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ต่อความสามารถในการฟังของนักเรียนชั้นมัธยมศึกษาปีที่ 5

EFFECTS OF TEACHING ENGLISH USING A FLIPPED CLASSROOM LEARNING APPROACH WITH GOOGLE SITES ON THE LISTENING ABILITY OF ELEVENTH-GRADE STUDENTS

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ABSTRACT

The two research objectives of this study were: 1) to examine the effects of teaching English using a flipped classroom learning approach with Google Sites on the listening ability of eleventh-grade students; and 2) to study students' opinions of learning English using a flipped classroom learning approach with Google Sites. The sample was 24 eleventh-grade students at Nongsungritani school, Nongsung district, Nakhon Ratchasima province. They were selected using cluster random sampling. The three instruments were lesson plans based on a flipped classroom learning approach with Google Sites (\bar{X} =3.54), an English listening ability test ($p=0.33-0.79$, $r=0.35-0.65$, $KR-20=0.89$), and an attitude questionnaire with a very high level of consistency ($IOC=1.00$). The data were analyzed using mean (\bar{X}), standard deviation (S.D.), and t-test for dependent samples. The results of this study showed that the mean score of the post-test of the English listening ability of participants who learned English using a flipped classroom learning approach with Google Sites was significantly higher than at the pre-test at the 0.05 level. Furthermore, the participants had very positive opinions of learning English using a flipped classroom learning approach with Google Sites at a strongly agree level (\bar{X} =4.71). This study demonstrated that a flipped classroom learning approach with Google Sites enhanced students' average English listening ability.

Keywords : Flipped classroom learning approach, Google Sites, English listening ability, Student satisfaction

บทคัดย่อ

การวิจัยในครั้งนี้มีวัตถุประสงค์เพื่อ 1) ศึกษาผลของการสอนภาษาอังกฤษโดยใช้การเรียนรู้แบบห้องเรียนกลับด้านด้วยกูเกิลไซต์ที่มีต่อความสามารถในการฟังของนักเรียนชั้นมัธยมศึกษาปีที่ 5 และ 2) เพื่อศึกษาความคิดเห็นของนักเรียนที่มีต่อการเรียนภาษาอังกฤษโดยใช้การเรียนรู้แบบห้องเรียนกลับด้านด้วยกูเกิลไซต์ กลุ่มตัวอย่าง คือ นักเรียนชั้นมัธยมศึกษาปีที่ 5 จำนวน 24 คน จากโรงเรียนโนนสูงศรีธานี อำเภอโนนสูง จังหวัดนครราชสีมา โดยใช้วิธีการสุ่มแบบแบ่งกลุ่ม เครื่องมือที่ใช้ในการวิจัย ได้แก่ แผนการสอนแบบห้องเรียนกลับด้านด้วยกูเกิลไซต์ (\bar{X} =3.54) แบบทดสอบ

ความสามารถในการฟังภาษาอังกฤษ ($p=0.33-0.79$, $r=0.35-0.65$, $KR-20=0.89$) และแบบสอบถามความคิดเห็นของนักเรียนที่มีต่อการเรียนภาษาอังกฤษโดยใช้การเรียนรู้แบบห้องเรียนกลับด้านด้วยกูเกิลไซต์ (IOC=1.00) สถิติที่ใช้ในการวิเคราะห์ข้อมูล ได้แก่ ค่าเฉลี่ย, ส่วนเบี่ยงเบนมาตรฐาน และสถิติทีแบบไม่อิสระ ผลการวิจัยพบว่า คะแนนเฉลี่ยความสามารถในการฟังภาษาอังกฤษของนักเรียนหลังจากเรียนรู้แบบห้องเรียนกลับด้านด้วยกูเกิลไซต์สูงกว่าก่อนเรียนอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 และผู้เรียนมีความคิดเห็นทางบวกต่อการเรียนภาษาอังกฤษแบบห้องเรียนกลับด้านด้วยกูเกิลไซต์ในระดับเห็นด้วยอย่างยิ่ง ($\bar{X}=4.71$) แสดงให้เห็นว่าการเรียนภาษาอังกฤษโดยใช้การเรียนรู้แบบห้องเรียนกลับด้านด้วยกูเกิลไซต์ สามารถส่งเสริมความสามารถในการฟังภาษาอังกฤษของนักเรียนได้

คำสำคัญ : การเรียนรู้แบบห้องเรียนกลับด้าน, กูเกิลไซต์, ความสามารถในการฟังภาษาอังกฤษ

INTRODUCTION

The English language is one of the most important tools in communication. The objectives of teaching and learning English in Thailand's Basic Educational Curriculum B.E. 2560 (2017) are to promote students to practice the four skills of English, and to use them in their daily lives. Before students can speak English in their daily lives, they should have the ability to listen effectively. Research has demonstrated that adults spend 40-50% of their time with listening, 25-30% with speaking, 11-16% with reading, and about 9% with writing (Jonathan, 2018, p. 1). Although the listening skill is used more than other skills, there are still many problems in English listening for students who learn English as a foreign language (EFL). Zur (2020, p. 268) explained that most EFL students have problems in listening. They are unable to understand a speaker's message, and have to concentrate hard to understand in the content of the listening. In addition, students lack opportunities to practice listening because teachers pay attention to grammar, and reading, and teachers rarely apply an appropriate approach and use authentic resources for listening (Abdulrahman, Basalama & Widodo, 2018, p.24). The authors Jindathai (2020, p. 7) and Chaibao (2017, pp. 2-3) summarize the main problems in English listening for Thai students as lacking vocabulary knowledge, linguistic features, unfamiliar accents or sentences, and being unable to recognise native speech. They always feel uncomfortable and have limited opportunities for listening inside the classroom and for practicing listening in daily life.

Recently, Thailand has had a growing interest in adapting and developing education to changes in social context and the advances in science and technology. A flipped classroom is one such change in learning, allowing students to learn by themselves through technology (Sojayapan & Khlaisang, 2020, p. 28). The flipped classroom was created by Bergmann and Sams in 2007 (Bergmann & Sams, 2012, p. 3). They are chemistry teachers in Colorado. They try to help their students who cannot attend a class by video recording their lessons for students to learn outside the classroom so that they can catch up to their friends when they come back to their classroom. Currently, the flipped classroom learning approach has been applied to many subjects because learning outside

a classroom has become very important, and technology can help teachers get closer to students even if they are not being taught in the classroom. Flipped classroom refers to a teaching method in which video lectures are uploaded online, and the students previewed these before face-to-face discussions and completion of their tasks in the classroom (Evseeva & Solozhenko, 2015, p. 205; Olitsky & Cosgrove, 2016, pp. 1-2).

Study of the flipped classroom has become an important aspect in 21st-century education. Student outcomes include improved learning and innovation skills; understanding of information, media and technology skills, and life and career skills. Many researchers have attempted to study the ways of learning via technology. Google Sites is an online resource able to present media for learning outside the classroom and to help improve listening skills. Students can learn by themselves and practice listening by demanding to actively learn through media in Google Sites and they can go back and listen again or pause when they misunderstand (Bergmann & Sams, 2012, p. 24). However, a major problem with this kind of study is that the eleventh-grade students at Nongsungritani school lack English listening ability. They do not actually listen much, neither inside nor outside the classroom. Most students have low English language competence so they cannot listen and understand well. These low listening skills highlight the need to improve their English listening ability.

In addition, even though many studies have reported an increase in use of the flipped classroom learning approach in teaching English language skills, there has been very little research reported on English listening skills. The purpose of this study is therefore to ascertain the effects of teaching English using a flipped classroom learning approach with Google Sites toward students' listening ability.

RESEARCH OBJECTIVES

1. To examine the effects of learning English using a flipped classroom learning approach with Google Sites toward the listening ability of eleventh-grade students.
2. To study students' opinions of learning English using flipped classroom learning approach with Google Sites.

RESEARCH BENEFITS

1. This study provides a teaching model that uses a flipped classroom learning approach with Google Sites to promote English listening ability.
2. Teachers can apply the approach in this study to teaching English listening in their classrooms.
3. The results of the study will be useful for English teachers to create English listening activities for their students, and the students should benefit from using a flipped classroom learning approach via Google Sites.

Literature Review

Teaching Listening : Listening is an active process in which an individual concentrates on spoken input, to gain meaning from passages, and to link what they hear with their existing knowledge (Listiyarningsih, 2017, p. 37). It involves the message, a sender, and a receiver. Most teaching listening is based on a Communicative Language Teaching (CLT) approach and is divided into three stages, namely, pre-listening which is the stage for preparing the listeners for what they are going to hear and eliciting their background knowledge. While-listening is the stage for practicing listening. It is the most difficult stage to control because listeners need to pay attention and process information received actively. Post-listening is the stage to help listeners connect what they have heard with their own ideas and to check their understanding after listening (Du, 2019, pp. 731-732).

Flipped Classroom : Flipped classroom began in 2007, created by Bergmann and Sams. It is a part of blended learning which integrates active learning and teaching with instructional technology (Park & Howell, 2015, p. 563). Students learn outside the classroom, anywhere, at any time, and by themselves. In the classroom, students review and do activities to expand and check their understanding through group activities. The teacher is a facilitator who engages students and frees up class time for more collaboration with active learning activities such as problem-solving or discussions (Milman, 2012, p. 85). Gerstein (2011, online) suggested there are four stages in the flipped classroom learning approach as follows in Figure 1.

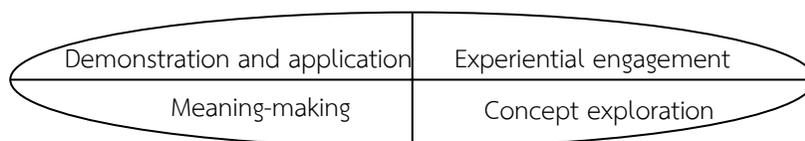


Figure 1 Gerstein's flipped classroom model

Source : Gerstein, 2011, online.

According to Figure 1, the experiential engagement stage takes place inside the classroom. Then students explore the concept outside the classroom in the concept exploration stage. After that, students complete the meaning-making and demonstration and application stages inside the classroom. Each stage is described as follows.

1. Experiential engagement is a step to prepare students and predict content.
2. Concept exploration is a step to practice and explore the concepts at each student's own pace.
3. Meaning-making is a step to determine meaning and to check their understanding after practicing at their own pace.
4. Demonstration and application is a step to create projects to apply, analyze, and evaluate their knowledge, and to check their understanding after learning.

Google Sites : Nowadays, technology provides a great influence over many aspects of learning. Many teachers looking for ways to improve the quality of their teaching use technology to facilitate their works. Google sites offers a simple way for teachers and students to use information technology, especially in educational environments (Kumbhar, 2020, pp. 47-48). Harris and Hodges (2016, p. 385) described using Google Sites as a tool for learning which was easy to use, low cost, and resulted in a positive student response. It is a free online application for creating and publishing websites (Nation, 2020, online). Google Sites provides facilities for a teacher to upload media. The media uploaded can be in the form of texts, images, and audios. Students can access the media without any location and time limits.

Related Research : Many researchers have performed research related to teaching English using a flipped classroom learning approach. Namaziandost, Neisi, and Momtaz (2019, pp. 129-139) examined the effects of flipped classrooms toward 50 upper-intermediate Iranian EFL students' listening comprehension. This study reported that a flipped classroom approach had a significant effect on listening comprehension. In addition, Kawinkoonlasate (2019, pp. 23-34) studied use of a flipped classroom approach to develop English language skills of Thai EFL students. The result reported that a flipped classroom approach was a teaching methodology with technology that led to an increase in student motivation, participation, communication skills, critical thinking, and interest in studying languages. Teachers should create better learning opportunities for students by incorporating technology into their teaching to achieve better learning outcomes. Botmart (2019, pp. 69-76) interviewed 74 Thai EFL university students about their opinions after learning English using flipped classroom learning approach, the finding indicated that students had positive opinions. Students liked learning English through a flipped classroom because it was fun, a convenient way of learning, and it enhanced their English knowledge. Boonsung and Meesup (2020, pp. 194-212) studied the learning achievement of 28 Thai students in secondary 2 using a flipped classroom approach through Google Sites. The results revealed that the learning achievement of the students after using a flipped classroom learning approach with Google Sites was significant higher than before using this approach at the significant level of 0.05 and students' satisfaction was at a high level.

Conceptual Framework

This research aims to investigate the effects of teaching English using a flipped classroom learning approach with Google Sites toward the listening ability of the eleventh-grade students, and to seek students' opinions about learning English using a flipped classroom learning approach with Google Sites. It was predicted that after students learned English using a flipped classroom learning approach, they would get higher scores in the post-listening ability test than in the pre-listening ability test. A flipped classroom is a teaching method in which an individual student studies by watching recorded videos or listening to recorded audio lectures outside the class, while in-class activities are devoted to fulfilling practical tasks and discussing major issues with a teacher

and friends. The following is a conceptual framework of this study based on Gerstein’s flipped classroom model (Gerstein, 2011, online). The flipped classroom model divides into 4 stages: experiential engagement, concept exploration, meaning-making, and demonstration and application. The conceptual framework is shown in Figure 2.

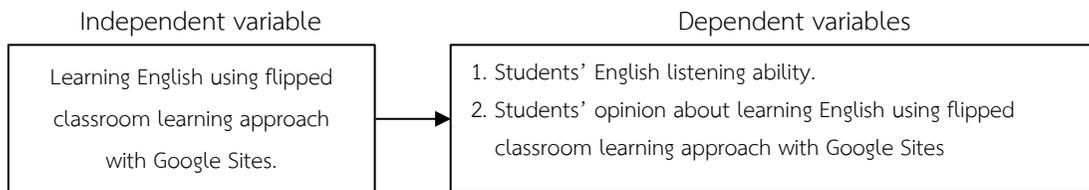


Figure 2 Conceptual framework

RESEARCH METHODOLOGY

The research objectives in this study aimed to examine the effects of teaching English using a flipped classroom learning approach with Google Sites toward the listening ability of eleventh-grade students and to study students’ opinions toward learning English using a flipped classroom learning approach with Google Sites. The research methodology was described in detail as follows.

Participants

The population for this study was 200 eleventh-grade students at Nongsungritani school, Nongsung District, Nakhon Ratchasima Province in the second semester of the academic year 2020. The population was arranged using mixed-ability classes. The samples of this study consisted of 24 eleventh-grade students in class 2B at Nongsungritani school, Nongsung District, Nakhon Ratchasima Province who studied the English Foundation 4 subject (E32102) in the second semester of the academic year 2020. The samples were selected using cluster random sampling.

Experimental Design

This research was pre-experimental; with a one-group pre-test and post-test design. It was conducted at Nongsungritani school. Before teaching, the participants were given a pre-test to examine their prior knowledge related to English listening ability before learning English using a flipped classroom learning approach with Google Sites. Then the sample students learned through the flipped classroom lesson plans with Google Sites constructed by the researcher. There were two lesson plans used in the experiment and lasted for four weeks, each lesson plan was taught for five hours, ten hours on total. The learning activities were conducted in four steps: experiential engagement, concept exploration, meaning-making, and demonstration and application. The post-test was conducted after implementing both of the lesson plans to examine the effects of learning English using flipped classroom learning approach with Google Sites toward the English listening ability of the participants. Finally, the participants were also asked to complete a questionnaire to obtain their opinions towards learning English using a flipped classroom learning approach with Google Sites.

Instrumentation

1. Instruments used in the research procedure were two lesson plans using a flipped classroom learning approach with Google Sites adapted from Gerstein's flipped classroom model (Gerstein, 2011, online). Each lesson plan was taught for five hours, making a total of ten hours. The topics were Yummy food, and Festivals and Celebrations. The lesson plans were divided into four stages as follows :

1.1 Experiential engagement : this stage occurred in the classroom to prepare students for learning and predicting the content using activities such as asking questions, interviewing, brainstorming, and predicting vocabulary.

1.2 Concept exploration : the teacher posted videos, audios, and exercises to Google Sites. Students explored the concept outside classroom at their own pace by watching, listening and doing exercises using Google Forms, and Google Docs, such as matching, gap filling, short-answer questions, multiple-choice questions, completion, selection questions and note taking.

1.3 Meaning-making : Students made meaning inside the classroom by discussion, summarizing, and reflecting upon the information they had watched or listened to. The teacher checked their understanding of what they had learned through exercises such as writing, matching, short-answer questions, speaking, multiple-choice questions, and role-playing.

1.4 Demonstration and application: Students had an opportunity to apply, analyze, and evaluate their knowledge to creating a project within the classroom, such as creating a video clip or a simulation.

The lesson plans were presented to three experts. The mean score of lesson plans were 3.54, which meant the lesson plans were excellent. The lesson plans were tried out with students who were not the sample students, but had the same background knowledge as the sample.

2. Instruments for data collection were:

2.1 The English listening ability test which was used for pre and post-test assessment consisted of two parts; 10 items for a conversation test and 20 items for a monologue test; they were all multiple-choice questions with four alternatives. The difficulty index (p) of the test was from 0.33 to 0.79. The discrimination index (r) of the test was from 0.35-0.65. And the reliability of the test was 0.89, which meant the test was reliable.

2.2 The questionnaire to obtain students' opinions about leaning English using a flipped classroom learning approach with Google Sites consisted of 10 questions together with one open-ended question. The Item-Objective Congruence index (IOC) was 1.00, which meant that all items were acceptably congruent with the objectives.

Data Collection

The data collection was done before and after the treatment. The experiment was conducted in the second semester of the academic year 2020. First, the English listening ability test was distributed

to eleventh-grade sample students at Nongsungritani school to assess their English listening ability before the treatment. Then, during the treatment the sample, students learned the two lesson plans for learning English using a flipped classroom learning approach with Google Sites. The implementation lasted for four weeks; each lesson was taught for five hours. Finally, after the treatment, the students were asked to take the English listening ability test again, as a post-test, and to complete the questionnaire to study the students' opinions about learning English using a flipped classroom learning approach with Google Sites.

Data Analysis

1. The effect of learning English using a flipped classroom learning approach with Google Sites toward the listening ability of eleventh-grade sample students was analyzed using mean (\bar{X}) and standard deviation (S.D.), and compared using a t-test for dependent variables from the English listening ability pre and post-test.

2. The students' opinions about learning English using a flipped classroom learning approach with Google Sites were analysis using mean (\bar{X}) and standard deviation (S.D.) from the questionnaire, and using content analysis from the open-ended question.

RESEARCH RESULTS

Part 1 : Results of research objective 1

The results of the examination of the effects of a flipped classroom learning approach with Google Sites toward the listening ability of the sample eleventh-grade students using an English listening ability test are presented in Table 1 and Table 2.

Table 1 The eleventh-grade students' pre and post-test scores on English listening ability

Student No.	Pre-test		Post-test		Development	
	Score (30)	Percentage	Score (30)	Percentage	Score (30)	Percentage
1	10	33.33	17	56.67	7	23.33
2	20	66.67	26	86.67	6	20.00
3	11	36.67	22	73.33	11	36.67
4	5	16.67	11	36.67	6	20.00
5	7	23.33	13	43.33	6	20.00
6	17	56.67	27	90.00	10	33.33
7	15	50.00	27	90.00	12	40.00
8	15	50.00	20	66.67	5	16.67
9	16	53.33	21	70.00	5	16.67
10	18	60.00	24	80.00	6	20.00
11	15	30.00	20	66.67	5	16.67
12	12	40.00	25	83.33	13	43.33
13	13	43.33	19	63.33	6	20.00

Table 1 Cont.

Student No.	Pre-test		Post-test		Development	
	Score (30)	Percentage	Score (30)	Percentage	Score (30)	Percentage
14	13	43.33	25	83.33	12	40.00
15	10	33.33	19	63.33	9	30.00
16	16	53.33	23	76.67	7	23.33
17	19	63.33	26	86.67	7	23.33
18	10	33.33	21	70.00	11	36.67
19	12	40.00	20	66.67	8	26.67
20	10	33.33	22	73.33	12	40.00
21	7	23.33	16	53.33	9	30.00
22	19	63.33	27	90.00	8	26.67
23	9	30.00	14	46.67	5	16.67
24	21	70.00	28	93.33	7	23.33

As shown in Table1, before learning English using a flipped classroom learning approach with Google Sites, the highest pre-test score on English listening ability was 21 points (one student), and the lowest score was 5 points (one student). After learning English using a flipped classroom learning approach with Google Sites, the highest score of English listening ability was 28 points (one student), and the lowest score was 11 points (one student). All sample students obtained higher scores in the post-test than in the pre-test.

Table 2 The comparison of mean scores between pre and post-test of eleventh-grade students' English listening ability.

Mode of Assessment	n	\bar{X}	S.D.	t	p
Pre-test	24	13.33	4.41	15.081*	0.000
Post-test	24	21.38	4.73		

*p < 0.05

As shown in Table 2, the post-test mean score of the English listening ability of the sample eleventh-grade students was significantly higher than the pre-test mean score at a 0.05 level. This indicated that the sample students' English listening ability had improved after learning English using a flipped classroom learning approach with Google Sites.

Part 2 : Results of research objectives 2

The questionnaire was used to study students' opinions about learning English using flipped classroom learning approach with Google Sites. The results of students' opinions about learning English using the flipped classroom learning approach with Google Sites are presented in Table 3.

Table 3 Students’ opinions about learning English using flipped classroom learning approach with Google Sites.

Statements	\bar{X}	S.D.	Meaning	Range
1. The steps of learning English using flipped classroom learning approach with Google Sites are easy to understand and can learn step-by-step.	4.42	0.76	Agree	6
2. Learning English using flipped classroom learning approach with Google Sites helps to stimulate my interest in learning English.	4.33	8.82	Agree	8
3. Learning English using flipped classroom learning approach with Google Sites promotes my listening ability	4.79	0.51	Strongly agree	3
4. Learning English using flipped classroom learning approach with Google Sites allows me to prepare for my lesson before learning in the class.	4.96	0.20	Strongly agree	1
5. Learning English using flipped classroom learning approach with Google Sites provides me with knowledge, interesting topics, and enjoyment.	4.75	0.53	Strongly agree	4
6. I was more autonomous learning when I learn English via flipped classroom learning approach with Google Sites	4.96	0.20	Strongly agree	1
7. Learning English using flipped classroom learning approach with Google Sites promotes group activities.	4.96	0.20	Strongly agree	1
8. Learning English using flipped classroom learning approach with Google Sites is an effective way of learning.	4.38	0.83	Agree	7
9. I can apply the knowledge in daily listening situations after learning English via flipped classroom learning approach with Google Sites.	4.67	0.64	Strongly agree	5
10. I like to learn English via flipped classroom learning approach with Google Sites.	4.88	0.34	Strongly agree	2
Total	4.71	0.53	Strongly agree	

As shown in Table 3, the assessment issue with the highest mean score on the questionnaire was 4.96 (no. 4, 6, 7), which meant the most students strongly agreed. On the other hand, the assessment issue with the lowest mean score on the questionnaire was 4.33 (no.2), which meant the most students agreed. The total mean score of all assessment issues was 4.71; it can be concluded that students had positive opinions about learning English using a flipped classroom learning approach with Google Sites.

The 24 students were also asked to answer the open-ended question: What do you think about learning English using the flipped classroom learning approach with Google Sites? The followings are the examples of students’ opinions :

“...Learning English using the flipped classroom learning approach with Google Sites is interesting, fun, and give me much opportunity to listen to English...” (Student A, Interview, February 12, 2021)

“...Learning English using the flipped classroom learning approach with Google Sites is very useful and I have learned more new things...”
(Student B, Interview, February 12, 2021)

“...I would like to learn English using the flipped classroom learning approach with Google Sites in the next lesson...” (Student C, Interview, February 12, 2021)

“...I can improve my English listening from learning English using the flipped classroom learning approach with Google Sites and I also feel it is fun...” (Student D, Interview, February 12, 2021)

“...Learning English using the flipped classroom learning approach with Google Sites encourages me to work with my friends and they can help me when I don't understand...” (Student E, Interview, February 12, 2021)

“...I can apply my knowledge in daily life after learning English using the flipped classroom learning approach with Google Sites...”
(Student F, Interview, February 12, 2021)

DISCUSSION

The comparison of mean scores between pre-test and post-test of eleventh-grade sample students' English listening ability showed that all of the students got a higher score in the post-test than in the pre-test, and the students' post-test mean score of English listening ability after learning using a flipped classroom learning approach with Google Sites was significantly higher than the students' pre-test mean score. From the results, flipped classroom learning approach with Google Sites was a meaningful activity that helped promote students' English listening ability. According to this research, there are several reasons that could explain these positive results with are discussed below.

Firstly, learning English a using flipped classroom learning approach requires active learning that promotes collaborative learning, and self-directed learning (SDL) in listening. In this study, there are four stages for learning which include: 1) experiential engagement (pre-listening); students asked the questions, interviewed, and predicted the vocabulary in the classroom which prepared them for listening and predicting content. These activities had various purposes, including pre-teaching or activating vocabulary, predicting content, generating interest, and checking to understand the task, 2) concept exploration (while-listening) : students listened to texts and did exercises using Google Sites outside the classroom to practice listening and explored the concepts at their own pace. This stage supported SDL in listening because SDL integrates self-management and self-monitoring which the students planed, controlled, and evaluated by themselves to develop their learning

(Laine, Myllymaki & Hakala, 2021, p. 439), 3) meaning-making (while-listening) : students listened to texts, watched videos, discussed, summarized, reflected on the information, and did exercises in their group. Group activity promoted collaborative learning that was done in a small group with a mixed-ability of students. The students helped to solve the problems or complete the tasks together. All students in a group were an integral part of the group involved in helping each other. For each activity, the success or failure of a group belonged to everyone in the group, and 4) demonstration and application (post-listening) : students created projects to apply, analyze, evaluate their knowledge, and checked their understanding after listened to texts. This stage promoted collaborative learning similar to a meaning-making stage in which the students created the projects in their small group with the mixed-ability of students.

Secondly, the flipped classroom learning approach is a method of teaching integrated with online resources for learning outside the classroom. Therefore, online resources must be interesting, accessible, and familiar to students. In this study, Google Sites was an online resource to present media for listening practice. It is one such online resource that is free of cost and used web-based instruction. Students can learn by themselves and practice listening by demanding to actively learn through media in Google Sites. Google Sites provides facilities for the teacher to upload the media which can be in form of texts, images, and audios. Students can access the media to listening to audios and do exercises without any constraints on place and time. In addition, students' submission of online assignments can be monitored in an orderly manner. Therefore, practicing English listening through Google Sites outside the classroom gives students the opportunity to review content and complete exercises to check their understanding. If there is any misunderstanding, students can go back and listen again or pause to understand. Kunna and Sukavatee (2017, pp. 558-572) explored the types of multimedia used in English classroom and the result showed that in the Internet environment, teachers used Google Sites for students to practice listening.

The results of students' opinion about learning English using a flipped classroom learning approach with Google Sites revealed that students had positive opinions about learning English using a flipped classroom learning approach with Google Sites. The finding reflected the effects of a flipped classroom learning approach. As Roth (2016, p. 78) showed, there are many reasons that a flipped classroom learning approach can help students, such as there being many kinds of material that are interesting that motivate students to be more independent and active when learning via online resources or contacting their teacher and friends when they find problems. In addition, learning outside the classroom enables students to pause and reflect on lessons and they can refer to the resources again without the pressure of interference or keeping up with other learners, and they can learn at their own preferred time and location. Moreover, the flipped classroom learning approach developed students' independence attributes which consisted of planning, managing,

and taking responsibility for learning, finding, and engaging in various activities, selecting resources, and reflecting on learning (Denprapat & Chuaychoowong, 2016, p. 226). In addition, the questionnaire showed that the students in this study found that they strongly agreed that it was useful to learn English using a flipped classroom learning approach with Google Sites. They expressed their opinions about learning English using a flipped classroom that provided them with knowledge, interesting topics and enjoyment. Moreover, they learned step-by-step and prepared the lesson before learning in class. As well, they were more autonomous in learning outside the classroom and had the opportunity to work with friends in the classroom.

In conclusion, even through teaching English using a flipped classroom learning approach with Google Sites has not been widely used to improve listening ability, this study confirms that learning English using a flipped classroom learning approach with Google Sites can be used for teaching listening. When teaching English using a flipped classroom learning approach with Google Sites, the teacher needs to; 1) give students sufficient opportunity to prepare themselves before they study in the classroom, 2) select online resources which will be interesting, accessible, and familiar to students, 3) provide listening text, related to students' lives, and 4) support active group activity in the classroom stages. These all help students to learn and listen to English better. Moreover, the results from the questionnaire to study students' opinions about learning English using flipped classroom with Google Sites revealed that students had positive opinions about learning English using a flipped classroom learning approach with Google Sites.

SUGGESTIONS

1. The topics used in English listening instruction should be relevant to the students' interests, needs or lives. Because well-chosen, relevant topics can engage students more fully in listening and can help students better understand, and have self-confidence in listening to English.
2. Teachers should consider students' level and the appropriateness of the content, and learning objectives in constructing lessons. These can help students to achieve English proficiency.
3. Teachers should find various materials, techniques, and multimedia in the classroom and outside the classroom in order to enhance English listening skills.
4. Teachers should encourage students to get experience outside the classroom by themselves, and support group activity in the classroom because it can enhance students' learning and help them enjoy learning.

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REFERENCES

- Abdulrahman, T., Basalama, N., & Widodo, M. R. (2018). The Impact of Podcasts on EFL Students' Listening Comprehension. *International Journal of Language Education*, 2(2), 23-33.
- Bergmann, J., & Sams, A. (2012). *Flip Your Classroom : Reach Every Student in Every Class Every Day*. US : ISTE.
- Boonsung, P., & Meesup, P. (2020). The Flipped Classroom Approach through a Google Sites and Project Based Learning on Creative Thinking and Innovation in the 21st Century. *Rajabhat J. Sci. Humanit. Soc. Sci.*, 21(1), 194-212. (In Thai)
- Botmart, V. (2019). *The Effects of Gamified Flipped Classroom Application on Learning English Vocabulary for Thai University students in EFL Context*. Thesis, Master of Arts in English Language studies, Suranaree University of Technology, Nakhon Ratchasima. (In Thai)
- Chaibao, C. (2017). Listening Problems of Matthayom 3 ISME Program Students at a Thai Secondary School. Thesis, Master of Arts in English for careers, Thammasat University, Bangkok. (In Thai)
- Denprapat, O., & Chuaychoowong, M. (2016). Using Flipped Classroom Model to Develop English Competency and Independent Attributes of Mathayom Suksa 1 Students at Mengrai Maharajwitthayakhom School. *Journal of Social Academic*, 9(2), 225-239. (In Thai)
- Du, J. (2019). Application of Schema Theory in College English Listening Teaching, *The 5th International Conference on Social Science and Higher Education* (pp. 729-733). China : Jingdezhen Ceramic Institute.
- Evseeva, A., & Solozhenko, A. (2015). Use of Flipped Classroom Technology in Language Learning. *Procedia Social and Behavioral Sciences*, 206(15), 205-209.
- Gerstein, J. (2011). *The Flipped Classroom Model : A Full Picture*. Retrieved September 3, 2020, from <http://usergeneratededucation.wprdpres.com/2011/06/13/the-flipped-classroom-model-a-full-picture/>
- Harris, R. S., & Hodges, C. B. (2016). Using Google tools for Online Coursework : Student Perceptions. *IEE Transactions on Emerging Topics in Computing*, 4(3), 385-391.
- Jindathai, S. (2020). Comparisons of English Listening Comprehension Strategies for High-Ability and Low-Ability Learners Taking an English Proficiency Test Preparation Course at Thai-Nichi Institute of Technology, *TNI Academic Conference* (pp. 7-13). Bangkok : Thai-Nichi Institute of Technology. (In Thai)
- Jonathan, J. (2018). Pedagogical Principles for Effective Reading Culture. *Lapai Research in Humanities*, 5(1), 1-8.
- Kawinkoonlasate, P. (2019). Integration in Flipped Classroom Technology Approach to Develop English Language Skills of Thai EFL Learners. *English Language Teaching*, 12(11), 23-34.

- Kumbhar, K. N. (2020). Creating a Library Portal by Using Google Sites. *Journal of Advances in Library and Information Science*, 9(2), 46-52.
- Kunna, P., & Sukavatee, P. (2017). Study of the use of Multimedia for English Teachers in Special Purpose schools in Northern Region. *An Online Journal of Education*, 12(1), 558-572.
- Laine, S., Myllymaki, M., & Hakala, I. (2021). Raising Awareness of Students' Self-Directed Learning Readiness (SDLR), *The 13th International Conference on Computer Supported Education* (pp. 439-446). Online Streaming.
- Listiyaningsih, T. (2017). The Influence of Listening English Song to Improve Listening Skill in Listening Class. *Journal of Multidisciplinary Studies*, 1(1), 35-49.
- Milman, N. B. (2012). The Flipped Classroom Strategy : What is It and How Can It Best Be Used?. *Distance Learning*, 9(3), 85-87.
- Namaziandost, E., Neisi, L., & Momtaz, S. (2019). The Effectiveness of Flipped Classroom Model on Listening Comprehension Among Iranian Upper-Intermediate EFL Learners. *Journal of Applied Linguistics and Language Research*, 6(4), 129-139.
- Nation, D. (2020). *What is Google Sites and Why Use It?*. Retrieved February 8, 2020, from <https://www.lifewire.com/what-is-google-sites-and-why-use-it-3486337>
- Olitsky, N., & Cosgrove, S. B. (2016). The Better Blend? Flipping the Principles of Microeconomics Classroom. *International Review of Economics education*, 21(16), 1-11.
- Park, S. E., & Howell, T. H. (2015). Implementation of a Flipped Classroom Educational Model in a Predoctoral Dental Course. *Journal of Dental Education*, 79(5), 563-570.
- Roth, C. (2016). *Using the Flipped Classroom to Enhance English Listening Comprehension for Pre-University Students in Cambodia*. Thesis, Master of Arts in English Language studies, Suranaree University of Technology, Nakhon Ratchasima. (In Thai)
- Sojayapan, C., & Khlaisang, J. (2020). The Effect of a flipped classroom with online group investigation on students' team learning ability. *Kasert Journal of Social Sciences*, 41(2020), 28-33. (In Thai)
- Student A. (2021, 12 February). Student. *Interview*. (In Thai)
- Student B. (2021, 12 February). Student. *Interview*. (In Thai)
- Student C. (2021, 12 February). Student. *Interview*. (In Thai)
- Student D. (2021, 12 February). Student. *Interview*. (In Thai)
- Student E. (2021, 12 February). Student. *Interview*. (In Thai)
- Student F. (2021, 12 February). Student. *Interview*. (In Thai)
- Zur, S. (2020). EFL Students' English Listening Comprehension Problem : A Study of English Teacher Education Program. *Advance in Social Sciences Research Journal*, 7(1), 268-273.