

# **Development of a Blended English Teaching Model Using Online Media**

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***Khanittha Chetupon***

Language Institute, Nakhon Pathom Rajabhat University

85 Malaiman Road, Muang, Nakhon Pathom, Thailand 73000

Email: kanet6781@gmail.com

## **Abstract**

When a technological program is implemented in the classroom, only one online media is typically used. In this current project, however, different types of cyber media, namely *Google Classroom, Google Forms, Kahoot, Padlet, and Quizizz*, were all blended into a single model to make the most of various electronic tools toward teaching English to university students. To evaluate the efficiency and effectiveness of the developed model, two measurements were performed. First, the efficiency criteria were determined at E1/E2 = 75/75, with an efficiency value of 77.48/75.23. Second, the effectiveness and satisfaction of the model were evaluated based on student achievements and attitudes toward the model. In assessing achievement, based on the purposive sampling method, 29 students were recruited. In the pretest and posttest design, the students' pretest score ( $\bar{X} = 12.34$ ,  $SD = 2.49$ ) and posttest score ( $\bar{X} = 22.68$ ,  $SD = 3.77$ ) showed the posttest score significantly higher than the pretest. Regarding satisfaction, results from a questionnaire revealed that the participants were satisfied at the highest level, and that the model encouraged the learners to be more active and creative in the classroom.

**Keywords:** Blended learning, Educational technology, Online learning, Online media, English teaching model

## **Introduction**

Currently, the world has entered the digital age, which is driven by technology using intelligent devices. In the 4.0 era, technology has progressed and developed rapidly, affecting human beings in every area of life, and education is no exception. As world trends change, Thai education also needs to be adapted accordingly. For this reason, the application of technology in educational management is widely popular. Teachers are trying to integrate various up-to-date technologies and audio-visual aids to facilitate teaching and learning to promote and provide students with unlimited access to information sources, news and knowledge from anywhere, at any time.

Hence, technology becomes a paramount key to facilitate teaching and learning management (Eady & Lockyer, 2013). It enables teachers to adapt classroom activities and it continues to grow in importance as a tool to enhance the language learning process (Ahmadi, 2018). Thus, educational technologies, especially online media, are widely used in today's classrooms. Previous studies have investigated the impact of using online media in teaching management and have confirmed that they could affect student achievement. Baig (2011) stated that student achievement is improved when learning through an online classroom because online learning effectively removes geographical barriers (anywhere learning). In addition, using digital media positively in education also helps improve students' academic performance (Sivakumar, 2020).

Recent years have witnessed an increase in using online media in classrooms where a variety of online media have been applied. Osman (2017) studied the impact of the Google Classroom application on the teaching efficiency of college students. Their findings showed

that Google Classroom impacted the learning achievement of the experimental group, which was in line with Putri and Rummyeni (2017). Haris, Yunus and Badusah (2017) carried research on the effectiveness of using Padlet in the ESL classroom. They indicated that the application of Padlet is effective in enhancing student performance in language learning. Not only does Padlet affect academic achievement, but it also helps to increase student engagement (Kleinsmith, 2017). In terms of Google Forms, Nguyen, Stehr and Eisenreich (2018) have confirmed that it can be used to improve student participation, engagement, and helps evaluate their learning achievements. They also proposed using Google Forms as a tool to benefit classroom environment and assessment. Other interesting free online platforms are Quizizz and Kahoot. These online tools allow teachers to conduct student-paced formative assessments in a fun and engaging way for students of all ages (Washburn, 2016). Mei, Yan and Adam (2018), through implementing Quizizz as a game-based learning tool in their classroom, found that all students were very active in answering questions, and more concentrated on the topic. This educational app enables students to participate in fun multiplayer class activities. After doing in-class exercises using Quizizz, the students report that this app brings a positive impact on their learning experience (Zhao, 2019). Spotighting the popular online game, Kahoot, this educational game was employed in many research studies, where the results have also shown that Kahoot had positive impacts on the students' academic performance, and enriched the quality of student learning in the classroom, with the highest influence reported on classroom dynamics, engagement, motivation and improved learning experience (Plump & LaRosa, 2017; Licorish, Owen, Daniel & George, 2018; Putri & Rummyeni (2017); Kaur & Nadarajan, 2020).

In Thailand, educational technology has had a significant influence on education as well, as in other countries around the world. It can transform the way that education is delivered and opens up a new pedagogy (Webber, 2003 as cited in Deerajviset, 2014).

Moreover, the use of educational technology can also help solve language teaching problems because it enables improved student motivation, which is the most powerful and influential determining factors in the success of second language learning (Jung, 2011; Kitjaroonchai, 2012 as cited in Polrak, 2019). For this reason, various online tools are employed in enhancing effective teaching in Thailand, especially in teaching English.

Google Classroom is widely used as an instructional tool in delivering knowledge, lessons and learning activities. Thippimon (2018) and Thongphan (2020) employed Google Classroom in their studies. Their findings have revealed that learning achievement after learning through a prepared learning system was higher, and these students were most satisfied with the teaching style. In terms of digital formative assessment tools such as Google Forms, Quizizz and Kahoot, Aramruangsakul (2018), Ounlamai and Boonprajak (2019) used the Kahoot program in enhancing students' learning achievement in Mathematics and the English language. Students perceived the use of Kahoot as highly beneficial in all aspects and it helped improve students' learning achievement. Chaiyo and Nokham (2017) employed Kahoot, Quizizz, and Google Forms in an engineering classroom to enhance student motivation, engagement and learning outcomes. They stated that Kahoot and Quizizz provided a lot of positives over Google Forms when used in the classroom.

Many research in the past only implemented one or some online tools in their studies. The results reflected the beneficial effects on both stimulating student motivation and enhancing academic performance. If the aforementioned online media can be used in effective teaching and learning, then why do not we mix them to increase the efficiency of teaching and learning management? To fill this gap, the application of various educational online tools in English teaching was used as instruments in this research. Several online media, such as *Google Classroom*, *Google Forms*, *Kahoot*, *Padlet* and *Quizizz* were selected to be the research instruments. Each type of online media was carefully selected to fit the

style of each learning activity. Then, the prepared online activities were organized according to the lesson plan to obtain a blended English teaching model by using online media.

## **Literature Review**

This section reviews two main concepts, including the blended learning approach and its efficiency.

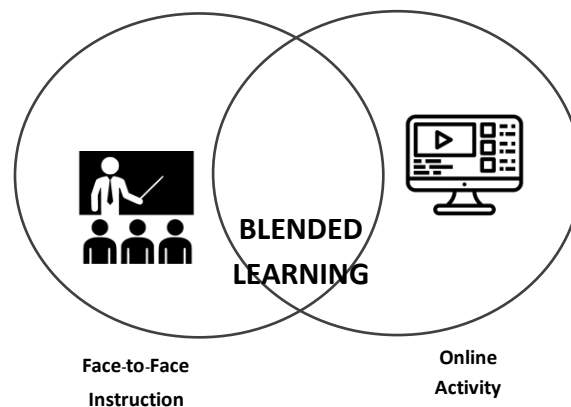
### ***Definition of Blended Learning***

The term blended learning is used broadly, and the review of the definition revealed that most of the definitions point out a combination of teaching methods. Garrison and Vaughan (2008) explain that it is an educational approach that combines face-to-face and online learning experiences. Graham (2006) defines blended learning as a learning system combining face-to-face instruction with computer-mediated instruction. This is consistent with Bernath's (2012) definition: "blended learning means a learning program that uses a combination of electronic media, or E-learning, with classroom teaching." As Bersin (2004) states, the term blended learning is used to specify a more balanced approach applying a combination of different media and teaching methodologies to accomplish successful instruction.

In terms of contents, Picciano (2009) highlights that this teaching model is an integration of traditional classroom online activities, where a portion of face-to-face time is replaced by online activities. To facilitate implementation, Sloan Consortium (2007) suggests that the proportion of the content delivered online should be 30 to 79 percent. Similarly, Evergreen Education Group (2011), as stated by Graham (2013), set a threshold of 30 percent of online content for an environment to be considered blended. Kemp and Grieve (2014) conclude that blended learning is a pedagogical approach that combines face-to-face interaction and online activities in teaching and learning management.

**Figure 1**

*A blended Learning Model*



### ***Benefits of Blended Learning***

The key reason for the benefits of blended learning is that this teaching approach brings the traditional way of teaching to meet up-to-date instruction with a perfect combination of course content and technology availability. While face-to-face instruction allows learners and teachers to face each other in person, discuss ideas and share experiences in the classroom, online learning supports a much broader provision of learning materials, such as actual examples, lively exercises, as well as exciting online activities.

In considering the effectiveness of face-to-face instruction and online instruction, each instructional mode has its own strengths and limitations. Reisetter, LaPointe and Korcuska (2007) examined whether online learners and face-to-face learners are similarly satisfactory. The results showed that both learning modes scored equally with regard to learning achievement and satisfaction, even though for each learning style, learners had completely different learning experiences. Díaz and Entonado (2009) also reflected that the face-to-face interaction between teachers and students can be more efficacious than with online students. Therefore, combining the strengths of both teaching models in the classroom might be another good strategy to enhance the quality of teaching and learning management.

In terms of benefits for the professional development of teachers, blended learning allows instructors more approaches and choices when designing instruction (Singh, 2003). Blended learning also offers teachers much more flexibility than face-to-face classes. This teaching model can either reduce or remove the barriers of time and location. (Brysch, 2020).

In terms of students' learning experiences, this teaching method provides students with more independence, with easier access to educational materials as confirmed by Szadziawska and Kujawski (2017). Students can access helpful online material any time from any location (Hunt, 2016). They are able to use their smartphones or other digital devices to facilitate their studies, and this learning style also allows them to receive instant feedback on their work (Rosell-Aguilar, 2018).

In reference to learning achievement and satisfaction, Hesse (2017) and Wuensch, Aziz, Ozan, Kishore and Tabrizi (2008) support the findings that student engagement, student achievement, and positive student perceptions of learning increase when blended learning is used. Thus, blended learning is a more effective and beneficial learning method for today's technology driven world.

### ***Implementation***

This approach can be implemented in many ways within a wide variety of contexts. Horn and Staker (2011) suggest six models of blended learning: 1) face-to-face driver model, where course contents are taught in person to a group of students in the classroom; 2) rotation model, where students rotate between online learning and the physical classroom; 3) flex model, where the content is delivered primarily online and students move on an individually customized schedule while the teacher provides face-to-face support as needed through small group discussion or group project; 4) online labs, where students attend a class with total online educational delivery for the entire course; 5) self-blended model, where students take one or more online courses to supplement traditional courses; and 6) online driver, where

students can decide where they would like to learn and receive all instructions and materials through virtual channels.

On the other hand, Watson (2008) suggests seven categories of blended learning: 1) full online curriculum with all learning done online; 2) full online curriculum with options for face-to-face instruction, but not required; 3) most or full online curriculum with select days required in the classroom; 4) most or full online curriculum in the classroom where students meet every day; 5) classroom instruction with significant, required online components that extend learning beyond the classroom and beyond the school day; 6) classroom instruction integrating online resources, but limited or no requirements for students to be online; and 7) traditional face-to-face setting with few or no online resources.

From the perspective of a blended learning management level, Graham (2006) categorizes the levels of blended learning into four different levels in which blended learning can occur including the activity level, the course level, the program level and the institutional level. On the first two levels, the combination options can be determined by the instructor. At the program and institutional levels, the combinations can be determined by the instructors and administrators (Caner, 2012).

However, each suggested model has a different proportion of online learning depending on the course content and learner's readiness and facilities. In this study, instruction takes place in the classroom. The content and activities are delivered online and the proportion of face-to-face time and online delivery will be 50/50 percent. Classroom activities are still required to discuss the course content, practice students' skills, and present students' projects.

## **Research Questions**

1. How effective is the developed English teaching model?
2. How does the blended English teaching model using online media affect students in



terms of learning achievement?

3. How does the blended English teaching model using online media affect students in terms of satisfaction towards the innovations?

## **Methodology**

### ***Research Instruments***

#### **1) Pretest-posttest**

This study employed a one group pretest-posttest design to measure student learning achievement after learning through the designed model. The prototype test consisted of 60 items and the test was tried out on 30 non-target students. The formula KR-20 was used to determine internal consistency of measurements with dichotomous choices. The analysis results showed that 30 items met the criteria, with the selected items in the range of 0.20-0.80 on the difficulty index (P), with discrimination index (R) greater than 0.20. In terms of reliability, Fraenkel and Wallen (1996) state that the reliability of items is acceptable if the alpha is within 0.70 and 0.99. The reliability of the designed test measured by KR-20 was 0.93. Therefore, the test is acceptable according to the defined criteria.

#### **2) A blended English teaching model using online media**

The model was designed to motivate students to learn the course content, and to improve their English ability and digital literacy. The teaching materials used in this model include a supplementary document and a lesson plan that integrated online media in exercises and activities in each lesson. The lessons were designed based on a blended learning framework. After designing the teaching materials, they were evaluated using the index of item-objective congruence (IOC) by three experts in the field of English language teaching. The content validity of each lesson plan ranged from 0.80-1.00, and the reliability of total issue was 0.77, similar to the validity of the teaching materials.

### 3) Questionnaire

A questionnaire was employed to determine student satisfaction and their attitude toward learning through the model. The questionnaire consists of 5 parts: 1) content; 2) design of online lesson; 3) online activities; 4) knowledge acquisition; and 5) benefits. Each part was created based on a 5-point Likert scale. The questionnaire was tried out on 20 non-target students and was checked for the index of item-objective congruence (IOC) by three experts.

The items that had scores lower than 0.5 were revised and those with scores higher than or equal to 0.5 were retained. Then, the reliability of the questionnaire was validated with Cronbach's coefficient alpha and the result revealed a value of 0.92. The alpha value was therefore determined to be strong (0.91–0.93) according to Taber's (2018) description, where an alpha value of 0.7 or higher indicates acceptable.

### ***Research Methodology***

This was a quasi-experimental study undertaken at Nakhon Pathom Rajabhat University, Thailand. The population for this study was 103 students who were enrolled in English for Specific Purposes (ESP) in the second semester of the academic year 2019. Then 29 participants were selected based on the purposive sampling method. They were the students who enrolled in English for Industrial Technology 2 at the Language Institute in the specified semester. The procedures of conducting this study were divided into two phases: The first phase was the development of the English teaching model integrating online media, and the second phase consisted of the implementation of the developed model.

In the first phase, development of the model was carried out using the following steps based on ADDIE model:

**Step 1. Analysis.** In this step, the previous teaching experiences, difficulties, and instructional problems found were listed. The two significant issues found were the students'

English abilities and teaching methodology. Then, there was getting to know student characteristics. Students' thoughts, feelings and attitudes generally determine their level of interest in learning and participation in class (Walton-Fisette, 2010). Therefore, the factors mentioned above were analyzed in order to determine a theme for the contents and to meet the students' level of English usage and student needs.

**Step 2. Design.** The basic concepts, theoretical framework and related documents were explored. Then, the course description and course objectives were identified to outline the content and design the teaching strategies, delivery format and learning activities.

**Step 3. Development.** In this step a lesson plan and a prototype of teaching materials were developed. Singapore Management University (2019) and Milkova (2020) suggest three key components in preparing an effective lesson plan: 1) learning objectives; 2) teaching/learning activities; and 3) assessment of student's comprehension. Yongyuthwichai (2003) states that a good lesson plan requires learning activities and proper teaching techniques in order to motivate students in participating and performing activities. To come up with an effective lesson plan, the design was formulated by blending different types of online media into learning activities. The criteria for selecting an online platform was determined by the characteristics of the digital media that corresponded to the style of each activity, as well as ease of use and being free of charge.

**Step 4. Implementation.** This forth step is about preparing an environment where a course developed can be delivered to learners. In this step, learners begin to see the content in their learning environment. Evaluation and detailed tracking is done to analyze if learning objectives are being met by both the instructor and learner (*ADDIE model*, n.d.). In this study, it is typically done online through Google Classroom.

**Step 5: Evaluation.** The prototypes were evaluated and rated on the index of item-objective congruence (IOC). Subsequently, the results and feedback were sent back for

revision. Then, a lesson plan and the instructional instruments were tried out with non-target students in the second semester of the academic year 2018 as a pilot study before using in the real experiment. The validity of the lesson plans and the designed teaching materials are shown in the research instruments. In addition, all steps of this model were also evaluated to reflect the effectiveness of each process in the formative phase and at the end, the summative test was applied to determine if the teaching reaches the desired outcome.

The second phase, implementation of the developed model, was carried using the following steps:

**Step 1: Introduction.** The introduction provides interest and motivation for the students; it focuses students' attention to the lesson. In this step, warm-up activities were typically used. The activities consisted of short, fun online games to stimulate students' readiness and to recall their prior knowledge connecting to the learning topic. The introduction lasts 15 – 30 minutes, and the primary online platforms used were Kahoot and Google Forms.

**Step 2: Presentation.** A variety of teaching methods, including lectures, activities and others, were used to present the new content (Singapore Management University, 2019). The lessons consisted of six units with a teaching duration of 15 weeks. The contents focused on using English for communication in an industrial context related to the students' educational field, and the prepared lessons were delivered online through Google Classroom.

**Step 3: Practice.** Students were prompted to apply the knowledge and skills they learned to perform individual exercises or group activities. The activities were developed on free online platforms like Padlet, Quizizz, Jeopardy and Google Forms, and the designed activities were delivered online through Google Classroom.

**Step 4: Evaluation.** This step provided students with the opportunity to demonstrate and practice the knowledge and skills articulated in the learning objectives. To check students' learning performance, online exercises, online activities, and online tests were developed through Google Forms and Quizizz. However, in-class activities like role playing, pair work or group work were still required. After students finish and submit their tasks, they can see how well they've done, and they will also receive positive feedback from the instructor, both individually and through online comments and in-class discussion.

**Step 5: Application.** After the teacher evaluates a student's learning performance in the previous step, students are provided with activities to apply their knowledge correctly in "real life" situations (Henrichsen, Smith & Baker, 1997, p.15). In this step, students were encouraged to apply the knowledge and skills they learned by setting them in situations and having them brainstorm to solve a given problem or giving them a task to complete during the semester. By the end of the lesson, a DIY project was employed where students created their own project by using reuse materials. Students were required to present their projects in the English language. Presentations lasted 10-15 minutes, and the details included name of the project, equipment, process, budget and usage. As an English teacher, the goal of English teaching is not just for students to pass the exam, but to be competent in English communication (Strauss, 2015).

### ***Data Collection and Analysis***

The data collection and analysis process were implemented as follows:

1) To measure the efficiency of the designed model

To measure the efficiency of the model, the E1/E2 formula developed by Brahmawong (1978) was employed. The participants were required to learn English through the developed model for 15 weeks. During the semester, they were assigned to complete the six-unit exercises, and the score of each exercise was collected throughout the semester. The total

score of all participants was used to measure the efficiency of the process (E1), and at the end of the course students were given a posttest to measure the efficiency of the product (E2).

2) To evaluate the student achievement after learning through the instructional model

The participants were required to do an online pretest through Google Forms at the beginning of the semester and an online posttest was applied at the end. Then, the two sets of scores were tested by a T-test in the SPSS program. In this procedure, a paired samples statistics were applied to compare the pretest-posttest scores, where the output displayed the samples size (N), mean ( $\bar{X}$ ), standard deviation (S.D) and standard error with the minimum and maximum values.

3) To study student satisfaction towards the innovation

At the end of the semester, the questionnaire was submitted online through Google Forms to collect qualitative data from the 29 participants. The collected data was analyzed and descriptive statistics were performed. The results show the mean values ( ) and standard deviation (S.D) of each set of the questions and overall. The answers to the survey questions were analyzed and interpreted according to the five-point Likert scale as shown in Table 1.

**Table 1**

*Five-point Likert Scale Interpretation*

Likert Scale	Score Ranges	Sentiment Level	Interpretation
1	1.00-1.80	Strongly disagree	Very low
2	1.81-2.60	Disagree	Low
3	2.61-3.40	Neutral	Average
4	3.41-4.20	Agree	High
5	4.21-5.00	Strongly agree	Very high

## **Results and Discussion**

This section presents the findings based on the research questions as follows:

### ***1) How effective was the developed English teaching model?***

**Table 2**

*Efficiency of a Blended English Teaching Model Using Online Media*

Process (E1)	Output (E2)	E1 / E2 (75/75)
77.48	75.23	77.48/75.23

To ensure the efficiency of the developed model, the instructional package was tested based on the E1/E2 standard introduced by Brahmawong (1978). The results showed that the efficiency of the developed model corresponded to the value determined at  $E1/E2 = 75/75$ , with a value of 77.48/75.23. The results revealed that students were able to complete all exercises correctly 77.48%, thus reflecting the efficacy of the teaching and learning process in E1. The E2 value showed that students could answer the questions correctly 75.25%, which reflected their knowledge and ability after learning through the designed model. Thus, it can be claimed that this English teaching model is effective according to the prescribed criterion.

To examine the effectiveness of the instructional package, the E1/E2 formula has been widely employed. The criteria for E1/E2 are usually set at 90/90 or 85/85 for the cognitive domain and 80/80 or 75/75 for the affective domain and psychomotor skills (Brahmawong (1973), as cited in Educational Research and Innovation Development Institute (2017). Therefore, the content of this developed model was considered to be a process for developing English language ability as well as changing learners' behaviors and attitudes, which takes time; so the acceptable criterion of E1/E2 should be set at 75/75. This is consistent with

Surakhai and Pinyonattagarn (2014); Santhuenkeaw, Tontiwongwanich and Pimdee (2019), who developed instructional tools to improve English teaching and their students' English ability. These design tools were evaluated by an E1/E2 standard set at 75/75. However, there was no evidence to indicate that English language teaching materials should be set at this E1/E2 level. Some researchers set E1/E2 at 70/70, such as Meksophawannagul and Hiranburana (2013), who developed an online case-based collaborative learning (CBCL) module for a Business English Communication course. Some researchers set the E1/E2 level at 80/80, such as Chetsadanuwat (2016), who developed self-instructional materials to enhance English listening skills for engineering students.

From the discussion above, it can be concluded that such criterion setting requires consideration of the nature of the subject matter, course objectives and student ability. Setting a threshold that is too low does not challenge learners or teachers. As for setting criterion too high, learners cannot reach the course objectives, nor can a developed teaching tool reach the effectiveness index.

***2) How does the blended English teaching model using online media affect students in terms of learning achievement?***

**Table 3**

*Differences between the Pretest and Posttest Scores*

Pretest		Posttest		Paired t-test	df	sig
$\bar{X}$	S.D.	$\bar{X}$	S.D.			
12.34	2.49	22.68	3.77	-18.58	28	0.000

Students' learning achievement after learning through the developed model was significantly higher than before learning at the .05 level. A comparison of the pretest score



( $\bar{X} = 12.34$ ,  $SD = 2.49$ ) and the posttest score ( $\bar{X} = 22.68$ ,  $SD = 3.77$ ), showed that the students had higher scores after learning through the instructional package.

The findings revealed that the students' learning achievement after the learning were significantly higher than before learning through the model. This finding is consistent with previous research results, which indicated that student achievement when taught through an online classroom was better than traditional approaches (Baig, 2011). Evan (2019) stated in the Project Tomorrow report that digital educational tools had helped students achieve better grades and test scores. This is because the integration of technology in the classroom helps students to practice more. Dennis (2012) confirmed that students could practice and review exercises and activities by self-learning through the system provided. In addition, students could also independently access more information outside the classroom, as well as examples of exercises on the online network.

However, every coin has two sides. Using technology in the classroom has both benefits and disadvantages. From observing learning behavior, it was found that some students used an online translator all the time. Even though students were allowed to use an online dictionary when faced with new vocabulary, they were also required to apply the knowledge they had learned to produce their own work by themselves. Porter (2019) shared the idea on ACTFL Language Educators' Blog that using an online translator did not meet the goal of learning a language better, but rather to try to get a certain grade on an assignment, and it might not reflect on the real ability of learners.

A close investigation was carried out in the first two to three weeks of this experiment. During the first part of teaching, all participants were asked to produce their work themselves, but there were some students who still used an online translator. They reasoned that they did not know the terms and were unable to arrange them into sentences. When we cannot stop students from using a translation tool, O'Neill (2019) suggested that we should

train them how to responsibly use of online dictionaries and translators for second language learning.

***3) How does the blended English teaching model using online media affect students in terms of satisfaction towards the innovations?***

**Table 4**

*Mean and Standard Deviation for Each Satisfaction Questionnaire Item*

Item	Mean	Standard Deviation	Interpretation	Rank
Contents	4.69	0.50	Very high	3
Pattern of online lessons	4.68	0.53	Very high	4
Online learning activities	4.74	0.51	Very high	2
Knowledge acquisition	4.76	0.48	Very high	1
Benefits	4.66	0.51	Very high	5
Overall	4.70	0.50	Very high	

As seen in Table 4, the students expressed their overall satisfaction towards learning through this innovation at very high level ( $\bar{X} = 4.70$ ,  $SD = 0.50$ ). In particular, the results found that satisfaction was at very high levels in all aspects, and that knowledge acquisition was the highest aspect ( $\bar{X} = 4.76$ ,  $S.D. = 0.48$ ), followed by online learning activities ( $\bar{X} = 4.74$ ,  $S.D. = 0.51$ ) and content ( $\bar{X} = 4.69$ ,  $S.D. = 0.50$ ).

The results clearly illustrated that the participants were satisfied at a very high level in all aspects. This showed that students welcomed educational technologies and were ready to learn and progress through using them. Technology helps them in adapting their own learning processes and also helps them access a lot of information that teachers could not provide in the classroom (Gilakjani, 2017). When considered individually, it was found that the

maximum average value was for knowledge acquisition. This finding reflected a correlation between student satisfaction and their learning achievement scores. The findings of this study were supported by Dhaqane and Afrah (2016), who found that satisfaction promotes both academic achievement and retention of the student. In addition, online applications also helped create an independent learning atmosphere, which made students feel comfortable and positively motivated them to study English (Dennis, 2012).

In terms of minimum average values, participants were more satisfied and interested in the instructional package compared to the benefits they would otherwise receive from using technology in the classroom only. This could be because this experiment was conducted prior to the coronavirus epidemic. But after 2020, technology in education, especially online learning, has become essential for educational institutions in changing face-to-face instruction to distance learning (Lamba, 2020).

## **Conclusion**

The findings affirmed that a blended English teaching model affects students in both learning achievement and satisfaction towards the innovation. The integration of online activities in the classroom could help students improve their learning outcomes. In terms of satisfaction, students enjoyed participating in all learning activities throughout the semester. Therefore, they expressed satisfaction towards learning using this innovation at a very high level in all aspects, especially knowledge acquisition. In addition, this teaching model promotes students' digital skills, which are essential for today's world.

## **Limitations of the Study**

Although using digital media in the classroom is effective in teaching and learning management, it still encounters some limitations. This could be due to slow or intermittent internet connections, which were a major problem in this experiment. The low efficiency of an internet network could reduce the effectiveness of a well-designed teaching plan and access to teaching materials. For example, while students were conducting an online exam and the internet signal was suddenly disconnected, students were then required to log in again and start all over. Not only was it a waste of time, but it also wasn't fair for students who had prepared well for a test and they had to encounter such unreliable technology. However, this difficulty was beyond our control. If it is an important test or serious activity that has a big impact on the student's scores, technology readiness and a reliable internet connection must also be carefully considered.

## **Suggestions for Further Study**

In this experiment, it was noted that the teaching model could enable students to open their minds to English and encourage them to eagerly participate in learning activities. Currently, there are many teaching materials provided online. Teachers can easily choose various media appropriate for teaching activities in order to increase the efficiency of teaching and learning management. For further research, it is suggested that studying through a blended instructional package, using social media like *Quora*, *Goodreads*, *Wattpad*, *SoundCloud*, *Bubbly*, *Clubhouse*, will challenge teachers to prepare a more effective teaching plan and open more learning experiences for students in the digital age. In addition, comparing two groups of participants, one experimental and one control group, should be conducted in order to compare students' learning achievement and deeply reflect on the effectiveness of such innovation.

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