The Development of Online Global Englishes-based Listening Materials to Enhance Thai Learners' Listening Comprehension

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Abstract

The purpose of this study is to test the efficiency of the online listening materials based on Global Englishes. In order to achieve the objective, researchers reviewed factors affecting Thai learners' English listening comprehension and other related issues on developing materials and developed a set of online materials for the participants, students who enrolled in a course named English for Communication 1 at Mae Fah Luang University in Semesters 1 and 2 in the academic year of 2020. The results show that, for the efficiency of the materials, the learning materials developed gained the efficiency (E1/E2) of 62.03/60.30 in the individual stage, 67.30/67.58 in the group testing stage, and $72.63/71.47$ for the field-testing stage—which means the criterion for each stage was met. The students' listening comprehension skills also improved as their post-test scores increased significantly. It can be said that the listening materials designed based on concepts of Global Englishes can be promoted and should be used as an effective way to enhance Thai learners' English listening comprehension.

Keywords: Global Englishes, English Listening Comprehension, English Learning Materials

1.   Introduction

Listening plays an essential role in communication and can be incorporated into a wide variety of communication domains. For effective conversation, communication skills are required to increase mutual intelligibility and understanding among English users (Vandergrift & Baker, 2015). However, even for native speakers, it is challenging to carry on effective conversations as more factors than just language proficiency are taken into account.

As English has become more important as a language used globally, English users worldwide have developed diverse English with unique linguistic features to communicate with foreigners. The spread of these diverse Englishes by non-native speakers called Global Englishes (GE) is increasing and is being accepted worldwide. *Global Englishes* is a broad term of English language that spreads, develops, and exists in various contexts worldwide (Rose & Galloway, 2019).

Owing to the spread, we could observe many English speakers develop their varieties from time to time. This phenomenon has changed language perspectives to respond to a call on ownership, application, and status of English. GE sheds light on how we see the language, and it acknowledges people to reconsider the status of English as it is for everyone; to illustrate, GE concerns intelligibility and comprehensibility. Furthermore, GE addresses all educators to redesign teaching and learning accordingly. More importantly, it should be counted as a tool for language teaching, and we could still

implement existing teaching methods along with the GE concept (Fang & Ren, 2018; Kaur, 2018).

With the ASEAN Economic Community (AEC), the demand for English proficiency is also increasing among Thais, and it can bring more career opportunities for those who are more fluent. However, the fact is that most Thai learners have been considered to have low to very low proficiency in English reading and listening skills (EF English Proficiency Index, 2020). It seems some Thais blame the failure of the educational system in Thailand and the fact that the country has never been colonized as the main reasons to make their English proficiency so low.

At Mae Fah Luang University, English has been used as a medium of instruction in most of its programs for more than a decade–even though students' skills are not quite good when they enter their programs. Thus, the students show their needs in improving English skills to help them succeed in learning courses in their study programs. The present study is a part of the project to develop learning materials to enhance students' English listening comprehension. The materials were developed based on concepts of Global Englishes and revised based on the surveys regarding the students' experience and attitudes towards many factors that can affect their listening skills and their opinions about varieties of English. This is because these students are more likely to use English with non-native speakers in their career (not just with native speakers), and raising their awareness may help them be equipped with the qualification that can help them succeed in their careers.

In addition, it should be noted that the students in this study are in English-medium instruction programs in which lecturers are not native speakers. Therefore, being familiar with varieties of English can help them succeed in academic achievements and prepare them for English varieties exposure in the future. The Global Englishes-based listening materials developed in this project will be used as a learning support system so that the students will have more chances to practice in order to enhance comprehension skills outside the classroom with various exposures to Englishes.

2.   Research Objective
This study aimed at testing the efficiency of the online listening materials based on Global Englishes concerning the efficiency of the materials.

3.   Research Hypothesis
The hypothesis of this study is that the learning materials' efficiency meets the criterion set for each stage.

4.   Literature Review
4.1 Listening comprehension
According to Buck (2001), listening comprehension is defined as a top-down process that listeners would interact with language knowledge, listeners' prior knowledge, context, and cognitive environment to help them interpret what the speaker is saying, yet sometimes listeners would have a bottom-up process to help them recognize acoustic input for better understanding. Zheng (2018) also mentioned that listening comprehension is the key concept in interpreting the meaning and understanding of messages. To comprehend listening texts, learners may use strategies to help.

Metacognitive strategy refers to a system that listeners use to plan, do, and evaluate themselves on their own to pursue successful listening comprehension. For example, the system may include a plan to be familiar with vocabulary and grammar structures, read related stories in advance, handle difficulties during the listening tasks, and evaluate themselves after the interaction (Zheng, 2018).

Buck (2001) introduced the discrete-point approach and the integrative approach to assess listening skills. The discrete-point approach is to test the ability to distinguish elements of the language in their oral forms. There are three typical tasks: phonemic discrimination, paraphrase recognition, and response evaluation. The integrative approach is to assess the process of languages such as cloze tests, gap-filling tests, dictation, sentence-repetition tasks, and statement evaluation. Those listening assessments could be in various forms, such as true/false questions, inference questions, multiple-choice questions, and short-answer questions.

Listening comprehension could be viewed as a top-down and bottom-up process as listeners could have themselves well-prepared to be a part of the conversation. However, to drive the listening process effectively, listeners should take a metacognitive strategy into account.

4.2 Global Englishes

The use of English as a global language has spread widely through many channels because of colonization, slavery, trade, and globalization regarding economics and politics. As a result, many English speakers develop their varieties from time to time. This phenomenon has changed language teaching and learning to respond to a call on various sociolinguistic perspectives, culture, ownership of English, new NNES norms, and target language speakers. Among these are the concepts of three circles of English (Kachru, 1992) and English as a lingua franca (Jenkins, 2003).

Pennycook (2007) mentioned that *Global Englishes* uses various English varieties and is a more inclusive paradigm than *World Englishes*. Rose and Galloway (2019) defined Global Englishes as "an inclusive paradigm relating to the linguistic, sociolinguistic and sociocultural diversity and fluidity of English use and English users in a globalized world." They stated that it is an umbrella term of World Englishes, English as a lingua Franca, English as an international language, and multilingualism.

However, in terms of language teaching materials, most commercial materials provided listening components only in Inner- and some Outer-circle varieties, such as American, British, Australian, South African, Malaysian, and Singaporean (Juntanee, 2019). Only a few Expanding-circle varieties, Israeli and Japanese, were employed (Kawashima, 2019).

There are also some existing studies regarding teaching listening of Global Englishes. Among them are Galloway and Rose (2014), who had university learners select any English varieties on the Internet to listen to and compose journal entries. They found that learners showed interest in diverse Englishes. Park (2019) also designed a 5-week listening course incorporating various listening strategies and American, British, and Australian varieties and found that the employed teaching strategies could enhance learners' listening comprehension for all varieties. Kamimura and Takano (2019) developed a web-based system regarding various English local pronunciations in different countries and

claimed that it could help learners to practice listening skills at their own pace. Ockey and French (2014) developed a test of L2 listening comprehension regarding multiple accents. The research introduced nine speakers and six comprehension items to assess familiarity. They suggested that strong accents and familiarity influence listening comprehension.

4.3 Global Englishes in Thai contexts
In Thailand, studies regarding Global English language teaching have started to gain some scholars' interest in the last decade. For example, Prabjandee (2020) introduced Global Englishes through professional development for teachers, and it showed that teachers had positive feedback towards the course, yet attitudes towards GELT showed minor changes. Rajani Na Ayuthaya (2016) incorporated World Englishes (WE) into a classroom for 17 weeks to examine classroom anxiety. It was found that learners had less anxiety when exposing various NNE varieties and suggested that adding WE activities in the classroom could also enhance language achievement. Passakornkarn and Vibulphol (2020) developed listening materials to increase awareness of English varieties. In terms of accents, attitude, and listening comprehension, Natiladdanon & Thanavisuth (2014) mentioned that there was no correlation between their ability to identify accent and the comprehensibility of most English ASEAN varieties. Chaipuapae (2019) also stated that accent familiarity and attitudes were not related to listening comprehension. The varieties used in these studies are, for instance, Thai, Burmese, Chinese, Singaporean, Malaysian, Filipino, Japanese, and Vietnamese. Considering the English varieties in these studies, it is reasonable to conclude that Asian varieties could be used in developing the listening materials.

In fact, Thais seem to have neutral attitudes toward Global Englishes, mostly Asian English varieties, such as Thai, Burmese, Chinese, Malaysian, Indian, Japanese, and Vietnamese and have awareness toward those varieties through provided listening and reading activities (Kalra & Thanavisuth, 2018; Prakaiborisuth & Trakulasemsuk, 2015; Suebwongsuwan, & Nomnian, 2020). Prior research incorporated Global Englishes with learning activities for students and teachers, for instance, courses, lessons, listening activities, and listening materials (Galloway and Namajiri 2020; Passakornkarn & Vibulphol, 2019; Prabjandee, 2020).

These studies shed light on Global Englishes awareness through various pedagogy, and some were on lessening classroom anxiety. Nevertheless, not much research was on enhancing listening comprehension or listening materials in enhancing listening comprehension. As these studies pointed out the benefits of having Thai learners experience varieties of English, materials that help to address the needs must be developed.

4.4 Language learning materials development
Materials in language teaching could be in the forms of printed or digital, such as worksheets, books, dictionaries, videos, and TV programs (Tomlinson, 2011). There are five key purposes of materials: motivating and giving guidelines, providing exposure to the language, providing comprehensive information, encouraging and supporting other activities, and assisting teachers in class (Mishan & Timmis, 2015).

To develop materials, Mishan and Timmis (2015) introduced materials development stages: a statement of belief, needs analysis, aims, objectives, syllabus design, drafting, piloting, production, and revision. This process could be done as a development loop.

Jolly and Bolitho (2011) also presented a process of materials writing, which includes needs identification, needs exploration, a contextual realization of new materials, pedagogy realization of materials and physical production of materials, the use in the classroom, and evaluation of materials.

For listening materials, Goh (2010) proposed blueprints that could also help enhance metacognitive strategies, which are 1) integrated experiential listening tasks as metacognitive strategies are included in other listening activities, and 2) guided reflections on listening as listening diaries, self- reflection, and other activities are embedded. Tomlinson and Masuhara (2017) also provided three principles for designing listening materials: giving reasons for listening to learners, including the real-life context in listening activities, and providing interactive and various listening tasks.

All in all, to develop the materials, the researchers employed Global Englishes concepts and Asian English varieties as listening tasks, metacognitive strategies, materials development framework of Goh (2010), Tomlinson and Masuhara (2017), and Jolly and Bolitho (2011). Moreover, the materials would be in a web- based system. The listening materials could help learners improve their listening comprehension step by step since the listening materials involve metacognitive strategies and Asian English varieties, as shown in Figure 1.

Figure 1. The Theoretical Framework of Online Global Englishes-Based Listening Materials
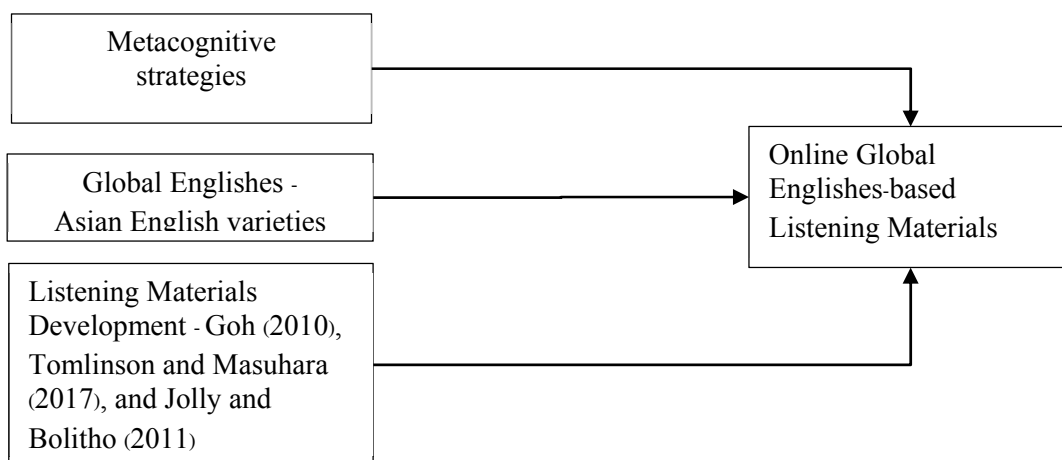
5. Research Methodology
5.1 Research design

This study employed a concept of the Development Testing (DT) process proposed by Brahmawong (2013), which has been widely used and accepted in Thailand for its systematic steps to determine the efficiency of instructional media. The DT process aims to test the efficiency of instructional media, looking at performance while using the materials through unit exercises and performance after using the materials through end-unit exercises and post-test.

In addition, Brahmawong (2013) claimed that this process is suitable for testing instructional materials, including online and physical learning materials. The online materials were developed and tried out according to the DT process, which was Individual

Testing (1:1), Group Testing (1:10), and Field Testing (1:100). The researchers developed the materials then had the participants use and provide feedback. After each testing stage, the researchers improved the materials according to the participants' feedback.

Mae Fah Luang University, the research context, is a university that aims to have English as a Medium of Instruction; consequently, students are encouraged to be familiar with various English varieties. In additions, both students and academic staff here are of different nationalities, including those from neighboring countries such as Myanmar, Cambodia, Laos, Indonesia, Japan, Bhutan, and China. These students and staff also represent World Englishes users.

5.2 Participants

Purposive sampling–by convenience–was used to get three groups of participants as needed for the Development Testing process. The three stages are Individual Testing (1:1), Group Testing (1:10), and Field Testing (1:100).

The samples should be heterogeneous in terms of academic performance, so non-proportional quota sampling was employed to classify the students by their performance of previous English courses as low, average, and excellent. The suggested number of participants were one to three students for Individual Testing, six to ten students for Group Testing, and a whole class for Field Testing (Brahmawong, 2013).

The participants in this study were three groups of students from English for Communication 1, the first mandatory General Education English course for all students at Mae Fah Luang University. It should be noted that at Mae Fah Luang University, students take general education courses in their first years--before most of the courses in their fields of study. However, since there are three stages, students in each group enrolled in the course in different semesters.

To be specific, the participants were students who enrolled in the sections in which the instructors were familiar with the researchers. The participants were three students who enrolled in this course in semester 1/2020 for the first stage, six students from the same course in semester 2/2020 for the second stage, and twenty-one students from the same course in semester 2/2020 for the third stage. Thus, each sampling group used the materials only once.

Even though teachers were part of the persons involved in using the materials, this research focused on only the students as the materials were designed for self-study. Thus, the participants in this study were only students.

5.3 Research instruments

5.3.1 Listening materials

The materials used as an instrument for this study were developed based on Global Englishes concepts, metacognitive, and materials development frameworks of Goh (2010), Tomlinson and Masuhara (2018), and Jolly and Bolitho (2011).

The prototype materials were in a web-based system to make it compatible with a wide variety of devices. The content was based on CEFR B2 level descriptors since it is the level that the university requires before the students graduate. These listening materials involved metacognitive strategies and Asian English varieties to promote listening

comprehension. It is not difficult to use, compatible with most electronic devices, and easy to access anywhere and anytime.

Before trying out in the individual stage, the materials were evaluated by experts in Global Englishes and materials developments and revised based on the feedback to ensure validity. Finally, the materials, consisting of various authentic listening audio and video files from real Asian people and YouTube channels, were uploaded to MFU's Learning Management System, Moodle, for the participants to access. The varieties of English included in the listening materials were Thai, Japanese, Singaporean, Indonesian, Malaysian, Vietnamese, Myanmar, and Chinese.

In addition to the audio and video files, there were eight- unit exercises with questions in various formats to assess participants' listening comprehension, such as multiple choices, true/ false choices, matching, and short- answer. The materials also provided transcripts for learners to recheck their understanding. The structure of the listening materials is shown in Figure 2.

Figure 2. The Structure of Online Global Englishes-Based Listening Materials
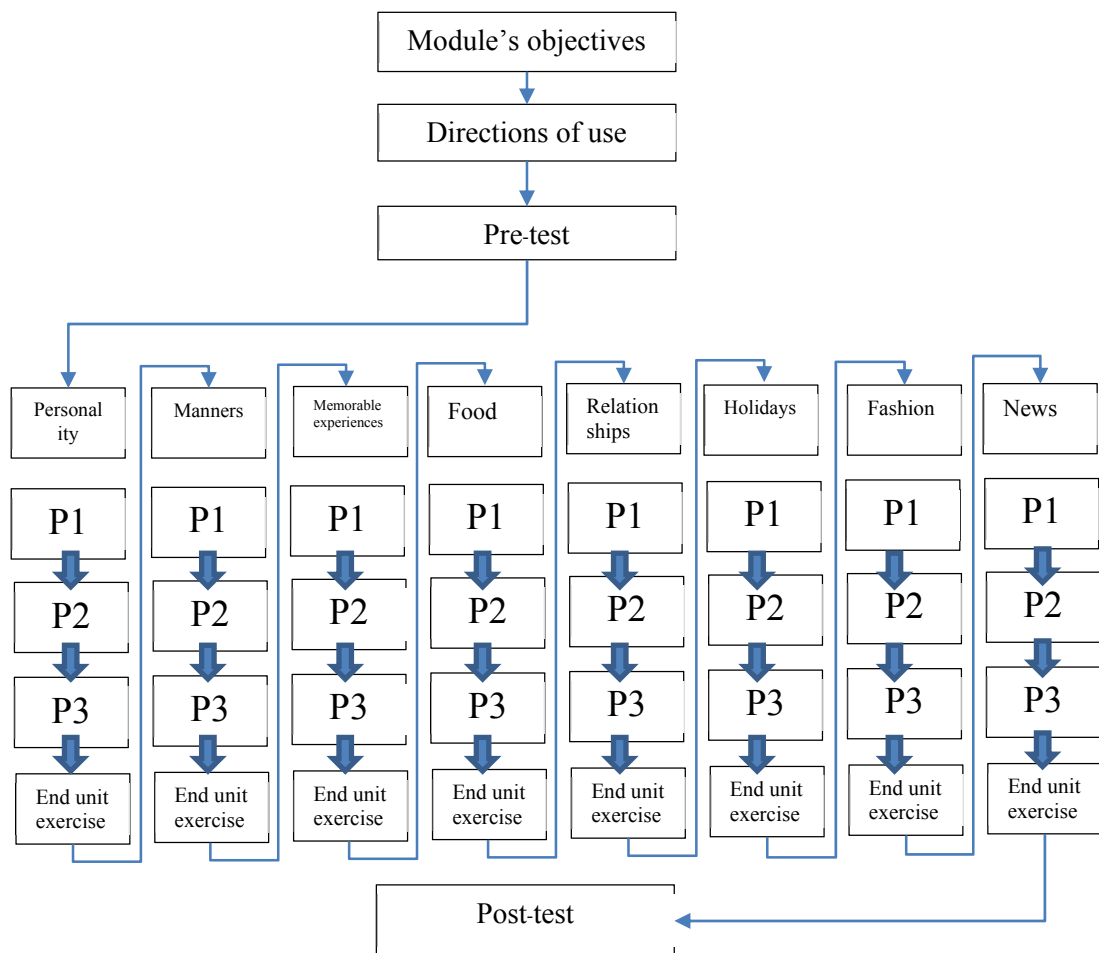
5.3.2 Pre and post tests

In addition to the learning materials mentioned earlier, pre-test and post-test were also used to confirm that the students' listening comprehension can improve after they practice through the materials provided. The tests were created based on the provided general English courses. Each test contained 30 items created parallelly in terms of content. They were also evaluated by experts in English and revised according to the feedback to ensure validity. All the test items earned IOC scores between 0.60-1.00; therefore, the experts agreed that those items were valid for the tests. The participants took the pre-test before using the materials and took the same test again after they finished all units (as shown in Figure 2). It was believed that by completing the post-test shortly after using the learning materials, the results should have reflected the efficiency of the materials as other variables were minimized.

5.3.3 Questionnaires

Five-point Likert scale questionnaire adapted from Bamroongkit, Wijakkanalan, and Kwangsawad (2018) were designed to get the students' feedback. The questionnaires were evaluated by experts in education and educational technology and revised according to the feedback to ensure validity. All the items earned 1.00 of IOC scores; therefore, the experts agreed that those items were valid for the questionnaire. The questionnaire consisted of 19 items to gain feedback from the students and their opinions towards the materials in three aspects: the system platform and the learning experience designs. Moreover, the researchers had an interview session to explore their opinions towards the application of Global Englishes in the online materials regarding comprehension difficulty and awareness.

5.3 Data Collection

The data collected in the development testing process includes pre-test scores, exercise scores of every unit (E1: Efficiency of Process), and post-test scores (E2: Efficiency of Product) as suggested by Brahmawong (2013). The scores from each stage were analyzed to see if the project's objective—to test the efficiency of the listening materials based on Global Englishes—was achieved.

All participants were informed about the objective, the procedure, and their roles in this research. After that, they were asked to take the pre-test and use the online materials provided within two weeks at their own pace. In the end, they took the post-test and responded to the questionnaire so that the researchers could analyze the data statistically. Thus, the participants of each group testing took the same online materials, including pre-posttest and listening units and end-unit exercises but on a different timeline.

5.4 Data analysis

The data of each testing stage was analyzed using the formula of Brahmawong (2013) as follows

Formula 1:

$$E_1 = \frac{\frac{\Sigma^x}{N}}{A} \times 100$$

E_1 refers to Efficiency of Process
Σ^x refers to scores the learners got from all unit exercises
A refers to the full score of all unit exercises
N refers to the number of learners

Formula 2:

$$E_2 = \frac{\frac{\Sigma^F}{N}}{B} \times 100$$

E_2 refers to Efficiency of Product
Σ^F refers to scores the learners got from the post-test
B refers to the full score of all end-unit exercises
N refers to the number of learners

For the objective, to test the efficiency of the materials, scores from unit exercises (E1: Efficiency of Process) and scores from post-test in each stage (E2: Efficiency of Product) were analyzed in order to see if the set criteria for efficiency were met. The criteria for E1/E2 were set at 60/60 for the individual stage, 65/65 for the group testing stage, and 70/70 for the field-testing stage. The results from the questionnaires were also used to ensure the quality of the materials. Suppose the criterion for the third stage is met and the participants are satisfied with the materials. In that case, it means the materials are considered efficient and can be disseminated to the population.

The pre-test and post-test scores were analyzed to see if the materials could enhance their listening comprehension skills for the second objective. To evaluate the effectiveness of the materials, the mean scores of the two tests were compared using a paired-samples t-test.

Furthermore, the study employs descriptive statistics, mean, and content analysis to explain the participants' satisfaction.

6. Results and Discussion

The materials developed based on the concepts of Global English were tested in three aspects, i.e., the efficiency according to the set criterion, the student's learning achievement, and the students' satisfaction, as suggested by Brahmawong (2009) in order to ensure the quality.

6.1 Efficiency of the learning materials

The listening materials' efficiency for each stage is as seen in Table 1. The table shows that in the individual stage, the score is 62.03/60.30. This means the percentage of the average of all scores the students earned from the unit exercises, E1, is 62.03 and the percentage of the average of all scores the students earned from their post-test, E2, is 60.30. As the set criteria of 60/60 were met, it can be said that the materials are effective for a small group of students. However, before testing in the next stage, some issues such as the low audio quality and unclear instructions were found. In addition, some parts were ambiguous, and some irrelevant videos appeared on the practice page. Thus, the researchers revised the materials, especially the instructions and choices, re-recorded the mentioned audios, rechecked answer keys, and removed irrelevant links from the lesson pages before testing in the next stage.

Table 1. The Efficiency of the Learning Materials

Stage	N	E1/E2	Criteria Set
1. Individual Testing	3	62.03/60.30	60/60
2. Group Testing	6	67.30/67.58	65/65
3. Field Testing	21	72.63/71.47	70/70

Note: E1 and E2 scores are not the same as pre-test and post-test scores. Thus, when both scores meet the set criteria, the efficiency of the materials tested is confirmed—even when E2 score is not higher than E1.

The efficiency score for the group testing stage is 67.30/67.58, so the set criterion of 65/65 was met. This means the materials are also effective for a group of 3-10 students. However, some issues needed to be revised: some unit exercise items, e.g., short-answer items and matching options, were somewhat tricky. Consequently, the researchers had to recheck the students' answers manually. The students also suggested that the tests should be in multiple choices or short answers rather than matching. Therefore, the researchers revised the unit exercises to be multiple choices.

In the third stage, the field-testing stage, the criterion set was also met as the efficiency score was 72.63/71.47. Thus, the researchers can claim that the objective of this study was achieved. The materials developed can be disseminated and expected to be effective for larger groups of students.

Some may notice that the criterion set for E1/E2 in this study (70/70) was relatively low. The explanation for that is that the unit tests and the post-test in this study were designed to assess the students' listening comprehension skills, not just knowledge. In addition, as pointed out by Brahmawong (2009) the criterion for affective domain and psychomotor skills is usually set slightly lower than that of cognitive domain; thus, the criterion used in this study was set a little bit lower than usual based on what the tests mention were designed to evaluate.

6.2 Participants' learning achievement
In terms of the students' skills improvement, the pre-test and the post-test scores were analyzed statistically. The results are shown in Table 2 below.

Table 2. Pre-test and Post-test Scores

Compared issue	Pre-test scores		Post-test scores		t	p
	Mean	S.D.	Mean	S.D.		
Listening comprehension	18.1667	3.38438	21.1000	3.78153	-3.917	.001

*p < 0.05, n = 30

The data reveals that the mean scores of the pre-test and the post-test were different. This means that there was an achievement after the participants used the learning materials developed based on Global Englishes. As the mean score of the students' pre-test was 18.17 and in post-test, the mean score was 21.10, the mean score of post-test is higher than pre-test.

In order to see if the difference, the improvement after using the materials, is statistically significant, a t-test (testing of significance) for a paired-sample test was also used. As shown in Table 2, the probability value (.001) was smaller than the level of significance assumed (.05), which indicates that the effect after using the materials was statistically significant.

The result confirmed many previous studies that using technology, including online materials, can help students improve their language skills as they provide learners with the target language input (Shadiev & Yang, 2020). In this study, the participants were exposed to various varieties they may not have had opportunities to experience in real life before; therefore, incorporating GE in the listening materials might enhance language achievement (Rajani Na Ayuthaya, 2016). It is suggested to do a further study regarding other factors that might hinder listening comprehension.

6.3 Satisfaction of the participants

In addition to the efficiency scores, the results from the questionnaires also revealed the participants' feedback on the materials. As shown in Table 3, the students who used the materials were strongly satisfied with the contents. For the system and the design of the material, the participants were still satisfied even though the degree of satisfaction was less than that of the contents.

Table 3. The Participant's satisfaction with the learning materials

Aspect	Mean	S.D.	Result Interpretation
The contents in the materials	**4.28**	0.11	**Strongly satisfied**
The contents in the material are aligned with the contents of the course.	4.36	0.61	Strongly satisfied
The order of the contents is appropriate.	4.26	0.90	Strongly satisfied
The structure of each unit is clear.	4.43	0.72	Strongly satisfied
The contents are up-to-date and interesting.	4.26	0.98	Strongly satisfied
The length of each unit is suitable.	4.16	0.74	Satisfied
The level of formality in the language used is appropriate.	4.36	0.66	Strongly satisfied
The speed of the speakers is suitable.	4.10	0.80	Satisfied
The system and the platform	**3.87**	0.20	**Satisfied**
Signing up and logging in to the system is convenient.	3.63	0.71	Satisfied
Each part in the materials can be easily accessed.	3.63	0.71	Satisfied
The sizes of fonts are appropriate.	4.10	0.88	Satisfied
The materials can be used with different devices.	4.00	0.37	Satisfied

Aspect	Mean	S.D.	Result Interpretation
Saving and editing is easy.	3.83	0.74	Satisfied
Learners can see their progress.	4.00	0.37	Satisfied
The design of the learning experience	**4.17**	0.53	**Satisfied**
The objectives of each unit are clearly stated.	4.20	0.61	Satisfied
The materials allow learners to control their learning.	4.16	0.64	Satisfied
The activities help learners to develop their listening skills.	4.26	0.98	Satisfied
The exercises help learners to develop their listening skills.	4.16	0.64	Satisfied
The instructions are clear.	4.16	0.64	Satisfied
The quality of the audio is good.	4.10	0.88	Satisfied
Overall satisfaction	**4.11**	0.22	**Satisfied**

One of the interesting points from this study was that the participants seemed less satisfied with the system or the platform when compared with their satisfaction with the contents. The results showed that the students deemed the platform's user interface not so friendly as they were least satisfied with the process of signing up/logging in and how to access each part. This is quite unfortunate because the platform where the materials were uploaded was not created by the researchers. In fact, it was the one available as the university had provided it to be an alternative channel for lecturers to interact with the students and other available platforms and services like Microsoft Teams and Google Classroom with Google Suite. In addition, this platform itself is relatively new to students and teachers; thus, the developing team still has to upgrade it almost every semester. It is true that a platform that is more user-friendly is needed.

Apart from the survey's result, the participants provided comments toward the application of Global Englishes in the materials as follows:

Some participants mentioned that the accents of the speakers played an important role in their comprehension.

I can guess…one audio might be a Filipino speaker. I had learned with a Filipino teacher. So, I can understand what the audio is about. Some audios are very hard to understand. I guess the male speaker might be from India. (Student A)

I like the Japanese speaker because her accent is quite clear, and the Japanese language uses some English words directly. When she talks, I can understand. (Student B)

I like one audio talking about manners. I guess she is Thai, and her accent is clear and easy to understand. (Student C)

Furthermore, the participants mentioned that the speed of the speakers affected their comprehension.

I think it is hard to understand when I listen to Chinese and Japanese people in the audio talk. They speak fast and it seems they connect every word together. (Student D)

Some audios are too fast. I have to replay many times to understand what they are talking about. Like...the practice 1 audio in unit Personality. He speaks too fast. (Student E)

For me, accents don't matter. I can understand most audios. Only some that are too fast. Yes, the male speaker from the personality unit and news unit too. (Student F)

Additionally, the participants showed awareness toward varieties of English.

The female speaker talking about scarves, I can understand what she says. And the audio that talks about relationships. I understand those two speakers. They are ok. I think they are Malaysian. (Student B)

I think I understand the cooking one. He might be Filipino or Malaysian. The guy speaks ok. I can answer all questions. (Student C)

The talk show about personality is good. I like to listen to this one. I know they are Thai, but they speak clearly because I understand what they say. (Student G)

This study also confirmed that, even though online language learning materials are practical, some students may not be satisfied because of many variables such as their preference and the competency in the use of technology (Jabeen &Thomas, 2015; Saleem, Butt, & Rafique, 2021).

Our results suggested that the developed materials could be an alternative learning tool in practicing listening skills at the learners' convenience (Kamimura & Takano, 2019). To illustrate, the participants spent around 20-45 minutes per listening unit. They finished the whole materials within two weeks as required.

Furthermore, the interview showed that accents and speed of the speakers influenced the participants' comprehensibility even when they were ASEAN English varieties. In terms of accent perspective, it is in contrast to the findings of Natiladdanon and Thanavisuth (2014) and Chaipuapae (2019) that accent identification or accent familiarity levels were not related to listening comprehension. Consequently, it is suggested that further study needs to be done in terms of relationships between accent and speed of the speakers of Thai learners' perception.

Finally, the participants tended to have neutral attitudes towards the GE varieties incorporated in the developed materials. They could identify some varieties correctly based on familiarity, for instance, Thai, Chinese, Japanese, and Malaysian. Other varieties that they could not identify are Singaporean, Indonesian, Vietnamese, and Burmese. Interestingly, most participants mentioned Indian variety a lot in the interview session, but it was, in fact, Indonesian variety. Further research on the correlation between sound recognition and background knowledge might be another interesting topic.

7.   Conclusion

The materials developed in this study passed the efficiency test as they met the set criteria in all stages and the student's scores from the post-test increased significantly. The students were also satisfied with the materials. Thus, the objective of this study is achieved. The materials should be disseminated to other groups of students to improve their English listening comprehension skills and raise their awareness of Global Englishes they may experience in both their everyday lives and their careers. However, as the system or platform used for the materials seems to get the lowest level of satisfaction from the participants, a more user- friendly interface needs to be developed based on the users'

comments to maximize the benefits and encourage learners to have a positive learning environment.

This study can be used as a guideline for those who are planning to develop materials to meet the needs of students in different contexts. More stakeholders, such as teachers and tentative employers, may also be included in further studies in order to confirm the results and add more insight to the field.

8. Acknowledgement

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10. References

Bamroongkit, S., Wijakkanalan, S., & Kwangsawad, T. (2018). Blended English teaching model improving communicative skills. *KKU Research Journal of Humanities and Social Sciences (Graduate Studies),* 7(2), 59 – 70.

Brahmawong, C. (2009). *eLearning principles and methodologies.* Bangkok, Thailand: College of Internet Distance Education, Assumption University.

Brahmawong, C. (2013). Instructional package testing. *Silpakorn Educational Research Journal,* 5(1), 5-20.

Buck, G. (2001). *Assessing listening.* Cambridge, UK: Cambridge University Press.

Chaipuapae, P. (2019). *Workplace listening comprehension of Thai undergraduates in an Asian English as a Lingua Franca Context* (Unpublished doctoral dissertation). Northern Arizona University, Flagstaff, AZ.

EF English Proficiency Index. (2019). *EF English Proficiency Index 2019.* Retrieved from https://www.ef.co.th/epi/

Fang, F., & Ren, W. (2018). Developing students' awareness of Global Englishes. *ELT Journal,* 72(4), 384–394. https://doi.org/10.1093/elt/ccy012

Galloway, N., & Numajiri, T. (2020). Global Englishes language teaching: Bottom-up curriculum implementation. *TESOL Quarterly,* 54(1), 118-145.

Galloway, N., & Rose, H. (2014). Using listening journals to raise awareness of Global Englishes in ELT. *ELT Journal,* 68(4), 386–396. https://doi.org/10.1093/elt/ccu021

Goh, C. (2010). Listening as process: Learning activities for self-appraisal and self-regulation. In N. Harwood (Ed.), *English language teaching materials: Theory and practice* (pp. 179–206). Cambridge, UK: Cambridge University Press.

Jabeen, S. S., & Thomas, A. J. (2015). Effectiveness of online language learning. *Proceedings of the World Congress on Engineering and Computer Science,* 1, 1-5.

Jenkins, J. (2003). *World Englishes.* London, UK: Routledge.

Jolly, D., & Bolitho, R. (2011). A framework for materials writing. In B. Tomlinson (Ed.), *Materials development in language teaching* (2nd ed., pp. 107–134). Cambridge, UK: Cambridge University Press.

Juntanee, J. (2019). *Global Englishes orientation of English textbooks in Thailand* (Unpublished master's thesis). Burapha University, Chon Buri, Thailand.

Kachru, B. (1992). *The other tongue: English across cultures*. Champaign, IL: University of Illinois Press.

Kalra, R., & Thanavisuth, C. (2018). Do you like my English? Thai students' attitudes towards five different Asian accents. *Arab World English Journal (AWEJ), 9*(4), 281-294. https://dx.doi.org/*10.24093/awej/vol9no4.21*.

Kamimura, K., & Takano, K. (2019, August). Phoneme sequence extraction of learner's pronunciation errors for foreign language learning. In *2019 IEEE Pacific Rim Conference on Communications, Computers and Signal Processing (PACRIM)*. Retrieved from https://xplorestaging.ieee.org/servlet/opac?punumber=8966541

Kaur, J. (2018). The intelligibility of English in global contexts: Concepts, methods, findings, and implications. *Foreign Language Education Research*, 22, 1–10.

Kawashima, H. (2019). Effects of pre-task planning on speaking anxiety of Japanese EFL learners. *ARELE: Annual Review of English Language Education in Japan, 30*, 145-160.

Mishan, F., & Timmis, I. (2015). *Materials development for TESOL*. Edinburgh, UK: Edinburgh University Press.

Natiladdanon, K., & Thanavisuth, C. (2014). Attitudes, awareness, and comprehensibility of ASEAN English accents: A qualitative study of university students in Thailand. *Catalyst*, 9(1), 16-30.

Ockey, G. J., & French, R. (2016). From one to multiple accents on a test of L2 listening comprehension. *Applied Linguistics*, 37(5), 693–715. https://doi.org/10.1093/applin/amu060

Park, A. (2019). *Effects of strategy instruction on Korean EFL learners' listening comprehension of World Englishes: Focusing on American, British, and Australian accents* (Doctoral dissertation). Graduate School of Seoul National University, Seoul, Korea. Retrieved from https://s-space.snu.ac.kr/bitstream/10371/161342/1/000000157226.pdf

Passakornkarn, S., & Vibulphol, J. (2020). Development of World Englishes-based listening materials to raise the awareness of the varieties of English for Thai EFL upper secondary school students. *LEARN Journal: Language Education and Acquisition Research Network, 13*(1), 225-246.

Pennycook, A. (2007). ELT and colonialism. In J. Cummins & C. Davison (Eds.), *International handbook of English language teaching* (pp. 13-24). Boston, MA: Springer.

Prabjandee, D. (2020). Teacher professional development to implement Global Englishes language teaching. *Asian Englishes, 22*(1), 52–67.

Prakaiborisuth, P., & Trakulkasemsuk, W. (2015). Attitudes of Thai university students toward ASEAN Englishes. In *7th International Conference on Humanities and Social Sciences "ASEAN 2015: Challenges and Opportunities" Proceedings*.

Rajani Na Ayuthaya, J. (2016). *The incorporation of World Englishes into EFL classroom practice: Effects on anxiety in English language learning of Thai tertiary students* (Unpublished doctoral dissertation). Thammasat University, Pathum Thani, Thailand.

Rose, H., & Galloway, N. (2019). *Global Englishes for language teaching* (1st ed.). Cambridge, UK: Cambridge University Press.

Saleem, F., Butt, A., & Rafique, S. (2021). A comparative study of the effectiveness of online and traditional ESL teaching at undergraduate level. *Global Educational Studies Review*, 6, 52-73.

Shadiev, R., & Yang, M. (2020). Review of studies on technology-enhanced language learning and teaching. *Sustainability*, 12(2), 524.

Suebwongsuwan, W., & Nomnian, S. (2020). Thai hotel undergraduate interns' awareness and attitudes towards English as a lingua franca. *Indonesian Journal of Applied Linguistics, 9*(3), 704–714.

Tomlinson, B. (Ed.). (2011). *Materials development in language teaching*. Stuttgart, Germany: Ernst Klett Sprachen.

Tomlinson, B., & Masuhara, H. (2017). *The complete guide to the theory and practice of materials development for language learning*. Hoboken, NJ: John Wiley & Sons.

Vandergrift, L., & Baker, S. (2015). Learner variables in second language listening
    comprehension: An exploratory path analysis: L2 listening comprehension. *Language
    Learning,* 65(2), 390–416.
Vandergrift, L., & Goh, C. C. M. (2012). *Teaching and learning second language listening:
    Metacognition in action*. London, UK: Routledge.
Zheng, J. (2018). The metacognitive strategy in English listening comprehension. *Theory and
    Practice in Language Studies*, 8(2), 226.