

การใช้สื่อประกอบการสอนแบบผสมผสานเพื่อพัฒนาทักษะการออกเสียง  
ภาษาอังกฤษของนักเรียนมัธยมศึกษาปีที่ 3  
AN IMPLEMENTATION OF BLENDED LEARNING INSTRUCTION MEDIA TO  
ENHANCE ENGLISH PRONUNCIATION OF MATHAYOMSUKSA 3 STUDENTS

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### บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อ 1) หาประสิทธิภาพของสื่อประกอบการสอนแบบผสมผสานในการพัฒนาทักษะการออกเสียงของนักเรียนชั้นมัธยมศึกษาตอนต้น 2) เปรียบเทียบผลสัมฤทธิ์ทางการเรียนด้านการออกเสียงของนักเรียนก่อนและหลังการเรียนโดยใช้สื่อประกอบการสอนแบบผสมผสาน และ 3) ศึกษาความพึงพอใจของนักเรียนที่มีต่อสื่อประกอบการสอนแบบผสมผสาน กลุ่มเป้าหมายได้แก่นักเรียนชั้นมัธยมศึกษาปีที่ 3 โรงเรียนอรุณพิทยวิทวิทยาตามจำนวน 50 คน โดยการสุ่มแบบเจาะจง ส่วนเครื่องมือในการวิจัยประกอบด้วยสื่อประกอบการสอนแบบผสมผสานที่ใช้เป็นสื่อเสริมในการเรียนการสอน แบบทดสอบความสามารถในการออกเสียง จำนวน 60 คำ และแบบสอบถามสำหรับวัดความพึงพอใจของนักเรียนที่มีต่อการใช้สื่อประกอบการสอนในการเรียนแบบผสมผสาน และค่าสถิติในการวิเคราะห์ข้อมูล ได้แก่ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐานและการทดสอบค่าทีที่ไม่เป็นอิสระต่อกัน

ผลการวิจัย พบว่า 1) สื่อประกอบการสอนแบบผสมผสานมีประสิทธิภาพ ( $E_1/E_2$ ) เท่ากับ 80.90/80.93 สูงกว่าเกณฑ์ 80/80 2) นักเรียนมีผลสัมฤทธิ์ทางการเรียนด้านการออกเสียงหลังเรียนสูงกว่าก่อนเรียนอย่างมีนัยสำคัญทางสถิติที่ระดับ .01 และ 3) นักเรียนมีความพึงพอใจต่อสื่อประกอบการสอนแบบผสมผสานในระดับสูงมาก (Mean = 4.39, S.D. = 0.76)

**คำสำคัญ:** สื่อประกอบการสอน, การสอนแบบผสมผสาน, ทักษะการออกเสียง, ภาษาอังกฤษ

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## ABSTRACT

The objectives of this study were 1) to assess the efficiency of the blended learning instructional media to enhance English pronunciation ability of junior secondary school students, 2) to compare the English pronunciation ability of the students before and after implementing the constructed instructional media in this blended learning, and 3) to explore the students' satisfaction with the implementation of the instructional media in this blended learning. The participants were 50 Matthayom Suksa 3 students at Arunothai Wittayakom School by applying the purposive sampling method. The research instruments consisted of the constructed instructional media as the supplementary media, a pronunciation ability test with a word list of 60 items, and a questionnaire for measuring the students' satisfaction with the implementation of the instructional media in this blended learning. The statistics for data analysis were mean, standard deviation, and the t-test for dependent sample.

The results revealed that 1) the efficiency of the instructional media ( $E_1/E_2$ ) was 80.90/80.93, which was higher than the standard criteria of 80/80 2) The posttest achievement scores of the students in pronunciation ability were significantly higher than those of the pre-test at a 0.01 level and 3) the overall satisfaction of the students was at the highest level with the mean of 4.39, and the standard deviation of 0.76.

**KEYWORDS:** Instructional Media, Blended Learning, English Pronunciation Ability, English

## Introduction

As the Covid-19 pandemic has spread all around the world, it has become a global public health challenge. The Covid-19 virus can easily transmit from one person to another via not only respiratory transmission, aerosol transmission but also contact transmission. As a consequence, the total number of infected people has dramatically increased from 87,062 people in March 2020 to 29.6 million people in September 2020 (Ritchie et al., 2020). To reduce the chances of being infected or spreading of the Covid-19, physical distancing is one of the key means to lower the risk of it. To limit the spread, the teaching and learning method in the educational system has been changed from on-site classes to online or blended classes. Likewise, schools in Thailand have been temporarily closed due to the state of Emergency Act put in place to curtail the spread of the Covid-19. Such measures have disrupted the normal functioning of schools and universities. Keeping learning alive in such a circumstance is very hard work for learners, teachers and administrators (OECD Policy Responses to Coronavirus, 2020). Therefore, technology becomes an anchor to continue studying and provides education for students who cannot access school as well as social cohesion during the Covid-19 lockdown. The process of shifting the learning system named 'blended learning' is implemented in various styles of teaching all around the world including Thailand. Garrison & Kanuka (2004) defined 'blended learning' as 'a mixed-mode learning' that provides teachers new paths to reach the goal of quality educational opportunities for all. It has become an effective teaching model to improve student learning outcomes (Laher & Boshoff, 2017; Kintu, Zhu & Kagambe, 2017; Nortvig, Peterson, & Balle, 2018; Anthony, 2019). Additionally, blended learning overcomes barriers of time and place which make the classroom more flexible, adaptable, and engaging, compared to

traditional learning methods (Lalima & Dangwal, 2017). Moreover, the implementation of a blended learning model in the classroom can provide students more opportunities to design their own learning experience, not only at their own pace but according to their own interests in online learning activities, individualization, personalization, and relevance (Boelens, De Wever & Voet, 2017). With this model, teachers can tailor their contents in the forms of online instructional media with the integration of digital solutions to accomplish in response to the individual needs of all students. However, implementing this model efficiently requires certain fundamental preparations in all the elements of the teaching-learning process, teacher, student, content designing, and infrastructure (Lalima and Kiran, 2017).

Since English has been playing a crucial role as an international language, which is used as a means of communication all over the world, its role in Thailand has dramatically increased due to the advancement of technology, globalization, and education reform envisaged by the new Thai Constitution. As a consequence, English language skills are in very high demand in today's situations (Arunsirot, 2020). Nevertheless, Thai students' English skills need serious improvement regarding the proficiency rankings of Thailand for non-native English speaking countries (Jareonsettasin, 2018). Compared with the four skills in English language learning, pronunciation is a major concern in learning English because teaching English pronunciation has been overlooked in the basic education curriculum in Thailand (Kaewchum, 2018). Consequently, the inability to pronounce English in a correct way could lead to misunderstanding, miscommunication, and, at times, frustration. According to the root causes of the failure mentioned above, the linguistic distance between the mother tongue and the target language, lack of exposure to English outside the classroom, and lack of qualified instructional media are still the main

factors which have remained unresolved up to now (Sahatsathatsana, 2017; Ulla, 2019). Furthermore, the lack of motivation is another important factor causing low English proficiency among Thai students (Wongsuriya, 2020).

Similarly, the English teaching situation in Arunothai Wittayakom School has been a string of issues waiting to be resolved. In Chiang Dao where the inclusion of ethnic groups has been integrated, the students in the school consist of up to nine different ethnic groups. With language diversity, teaching English, especially pronunciation ability is considered a big burden to the teachers. According to a preliminary survey, overcrowding in the classroom, shortages of English native teachers, a traditional teaching style, lack of qualified instructional media, inappropriate textbooks, and insufficient school facilities are some of the factors contributing to low academic achievements of these students (Head of Academic Affairs, Arunothai Wittayakom, personal communication, March 26, 2020). Furthermore, the lockdown of education institutions due to COVID-19 is another major hurdle that has interrupted not only the students' learning, internal assessments but also the public assessments for qualifications (Burgess and Sievertsen, 2020). This study, thus, was aimed at reducing these negative impacts on the students' pronunciation ability at Arunothai Wittayakom School. Blended learning, therefore, was implemented in the pronunciation classroom in an attempt to fulfill these gaps which have taken a deep root in the Thai educational system as well as the impact of the current pandemic. Consequently, the instructional media used in this blended learning were

constructed to support the students to achieve their own goals in better and correct pronunciation which could help improve pronunciation skills of the students, so that they will be able to communicate in English efficiently.

### Objectives of the Study

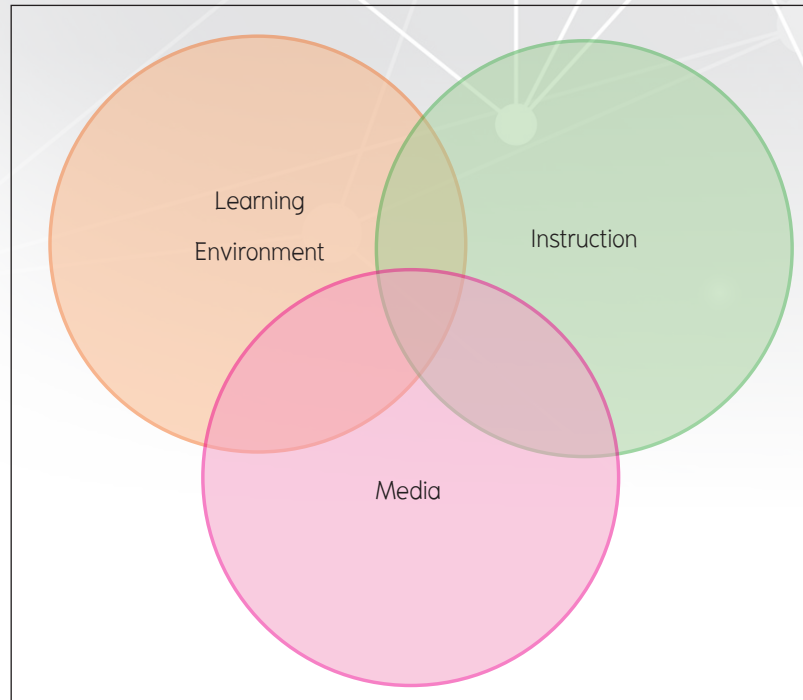
1. To assess the efficiency of the blended learning instructional media to enhance English pronunciation ability of junior secondary school students at Arunothai Wittayakom School
2. To compare the English pronunciation ability of the students before and after implementing the constructed instructional media, and
3. To explore the students' satisfaction towards the implementation of the instructional media in this blended learning

### Literature Review

#### Blended Learning

According to Graham (2006), blended learning is a teaching method that combines face-to-face and online interactions and technologies in the educational system. Since the rise of blended learning is regarded as a solution of the impact of the coronavirus on the education system, the face-to-face interaction provides a needed human touch to the teaching-learning process while the online approach allows the students more opportunities to learn by themselves. Thus, three components of the blended learning model proposed by Kaur (2013) are illustrated in Figure 1.





**Figure 1** Components of Blended Learning

A learning environment component refers to either a synchronous or asynchronous communication. Methods in this domain comprise traditional classrooms, virtual classrooms, live product practice labs, interactive chatrooms, and mentoring. Next, as learning is complex, success requires various kinds of media to meet learners' needs and requirements. The media component is the tools that will expand learners' perspectives through the lens of four categories: managed learning, orchestrated learning, collaborative learning, and authentic learning (McCarthy, 2018). The media-supported blended learning should be designed to maximize student learning, and to provide learners a wide range of new and interesting learning experiences and teaching environments different from the traditional classroom context of education. To achieve this, the use of instructional media is not limited to transforming abstract concepts to become more concrete, interesting, and easier for students (Lalima & Kiran, 2017). Finally, the instructional component refers to any instructional strategies used in the blended learning that help students to achieve their learning objectives.

Such strategies must be appropriately selected to form paths that have proved to be effective in improving students' learning systems within a particular context.

#### **Problems of Students' English Pronunciation in Thailand**

Sahatsathatsana (2017) mentioned the factors affecting English pronunciation ability of Thai learners. Firstly, the differences between the sound systems of the two languages can cause the common problem of learning English pronunciation which leads to not only the difficulties in pronunciation but also the lack of sound discrimination. Secondly, the mother tongue interference is the most influential factor, where interferences or negative transfer from the first language are likely to cause errors in pronunciation of the target language. Thirdly, the motivation is another factor which plays a crucial role in learning language. It influences the need and desire for native-like pronunciation (Wongsuriya, 2020). Therefore, the teacher should encourage learners to speak English outside the classroom and provide

them with activities that enhance their motivation in the classroom (Arber, Weinmann and Blackmore, 2020). Fourthly, the lack of exposure to the English environment affects the students' pronunciation ability. As a consequence, learners living in an English-speaking country or in a community where English is the second language have many more opportunities to listen to and to use the English language. As English is considered a foreign language in Thailand, students lack opportunities to use English in their daily lives. Lastly, the instruction is another important factor

which affects the teaching and learning English to the students. Generally, foreign language instruction focuses on four main areas of English development: listening, speaking, reading, and writing. Consequently, pronunciation instruction has been found neglected in the teaching and learning process in classroom in Thailand. Moreover, English textbooks used in the country are mostly commercial books that are oriented toward western environment that goes far beyond of needs of Thai students (Ulla, 2019).

## A Research Framework

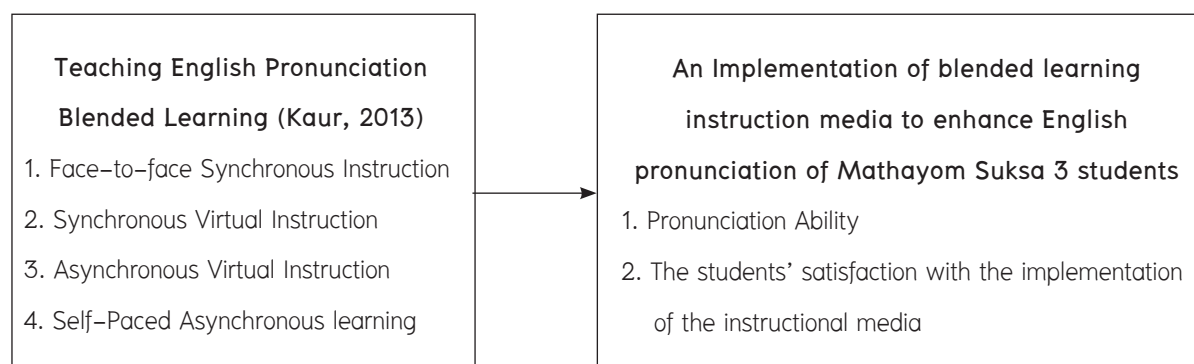


Figure 1 The Research Conceptual Framework

## Research Methodology

### Population

The population consisted of 191 Matthayom Suksa 3 students at Arunothai Wittayakom School in the first semester of the 2020 academic year.

### Sample group

The sample group involved in this classroom action research were 50 Matthayom 3 students at Arunothai Wittayakom School in the first semester of the 2020 academic year. They were selected by applying the purposive sampling method, and the classroom with the largest variety of ethnic groups was chosen.

## Research instruments

1. The constructed instructional media as the supplementary media used in the online classroom.

1.1 An investigation was conducted on the theories and related research about the creation of the instructional media used in the blended learning approach.

1.2 A comparison between English and seven sound systems of the ethnic minority groups was carried out. It was found that ten English phonemes do not exist in the Karen language, eight English phonemes do not exist in the Ahka language, 13 English phonemes do not exist in the Shan language, eight English phonemes do

not exist in the Lahu language, seven English phonemes do not exist in the Lisu language, 11 English phonemes do not exist in the Hmong language, and nine English phonemes do not occur in the Thai language.

1.3 According to the numbers of phonemes mentioned in 1.2, eight lessons were constructed in terms of the places of articulation: Bilabial, Labio-dental, Apico-dental, Apico-Alveolar, Lamino-Postalveolar, Fronto-palatal, Dorso-velar, and Glottal.

1.4 The constructed English pronunciation lessons were validated for their accuracy and appropriateness by three experts in Linguistics before the improvement was carried out in an attempt to better the lesson plans. The mean score of the item-objective congruence (IOC) index rating of the lessons was 0.93, which is at an acceptable level.

1.5 The lesson plans with the implementation of the instructional media were constructed and then were validated by three experts in curriculum and educational technology for their appropriateness, and the recommendations were provided for further improvement before the experiment and data collection. The mean score of the item-objective congruence (IOC) index rating of the lesson plans was 0.90, which is at an acceptable level.

## 2. Pronunciation ability test

The pronunciation ability test in this study was an oral test including the parallel pre-test and post-test. Firstly, the contents were studied. After that, 60 words were chosen in order to measure students' pronunciation ability. Secondly, three experts in linguistics were asked to assess the correctness and appropriateness of the test items. The mean of the pretest and posttest using the index of item objective congruence (IOC) was 0.95. Thirdly, another group of 50 Matthayom Suksa 3 students at Arunothai Wittayakom School were

asked to take the test as a pilot study. The results from the pilot study were analyzed to examine the level of difficulty and discrimination power. The item analysis results for difficulty ( $p$ ) were 0.65, which was an acceptable value, and the discrimination index ( $r$ ) was 0.32, which was an acceptable value and the KR-20 value was at 0.82 which was higher than 0.7. Finally, 60 oral test items were selected to incorporate into the pretest and posttest.





3. The questionnaire for measuring the students' satisfaction with the implementation of the instructional media in this blended learning

A five-point rating scale questionnaire with 12 statements were used to survey the students' satisfaction with the implementation of the instructional media in connection with the instructional media, their advantages, how they could help the accomplishment and accuracy of their pronunciation, and the effectiveness of the media. After that, three specialists were asked to assess the appropriateness of questionnaire items by means of IOC. The mean of the evaluation scores of the questions for the students' questionnaire was 0.95. The t-test for each item was .872. The item with the value between 0.05-1 was accepted. Alpha Coefficient was used to calculate the reliability coefficient value. The value of Cronbach's Alpha Coefficient was .942 which was greater than .07.

## Intervention

This classroom research took place from July to September in 2020, totaling 12 weeks of a classroom session and two weeks of pre-test and post-test administration. As the blended learning was based on Kaur (2013), this pronunciation classroom combined various synchronous and asynchronous elements. The blended learning model used in this study is illustrated in Table 1.

Table 1 The blended learning model used in this study

Face-to-face Synchronous Instruction	Synchronous Virtual Instruction	Asynchronous Virtual Instruction	Self-Paced Asynchronous learning
<ul style="list-style-type: none"> <li>■ Instructor-led classroom training</li> <li>■ Coaching/mentoring</li> </ul>	<ul style="list-style-type: none"> <li>■ Live online class via video conferencing via 'Zoom' with the integration of gamification approach</li> </ul>	<ul style="list-style-type: none"> <li>■ Online Instant Messaging through Line Application</li> </ul>	<ul style="list-style-type: none"> <li>■ Video Clips</li> <li>■ Online tutorials</li> <li>■ Speech to text software</li> <li>■ Online self-assessment</li> <li>■ Augmented Reality technology</li> </ul>
			
<ul style="list-style-type: none"> <li>■ The teacher presents the objectives of the study to the students</li> <li>■ The teacher introduces the sounds and demonstrates how to pronounce each sound step-by-step.</li> <li>■ The teacher gives the students exercises to help them articulate the sounds.</li> </ul>	<ul style="list-style-type: none"> <li>■ The teacher presents each sound in detail to the students through an online class.</li> <li>■ Visual aids are shared with the students to enhance the students' pronunciation.</li> <li>■ The teacher gamifies the tasks to transform the online classroom atmosphere to become more fun, motivating, and engaging.</li> <li>■ The teacher gives students extra points for their participation, engagement, and positive behavior in the class.</li> <li>■ The teacher presents the progress bar and announces the winner</li> </ul>	<ul style="list-style-type: none"> <li>■ The teacher gives the comments on the students' tasks and posts feedback to the students.</li> <li>■ Teacher and students discuss solutions on how to pronounce the sounds accurately.</li> </ul>	<ul style="list-style-type: none"> <li>■ Students review the lessons according to their own pace.</li> <li>■ Students undertake self-assessment quizzes.</li> </ul>



Blended learning implemented in this study was a hybrid of 40-percent traditional learning and 60-percent online learning according to a new normal situation during the Covid-19 outbreak. In the face-to-face instruction, students attended the class in person for the content introduction and wrap up. After the orientation session, the teacher as a facilitator demonstrated how to produce the sound and delivered training to the students and provided them opportunities to practice.

Regarding online learning, synchronous video conferencing with the integration of the gamification approach was used as the main component in online teaching in order to enable the students and the teacher to converse, participate and collaborate in real-time. However, an important obstacle which might lead to the failure in teaching online is the distractions (Guijosa, 2019). Without a teacher-supervised class, the students tended to pay less attention to their online study because they had a greater tendency to multitask. Therefore, the gamification approach which focuses on students' motivation and engagement was integrated into the online learning in this study. The game mechanisms, e.g. points, badges, progress bars, rewards, and competition, were used to allow the teacher to captivate the students' attention as well as to increase their engagement, active learning, motivation, and joy. Additionally, the online instant messaging through Line application allowed the teacher

and the students to communicate with one another out of the classroom. However, the problem of slow internet connectivity and lack of internet access for some areas were the main barriers in online teaching. Self-paced learning in the forms of the online tutorial, video clips, augmented reality technology and speech-to-text software, thus, was provided to the students to review their lessons. Also, online self-assessment enabled the teacher and the students to monitor the progress of the learning process in English pronunciation.

#### **Data collection**

The data collection involves the following steps: (1) the pretest was administered to the participants; (2) the participants were taught with the implementation of blended learning instruction media to enhance their English pronunciation ability; and (3) the participants were asked to take the posttest, and complete the questionnaire in the last session.

#### **Analysis**

The data was statistically analyzed for mean, percentage, standard deviation, and the t-test for dependent sample.

#### **Results**

1. The efficiency of the instructional media used in the blended learning is illustrated in Table 2.



**Table 2** Results of the effectiveness of the learning process (n=50)

Learning Unit	Total scores	Accumulated Scores	Mean	Process Effectiveness ( $E_1$ )
1	50	2033	40.66	81.32
2	50	2037	40.74	81.48
3	50	2011	40.22	80.44
4	50	2029	40.58	81.16
5	50	1989	39.78	79.56
6	50	2020	40.40	80.80
7	50	2021	40.42	80.84
8	50	2040	40.80	81.60
<b>Total</b>	<b>400</b>			<b>80.90</b>

**Table 3** Results of the effectiveness of the performance (n=50)

Total scores	Post-test scores	Mean	Performance Effectiveness ( $E_2$ )
60	2428	48.56	80.93

Table 2 and Table 3 show the results of the efficiency of the constructed instructional media used in this blended learning. Efficiency of cumulative scores ( $E_1$ ) was 80.90 and that of the post-test scores ( $E_2$ ) was 80.93. It could be concluded that the instructional

media had the efficiency of 80.90/80.93, which was higher than the standard criterion of 80/80.

2. The students' scores before and after learning with the instructional media are shown in Table 4.

**Table 4** Dependent sample test of English pronunciation ability

Score	N	Mean	S.D.	t	Sig.
Pre-test	50	6.90	1.09	-160.425**	.00
Post-test	50	48.56	2.56		

\*\* $p \leq .01$

Table 4 revealed that the mean of the pre-test was 6.90 with the standard deviation of 1.09, whereas the mean of the posttest was 48.56 with the standard deviation of 2.56. The finding can be interpreted that, the students' posttest scores were more clustered which indicated that their pronunciation abilities were more similar after implementing the instructional media in

the blended learning. The t-test indicates that there is a significant difference between the pre- and posttest mean scores at a .01 level.

3. An examination of students' satisfaction with the implementation of the instructional media is analyzed as shown in Table 5.

**Table 5** Results of the students' satisfactions with the implementation of the instructional media in the blended learning

Questionnaire items	Mean	S.D.	Levels of Satisfaction
1. The instructional media in the blended learning facilitate and help students to learn better	4.57	0.60	highest
2. The instructional media in the blended learning help students to better understand the contents.	4.62	0.67	highest
3. The instructional media in the blended learning are enjoyable.	4.40	0.81	highest
4. The instructional media in the blended learning allow students to learn at their own pace.	4.31	0.84	highest
5. The instructional media in the blended learning help students to become a fast learner.	4.04	1.01	high
6. The instructional media in the blended learning save time for students to spend on their learning process.	4.17	0.89	high
7. The instructional media in the blended learning help the student become more active.	4.27	0.90	highest
8. The instructional media in the blended learning reduce the language barriers because they present the contents in the forms of animation which is the easiest way to perceive.	4.48	0.81	highest
9. The instructional media in the blended learning help students to imitate sounds from native speakers that ultimately improve their pronunciation ability to become more accurate.	4.61	0.57	highest
10. The instructional media in the blended learning engage students to focus on their learning process.	4.36	0.66	highest
11. The instructional media in the blended learning stimulate the students' inquisitiveness.	4.32	0.79	highest
12. The instructional media in the blended learning provide instant feedback which facilitates the students in their learning experience.	4.47	0.58	highest
<b>Overall</b>	<b>4.39</b>	<b>0.76</b>	<b>highest</b>

Apparently, the overall satisfaction of the students was at the highest level (Mean = 4.39, S.D. = 0.76). With a variety of instructional media used in the blended learning, the satisfaction on the instructional media in the blended learning help students to better understand the contents received the highest level of satisfaction

(Mean = 4.62, S.D = 0.67), followed by the instructional media in the blended learning helping students to imitate sounds from native speakers that ultimately improve their pronunciation ability to become more accurate with the highest level of satisfaction (Mean = 4.61, S.D = 0.57). Furthermore, the lowest level of satisfaction was on

the instructional media in the blended learning being able to help students to become a fast learner with the high level of satisfaction (Mean = 4.04, S.D = 1.01).

### Research Conclusion

1. The efficiency of the instructional media ( $E_1/E_2$ ) was 80.90/80.93, which was higher than the standard criteria of 80/80.

2. The posttest achievement scores of the students in pronunciation ability were significantly higher than those of the pre-test at a .01 level.

3. The overall opinions of the students were at the highest level with the mean of 4.39, and the standard deviation of 0.76.

### Research Discussion

1. To examine the efficiency of the instructional media to enhance English pronunciation ability of Mathayom Suksa 3 students at Arunothai Wittayakom School, the analysis results indicated that the efficiency of the instructional media used in the blended learning was 80.90/80.93. The findings confirm that these instructional media enabled the students to improve their English pronunciation ability. The instructional media, thus, are considered as an essential tool to enhance a better result in students' learning. This was because the lesson plans with the implementation of the instructional media were verified and assessed by the experts in terms of appropriateness and accuracy of the contents, and the instructional media designs that support the learning objectives. Furthermore, the various kinds of the instructional media, both online instruction and the self-paced asynchronous learning, created more opportunities for the students to learn efficiently. While they were learning through online platforms, they acquired new knowledge in real-time. Moreover, the implementation of the instructional media in the self-paced asynchronous learning enabled students to

access contents while learning outside of the classroom at their convenience or independent of the instructor. As a result, the students could revise, do the exercises and check the answers by themselves, which resulted in them getting the higher scores in the posttest. This was congruent with Bates (2019), who stated that the roles of media could make the class situation more alive, enhance and promote learning, and replace the teacher in certain contexts. Moreover, Kristanto, Mustaji and Mariono (2017) also confirmed that the instructional materials in blended learning are practical for use in learning instructional activity. Similarly, Puspitarini & Hanif (2019) stated that the utilization of learning media in the learning process influences the students in regarding to increase their learning motivation which can lead to enhancement of the students' knowledge afterwards. This is in accordance with the advantages of instructional media used in blended learning expressed by Siraj & Maskari (2018) as a tool in increasing the students' engagement, learner autonomy, connection of learning to real life environments and flexibility. In addition, the instructional media in the blended course design provides the students with the flexibility and pace, access and modeling, peer relationships and community, clear communication and feedback, and the challenges of time management and self-discipline (Shand & Farrelly, 2018).

2. The comparison between the pre-test and post-test scores before and after the implementation of the instructional media revealed that the posttest scores of the students in pronunciation ability were significantly higher than those of the pre-test at a .01 level. It can be concluded that the instructional media were efficient and effective, because it could make the students' achievement scores higher. As the instructional media in this study were selected to meet the students' needs and their learning environment, the multimedia



in the audio-visual form is very beneficial for both the teacher and the students to enhance the effectiveness and efficiency of their teaching and learning process. Additionally, a video conferencing system was chosen as a main channel that allows a live exchange between the teacher and the students in different locations in order to facilitate both parties when they are unable to participate face-to-face due to the Covid-19 outbreak. Consequently, the teacher could foster the students' collaboration and keep the entire class connected. It was consistent with Massner (2021), concluding that video conferencing is a powerful tool to increase the interaction, communication, and collaboration in online courses. Furthermore, the integration of the gamification approach in this study had brought about a positive contribution to improve the students' motivation and engagement. It is in line with Alsawaier (2018), reiterating that there is a direct link between increased motivation and higher levels of engagement when the gamification intervention is introduced. Similarly, Jayalath & Esichaikul (2020) indicated that gamification could enhance motivation and engagement in blended e-learning through an operational model and gamification design which embed motivational and engagement designs as an effective means of achieving learners' success in the context of technical and vocational education and training. Additionally, Handoko & Antaridha (2019) confirmed that the use of instructional media in the blended learning platform can improve students' performance in writing an essay as well as the study of Geta & Olongo (2016). Furthermore, the use of various kinds of online technology in blended learning have the positive impacts on the learning of students in highly engaging lesson, communication and collaborative learning, the ability to foster creativity and learner's autonomy, portability and quick and easy access to resources with more and better opportunities to improve their knowledge (Turmudi, 2020).

3. The students' satisfaction with the implementation of the instructional media revealed that it was overall at the highest level. This was because there was a variety of the instructional media used in this study through various forms of channels. These could help the students to understand how to pronounce each sound correctly by observing the mouth shapes and movements of native speakers via the online tutorials. Moreover, the video clips could provide visual and audio contexts about the correct ways of English pronunciation, stimulating the students' language production to become more accurate. The speech to text software allows the students to practice by themselves and receive the instant feedback which motivates and facilitates the students to improve their pronunciation. This finding confirms the study of Sadiman (2016), and Hernandez-Nanclares & Perez-Rodriguez (2016), revealing that the participants would be satisfied due to the fact that the instructional media are well-matched between students' characteristics, forms of teaching materials and techniques, learning environment, and educational support facilities which are the processes of the media development to create the effective media for the students within a particular learning environment. Valieiev et al. (2021) also concluded that students were satisfied with blended learning with the use of online resources through interactive presentations, instructive animation, dialogue simulators, and training quizzes saturated with graphic schemes as a driver of student-centered learning. Additionally, the study of Kintu and Zhu (2016) also confirms that learners' satisfaction with a learning management system can be an antecedent factor for the effectiveness of blended learning.

It can be concluded that even though blended learning is a new trend of the educational system nowadays, the instructional media still play a vital role as the engine parts to contribute enormously to the effective instruction for all students, which helps them to

achieve at their highest potential. Thus, with a mixture of learning styles, a set of instructional media should be well designed to exploit the advantages of technology in order to revolutionize the traditional perspective of the learning process into fusion teaching which could result in higher levels of students' engagement, satisfaction as well as a better learning outcome.

### Implications and Recommendations

1. Implications and recommendations for the implementation of the blended learning model in teaching pronunciation in EFL classroom

The blended learning model used in this study is advantageous to the students in teaching English pronunciation. An examination of learner background, design features and learning outcomes as factors for effectiveness can help to guide the design of effective instructional media used in blended learning that involves face-to-face session and online aspects. Thus, it is

strongly recommended for those teachers who have sought an effective and efficient way to improve the pronunciation ability of the students in the new normal situation.

2. Implications and recommendations for EFL students

The blended learning model used in this study provides an advantage of self-pace learning to the students, so that they can manage their own time and learning styles in an attempt to enhance their pronunciation ability by using the freedom of their choices to unleash the power of learning.

### Recommendation for Further Study

It is recommended for other teachers and researchers to specifically tailor the blended learning approach with the implementation of the instructional media based on the needs of the subjects in their studies.

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