (TOEIC) is the world's leading standardized test of business English. Over seven million people take the test yearly (ETS, 2017). It plays a vital role in both career and educational aspects. TOEIC scores are the standards for admission and graduation, recruitment and selection, pay and rewards, and job promotion. Nonetheless, the average score of Thai test-takers was 478 out of 990, making Thailand become bottom of the list among other countries in Asia (ETS, 2019). Previous studies revealed that their participants gained low TOEIC scores ranging from 300 to 460 (Maliwan, 2018; Siriboon, 2008).

To gain a deep insight into TOEIC preparation and online TOEIC tutoring in Thailand, the researcher conducted a preliminary study by sending questionnaires to 185 students in an online TOEIC preparation course of a tutoring institution and conducting semi-structured interviews with ten students randomly. The results are parallel to the previous research. The students' average TOEIC score was 481, and the minimum score was 230. It reflects that Thai learners' low English proficiency is a severe issue. It is, therefore, essential to find effective ways to improve their English abilities to help them attain the target TOEIC scores.

Grammar is an integral part of the English language. However, the findings from previous research confirm that grammar is one of the main problems for Thais (Akkakoson, 2016). Regarding the preliminary study, the skill that most students in the course wanted to improve most was grammar. When evaluating their grammar proficiency, the students rated themselves only 2.2 out of 5. They encountered difficulties in the grammar part. Regarding TOEIC test format, grammar test items are included in part five (Incomplete Sentence) and part 6 (Text Completion), containing 30 and 16 questions, respectively. Hence, test-takers must develop strong grammatical skills to get good TOEIC scores. The study of Harada (2016) showed that grammar proficiency helps increase TOEIC scores. Hence, learners should study grammar points frequently found in the test.

The online TOEIC tutoring market in Thailand has fierce competition. More than 30 tutors offer a range of online TOEIC courses, most of which are asynchronous. Despite being convenient, the courses lack interaction and do not provide enough communication channels for tutors and students. When students have questions, they usually receive replies from web administrators and rarely get instant feedback. Regarding the preliminary study, interaction is the students' primary concern in online learning. They were worried that they would not be able to contact their tutor if they had questions or needed help ( $\bar{x} = 4.34$  from a 5-point Likert scale), and the interaction between tutor and students would be limited ( $\bar{x} = 4.05$ ). Online instruction with insufficient support and interaction with teachers leads to frustration, a decrease in motivation and satisfaction, and higher dropout rates (Kaur & Sidhu, 2010). Online students value interaction. It is a human factor playing a vital role in the learning process (McLester, 2002). Therefore, instructional methods with a variety of interactive techniques should be developed (Chan & Law, 2007).

In Thailand, synchronous online TOEIC tutoring is generally delivered in a one-on-one session. Apart from that, synchronous sessions are carried out via Facebook Live by TOEIC tutors on their Facebook pages for free as a marketing strategy to attract followers. Besides, the

integration between asynchronous and synchronous instruction for TOEIC tutoring is still rare. It reflects a gap and a potential opportunity for online TOEIC instruction.

Despite a significant role of TOEIC, there is no previous research in Thailand aiming to develop teaching methodology specifically for TOEIC preparation. All studies surveyed learners' opinions on existing TOEIC preparation courses and are not related to online instruction. The research using technology for TOEIC preparation also remains scarce worldwide. Moreover, all of the studies were conducted with students in a university context, not in the context of tutoring institutions. Besides, most previous studies involve listening and reading skills as they focus on the improvement of overall TOEIC scores. There is a lack of research focusing on grammar instruction for TOEIC preparation. To bridge these gaps, this study aims to develop an interactive web-based TOEIC tutoring course to improve English grammar proficiency. There are two research questions:

1. What are the effects of the interactive web-based TOEIC tutoring course on students' English grammar proficiency?
2. What are the opinions of students on the interactive web-based TOEIC tutoring course?

### **Literature Review**

In this section, previous research related to designing frameworks for the development of the interactive web-based TOEIC tutoring course is presented.

#### ***Web-based Instruction***

Web-based instruction refers to “the teaching methods that use multimedia devices or network technologies” (Zong, Li & Jia, 2018, p.8). There are three types (Salzer, 2011).

First, *asynchronous web-based instruction* is an online learning approach which does not happen in real-time. Asynchronous instruction provides great convenience and flexibility. However, it requires a high degree of self-regulation. Otherwise, the learning process could be interrupted (Zembylas, 2008). This posed a challenge in online learning, especially for adult students whose common learning issues involve time constraint and self-regulation (Jun, 2005; Whipp & Chiarelli, 2004). Besides, students can feel dissatisfied and demotivated because of delayed response and feedback from instructors (Huang & Hsiao, 2012).

Second, *synchronous web-based instruction* requires simultaneous interaction between teachers and students. Active communication between teachers and students can be promoted (Ng, 2007). Thus, students are less likely to feel isolated because it is more interactive and social (Hrastinski, 2008). Additionally, it enables immediate responses and feedback (Diaz & Entonado, 2009). This helps facilitate learning experiences (Theile, 2003) The students could share their comments and see the learning progress of their classmates like the traditional classroom environment (Martin & Parker, 2014). Nonetheless, synchronous learning could cause time obstacle since it requires all parties to be online at the same time (Ebner & Gegenfurtner, 2019).

Third, *blended or hybrid online instruction* combines asynchronous and synchronous formats. It harnesses the positives of both online learning approaches. Students have flexibility

since they can learn at their own pace during asynchronous sessions, while they can still interact and communicate with one another simultaneously via synchronous sessions (Frey, 2015).

### ***Previous Studies Concerning Interaction in Web-based TOEIC Instruction***

Ishikawa et al. (2015) studied the effects of the integration of web-based courseware featuring online materials for TOEIC preparation and in-class instruction on the students' TOEIC scores. The teacher gave support and encouragement to the students via Line Application. Obari (2013) investigated the effects of online TOEIC training kit on the students' TOEIC scores. The students watched online lessons and did practice exercises in the courseware. The results of both studies showed an increase in the TOEIC scores. Although the students were engaged with materials and activities in the courseware, the interaction was limited due to an asynchronous learning environment. Rahayu (2020) explored students' experience of studying a synchronous TOEIC class via Zoom. Despite their positive feedback, the students thought face-to-face communication was easier and better. The previous studies in this area focused on either asynchronous or synchronous instruction, and mainly adopted quantitative data collection. Thus, there is a literature gap in the implementation of mixed types of online instruction for TOEIC to promote interaction and a mixed-methods data collection approach to provide insight into students' opinions.

This study employs blended online instruction as treatment and a mixed-methods approach. Asynchronous learning tools are pre-recorded video lessons, recorded Facebook Live, discussion board in a Facebook group, and communication channels, including Facebook Messenger, Line, and Instagram. The synchronous learning tool is Facebook Live broadcast.

### ***Transactional Distance Theory***

Moore (1997) proposed that the separation between teachers and students in an online learning environment leads to communication and psychological gap called a transactional distance. It involves "teacher-learner relationships that exist when learners and instructors are separated by space and/ or by time" (Moore, 1997, p.22). There are three clusters.

Firstly, *dialogue* means an interaction between teachers and students, between students and content, and among students themselves (Ustati & Hassan, 2013). Dialogue involves verbal messages, ideas, and actions. It minimizes a transactional distance. The ways teachers promote dialogues include expressing enthusiasm, establishing rapport, facilitating practice, providing feedback, and offering supports (Burgess, 2006). The more a teacher interacts with students, the more their relationship is strengthened (Pennings et al., 2016).

Secondly, *structure* refers to the flexibility of the course (Moore, 1997). It indicates the extent to which the instruction can accommodate learners' inputs, including their preferences, needs, learning styles, and backgrounds. Structure involves lesson organization, content, materials, curriculum, strategies for teaching, and course activities. A live broadcast lesson has a loose structure enabling teachers and students to create dialogues. It reduces a transactional distance (Gorsky & Caspi, 2005).

Thirdly, *learner autonomy* means the extent to which learners can control their learning process, set learning goals, plan their study, and evaluate their learning process (Moore, 1997). It

consists of three elements (Falloon, 2011). First, *independence* means students' ability to design their learning experiences and choose their learning styles. Second, *interdependence* refers to students' ability to take shared responsibilities and actively participate in building a learning community. Third, *reflection* refers to students' ability to observe, evaluate, and understand their learning process.

This study adopts the theory of transactional distance as a conceptual framework for the development of the interactive web-based TOEIC tutoring course. This theory plays a crucial role in helping us understand the nature of online instruction and how it works (Abuhassna & Yahaya, 2018). It provides a helpful guideline for online learning and teaching practices (Garrison, 2000). Transactional distance theory should be incorporated into online courses (Koslow & Piña, 2015). Transactional distance theory focuses on the factors having an influence on interaction and causing a gap in online learning. To bridge the gap, it is necessary to find ways to increase interaction.

### ***Community of Inquiry***

Garrison, Anderson, and Archer (2003) proposed a community of inquiry theory. It serves as a model to promote interaction in online instruction. Therefore, it provides a solution to a transactional distance (Kucuk & Sahin, 2013). According to this theory, Tolu (2010) further explained that a meaningful online learning environment is developed when the interaction is promoted. Teachers employ a learner-centric teaching approach while students proceed with their learning by cooperatively participating in technologically enhanced activities in their learning community. There are three elements.

*Social presence* refers to the ways community members present themselves emotionally and socially as actual people via a communication to develop relationships (Rourke, 2001). It involves self-disclosure, voice tone, facial expression, body language, and eye contact. Open communication and collaboration promote social presence.

*Cognitive presence* refers to the ways community members construct knowledge in a meaningful way (Garrison, 2007). Akyol and Garrison (2011) explained that there are four stages. First, *activation* occurs when teachers and students identify problems together through discussion. Second, *exploration* phase involves understanding problems by gathering and sharing ideas and information. Third, *integration* refers to the construction of meaningful solutions. Fourth, *resolution* involves the application of new knowledge.

*Teaching presence* refers to the roles of teachers to design, organize, facilitate, and direct teaching (Garrison et al., 2003). Arbaugh (2007) pointed out that teachers are responsible for creating effective learning experience and course preparation, which involves teaching approaches, learning materials, and course content. Besides, teachers facilitate the learning process by monitoring students' discussion, encouraging idea sharing, and providing guidance. They also deliver instruction, clarify misunderstandings, and giving feedback.

Community of inquiry theory is included in the theoretical framework of this study. While transactional distance theory emphasizes the factors causing problems about interaction in online

learning, community of inquiry theory focuses on solutions to increase interaction and minimize transactional distance.

### **Methodology**

This study employed a mixed-methods approach. A one-group pre-test and post-test design was employed. It was considered feasible for the context of a tutoring business since a tutor could not randomly select students. The sample included 40 students enrolling on the interactive web-based TOEIC tutoring course of the tutoring institution in Thailand during January and February 2020. They were between 19 and 35 years old. Purposive sampling was adopted. All students were interested in taking the TOEIC test. Students' backgrounds and English language proficiency were varied. Approximately 52.5%, 35%, and 12.5% were full-time employees, full-time university students, and unemployed, respectively. Around 40% had taken the TOEIC test before. Their average score was around 528 out of 990.

The instructional instrument was the interactive web-based TOEIC tutoring course. It was developed based on transactional distance theory and community of inquiry theory. The course was the integration of synchronous and asynchronous instruction and the use of technological tools to promote interaction in online learning. It was a five-week grammar course for TOEIC preparation (January-February 2020). The students were provided with a course roadmap with details about course schedule and activities.

In the asynchronous online part, students watched video lessons on the website around 3-5 hours per week. They could manage their study freely and access lessons anywhere and anytime. The total length of all videos was 20 hours. At the end of each lesson in the coursebook, there were QR codes linking to online exercises on websites. The answer key and detailed explanation were given in a Facebook Live session.

In the synchronous online part, the lesson was delivered via Facebook Live broadcast weekly in a closed Facebook group at the weekend, and it was saved in the group for three days. Each session lasted 1-1.5 hours. The tutor practiced doing exercises together with students. The exercises included the online exercise via QR code in the coursebook and the pop quiz that the students had not seen before.

The Facebook group was a knowledge sharing space where the tutor posted useful materials and organized activities for the students. When students participated in each activity, they were given a star to collect as a point. Those receiving every star would get a big prize (a grammar e-book) when the course finished. The tutor also gave extra rewards i.e., grammar sheets for the students who took part in activities each week. Also, the Facebook group was a communication channel that the tutor used for reminding the students of course activities and weekly schedule. Besides, the students and the tutor could contact each other directly via three applications, including Facebook Messenger, Line, and Instagram. Additionally, the students were encouraged to reflect their learning experience in an online weekly reflective journal.

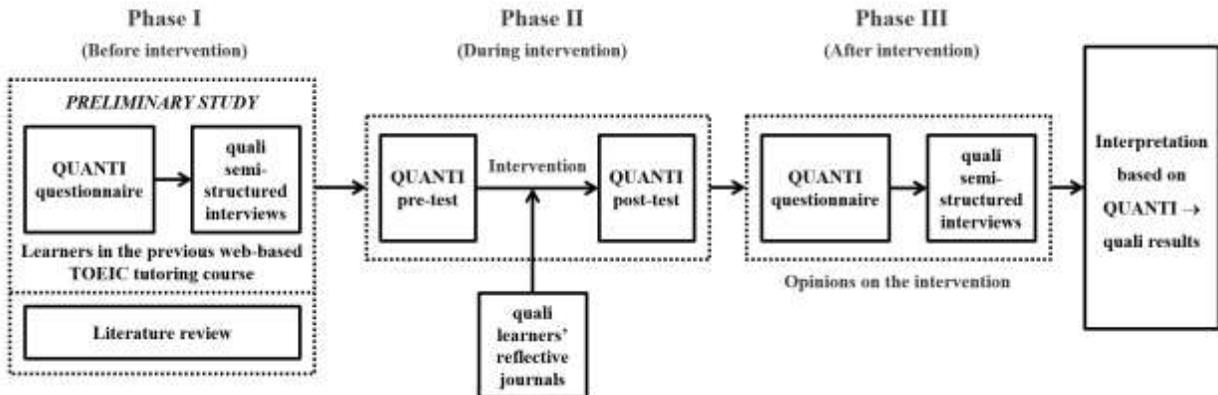


Figure 1. The research design model of this study

To collect data, quantitative and qualitative approaches were adopted. Figure one shows the research design model. Each research instrument was validated by three experts in English language teaching. The quantitative results indicating the effects of the interactive web-based TOEIC tutoring course on students' grammar proficiency were gained from pre-test and post-test scores. The test covered all grammar topics in the course. The test items in the pre-test and the post-test were the same. There were 30 multiple-choice questions. The test format was the same as the official TOEIC test in part five and six. Students were given 20 minutes to complete the tests online. The scores were analyzed by using a paired samples t-Test in SPSS to examine whether there was any statistically significant difference between their pre- and post-test scores. When finishing the course, all students were given the online questionnaire to explore their opinion on the course. The items in the questionnaire based on a five-point Likert scale were about their learning experience and satisfaction. An open-ended section was also included so that students could give feedback and suggestions about the course. Descriptive statistics, including means and standard deviations were used for the analysis of the items that were based on a five-point Likert scale. Data gained from open-ended questions were analyzed by thematic coding.

The qualitative results showing students' opinions on the interactive web-based TOEIC tutoring course were gained from semi-structured interviews and reflective journals. The interviews were conducted with ten students after they completed the questionnaire. A reflective journal was an online report in which students weekly recorded their learning experiences. They were asked about their grammar learning, their participation in course activities, their opinion on lessons and interaction, and their reflection on learning progress and issues they faced. The qualitative data was analyzed by thematic coding.

## Results and Discussion

### *Research question 1- What effect does the interactive web-based TOEIC tutoring course have on students' English grammar proficiency?*

The analysis of the difference between pre-test and post-test scores was carried out to answer this question.

Table 1. Paired-samples *t*-Test of the mean scores of pre-test and post-test

	Pre-test		Post-test		t	P
	Mean	SD	Mean	SD		
English grammar proficiency test	16.78	5.83	20.25	5.43	5.47	.000*

\*  $p < 0.05$

From Table one, the paired-samples *t*-Test showed a statistically significant difference in the mean scores of pre-test (mean = 16.78, SD = 5.83) and post-test (mean = 20.25, SD = 5.43);  $t = 5.47$ ,  $p < 0.05$ . The gain score of the post-test mean was positive.

Moreover, the results from the questionnaire reveal that the students strongly agreed they had seen the development of their grammar skills ( $\bar{x} = 4.68$ ) and gained more confidence in grammar after taking this course ( $\bar{x} = 4.48$ ).

It can be concluded that students' English grammar proficiency improved as a result of the interactive web-based TOEIC tutoring course. This is in line with the findings of the previous research conducted by Obari (2013) and Ishikawa et al. (2015), indicating that the web-based TOEIC preparation courses, along with active participation in e-learning activities, improve students' TOEIC scores. It is consistent with the studies of Siriboon (2008) and Maliwan (2018) that students have a positive attitude towards TOEIC preparation courses and believed the courses could help them get higher scores and have more confidence in taking the test.

### ***Research question 2- What are the opinions of students on the interactive web-based TOEIC tutoring course?***

Data from the questionnaires, semi-structured interviews, and students' reflective journals were analyzed to answer this question.

#### ***Overall Impressions towards the Course***

The results from the questionnaires indicate that the students had a positive attitude towards the interactive web-based TOEIC tutoring course. They felt much satisfied with the interaction in the course ( $\bar{x} = 4.90$ ). They strongly agreed that they gained good experience and was impressed with the course ( $\bar{x} = 4.88$ ). Similarly, the results from the open-ended section in the questionnaires show that the students thought the course was well worth studying.

*This course is extremely impressive. The tutor taught very well and could explain each grammar point clearly. She provided lots of techniques, always encouraged me during the course. I felt this English course is worthwhile and I am glad that I decided to enroll on this course. (S1)*

#### ***Students' Opinions on the Interaction within the Course***

##### ***Teacher-Student Interaction***

The findings from the questionnaires show that the students perceived a high level of teacher-student interaction in this course. The means in this area were very high (above 4.80). The findings from the interviews show that the interaction between the tutor and the students had a positive impact on online learning. It made the students have good feelings and enjoy learning, leading to an increase in their learning motivation. When the tutor regularly followed up students' learning process, they felt active and eager to follow the learning schedule and complete the course in time.

*The interaction within the course made me happy and have fun in learning. I wanted to study more and more because of the encouragement and attention from the tutor. It aroused my enthusiasm for learning. (S2)*

*I had studied many online courses before, but I had never completed any courses! This is the first course that I could finish. The interaction in this course was a great motivation that prompted me to become an active student. When the tutor contacted me during the week for the follow-up, I felt I had to be responsible for my study. I became less lazy and tried to catch up with the lessons. (S3)*

The results were consistent with the previous literature. Interaction can turn passive learners into active learners (Chan & Law, 2007). The finding of the study conducted by Ivankova and Stick (2007) supports that there is a significant correlation between teacher-learner interaction and course completion rates. Students tend to persist in their online courses when teachers provided them with timely and suitable feedbacks, instant supports, and interactive activities.

Moreover, the students were provided with contact channels including Facebook Messenger, Instagram, and Line Application. This allowed them to communicate with the tutor anytime. They strongly agreed that the contact channels in this course were sufficient ( $\bar{x} = 4.95$ ) and convenient ( $\bar{x} = 4.93$ ). Also, results from the interviews show that quick responses and feedback from the tutor increased students' satisfaction.

*It is very convenient. Although we didn't see each other in person, I could ask the tutor all the time. When I was confused or didn't understand anything, I could always contact her directly, and she always responded to me promptly. I felt so good. This was helpful. (S4)*

This accords with the findings of Huang and Hsiao's (2012) and Diaz and Entonado's (2009) studies in that immediate responses and feedback make students more satisfied and motivated. Apart from promoting learners' motivation, instant communication allows teachers to correct students' misunderstanding promptly (Chen & You, 2007). It enhances students' learning experience and, therefore, plays a significant role in their development (Theile, 2003).

Teacher-student interaction also encourages students to freely express their ideas and feel comfortable to engage in discussion.

*Interaction helped a lot. I had greater courage to ask the tutor questions and give answers to the class in the Facebook group and Facebook Live. The tutor was kind and friendly, making me feel that it's okay to give a wrong answer. (S2)*

Interaction strengthens the relationship between the tutor and the students. The more they interact with each other, the more closely their rapport is fostered.

*After the course finished, I will miss the tutor and Facebook Live class. I want to continue studying with her. I appreciated that she genuinely dedicated to her students. Thanks for her care and encouragement. She always provided us with support and advice. She is more than a tutor. I love her. I think I made the right decision to take this course. (S5)*

This result aligns with the finding of the study by Pennings et al. (2016) in that frequent interpersonal interactions strengthen teacher-student relationships. Lee and Ng's (2010) further supported that students feel free and more willing to engage in discussion and share their opinions when they have developed a positive rapport with their teachers. Similar to the findings of this research, the study by Buskist and Saville (2001) revealed that instructor-student rapport increases the enjoyment in learning. The more they contact their teacher, the greater chance they will take the teacher's courses later.

#### *Student-Student Interaction*

Although the students felt that they had an interaction with their coursemates, the level of student-student interaction they perceived was relatively low ( $\bar{x} = 3.93$ ) when compared with teacher-student interaction. Ng's study (2007) shows a similar result. This was because the students did not know their coursemates before.

Despite a low level of interaction among the students, the qualitative findings from the interviews indicate that the students had an impact on one another in many ways.

*I did not join the Facebook Live in the first week. When I watched the saved Live video, there were over a thousand comments, and the coursemates were active in participating in the Facebook Live. Then I realized that it's time for me to focus on the lesson and keep following the pace of the class. (S6)*

*We had a chance to express our ideas promptly as if we were studying together in a real classroom. Studying with other coursemates was enjoyable and fun. Everyone was eager to do the practice exercise and share their answers. (S1)*

*At first, I felt a little bit shy to answer in the Facebook Live class. I preferred to answer after seeing other coursemates' responses to ensure that my answer tended to be correct. After the first few weeks, I gained more confidence and enjoyed taking part in the Facebook Live session. I also learned from my peers' answers. (S7)*

This is in line with the study of Martin and Parker (2014), revealing that text comments enable learners to see their peers' learning progress and evaluate their learning comparatively. Thus, this promotes their motivation in learning. Sims (2003) further points out that students become more participatory and attentive to their studies owing to the interaction with peers. Plus, they tend to share ideas with others leading to a collaborative learning environment.

***The Flexibility of the Course***

The results from the questionnaire show that the students had flexibility in their study in terms of time ( $\bar{x} = 4.35$ ) and location ( $\bar{x} = 4.60$ ). They agreed they could fully manage their studies ( $\bar{x} = 4.45$ ). Most students were full-time employees and university students. Studying online was convenient for them as they could learn anytime and anywhere. From the interviews, students accessed the lessons from various places such as houses, workplaces, universities, or even sky trains. They preferred studying at different periods. Moreover, they could study at their own pace and review the lessons as much as they wanted. This flexibility helped facilitate their learning and increased their satisfaction.

*I think it was much better than studying in the real classroom since I could repeat the lessons that I did not understand. Conversely, when I could not catch up with the lesson in the classroom, it's impossible to re-watch it again. Moreover, if I got something to do and could not attend the class, I would miss that whole lesson. (S1)*

This is affirmed by the study of Kern and Warschauer (2000), stating that online instruction has advantages for learners with busy schedules, career duties, family obligations, and location constraints. Perveen (2016) emphasizes that in an asynchronous learning environment, students tend to learn and understand the lessons better. This is because it allows them to access and re-watch the lessons as much as they want to master the content.

***Learner Autonomy in the Course***

The students agreed that the learning pattern of the course helped them to be more responsible for their learning ( $\bar{x} = 4.53$ ) and have clear learning goals ( $\bar{x} = 4.65$ ). The course activities with rewards increased their learning motivation ( $\bar{x} = 4.75$ ). In line with that, qualitative results indicate that the factors effectively motivating students included the course roadmap, Facebook Live, and course activities with rewards.

*The course roadmap was helpful because I knew what to study that week and how long I should spend time on each lesson. I tried to manage my study time to follow the guideline. When I could complete all the lessons in advance, I felt proud of myself. (S2)*

*What kept me motivated in learning was Facebook Live. Sometimes when I was busy during the week, I would watch all recorded video lessons for one day so that I could catch up on the lessons before Facebook Live. (S8)*

*I liked the star collection activity. I wanted a big reward. In the final week, I left the conference earlier so that I could join the Facebook Live and get a star. Also, it was the last Facebook Live, so I did not want to miss it. I was responsible for my study since the beginning. So, I should try my best to complete this course fully. (S4)*

In line with that, Slattery and Carlson (2005) shed light on the importance of course syllabus by suggesting that learners often rely on a syllabus, and it helps them allocate their time more effectively. Furthermore, the results of the study by Chanseawrassamee (2012) supported that adult learner has a positive attitude towards games and rewards which motivate them to learn more enthusiastically. English book was ranked first as the reward that Thai adult learners in his study wanted the most.

### ***Problems the Students Faced in the Course***

Regarding the results from students' reflective journals and the interviews, the main issue considered as an obstacle for learning was time management. As most students either worked or studied full-time, they had to be responsible for their job or their university study. As a result, some of them did not have enough time to study. The result from the questionnaires indicates that although the students agreed that this course helped them to have more discipline in learning, the mean score (4.17) was relatively lower than those of the other statements in the questionnaire.

*I work as a nurse. When I had a night shift, I could not join the Facebook Live. My job is always busy, so I had difficulty in managing my study time. (S9)*

*In the second and third weeks, I could not complete the lessons and did not do online exercises because I had exams at the university. I felt nervous and afraid that I couldn't follow the course schedule and other coursemates. (S10)*

This follows the idea proposed by Jun (2005) that as adult learners have many roles in their lives, the time constraint is their main barrier for learning. This could intervene in their learning progress (Zembylas, 2008). Online learning, which requires a high degree of self-discipline, could be challenging for them (Cercone, 2008). Whipp and Chiarelli (2004) suggest that self-regulation should be promoted through goal setting, planning, help-seeking (from teachers and peers), and self-reflection to deal with this issue.

Online learning plays an increasingly significant role in today's education. The COVID-19 has resulted in a sudden shift from the classroom to digital platforms. Interaction is a challenge for educators to find ways to maintain it in order to engage students online and facilitate effective learning. This study fills the literary gap by providing a guideline to incorporate interaction into online learning under the context of both asynchronous and synchronous instruction. A mixed-methods research approach gave an insight into what and how the online interaction affected students' grammar proficiency. The findings confirm that interaction increased students' satisfaction. Teachers should actively promote interaction by regularly following up students' learning progress, organizing interactive activities, giving timely responses, offering support and encouragement, and providing adequate contact channels. These approaches could arouse students' enthusiasm, make them enjoy learning, and motivate them to study. In online learning, time management and motivation to keep learning could be the issues for students, leading to a low completion rate. This study suggests ways to deal with it by promoting learner autonomy through a course roadmap, activities, and rewards. Active learning, along with teacher's support, could help students improve English grammar proficiency. The teaching model of this study can be applied to not only English courses but also other courses to promote interaction in online learning.

### **Conclusion**

This study examines the effects of the interactive web-based TOEIC tutoring course on students' English grammar proficiency. The results indicate that the students significantly improved their grammar proficiency after taking the course. They had a positive attitude towards the course. Online learning provided great flexibility for students, as they could learn anywhere and anytime. It is further suggested that the more contact channels, the higher level of students'

satisfaction. The communication between students and teachers helps strengthen their rapport and leads to learning motivation. Teachers play a vital role in facilitating an active learning environment. Their encouragement, support, and guidance positively affect students' learning progress. Besides, as online learning requires a high degree of self-regulation, teachers should not only follow up learning progress regularly but also develop course roadmap to help learners better manage their time. Plus, rewards can be offered to encourage students to become more active in learning.

### Recommendations for Further Studies

This research was conducted with one group of participants, and the sample size is small. It is recommended that future studies be done with a greater number of participants to gain richer data. Additionally, data collection took place within a short period. It would be interesting if future studies could investigate the long-term effect of an interactive web-based course on students' performance.

### About the Authors

**Orabudh Mayanondha** is a Ph.D. candidate at Language Institute of Thammasat University in Thailand majoring in English Language Teaching. Her research interests include web-based instruction, technology in teaching, and grammar instruction. <https://orcid.org/0000-0002-3686-2337>

Assistant Professor **Kittitouch Soontornwipast**, Ed.D. is a full-time lecturer at Language Institute of Thammasat University, Thailand. His research interests include teacher training, instructional media, action research for English teachers, and teaching methodology. <http://orcid.org/0000-0002-0461-7775>

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