

การพัฒนาเกมไวยากรณ์ออนไลน์ เพื่อการสื่อสารภาษาอังกฤษ Effectiveness of an Online Grammar Game of Communicative English



สนับสนุนทุนวิจัยโดย ศูนย์สนับสนุนทุนและพัฒนาการเรียนการสอน มหาวิทยาลัยรังสิต ประจำปีการศึกษา 2559



Effectiveness of an Online Grammar Game of Communicative English



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บทคัดย่อ

วัตถุประสงค์ของการศึกษาครั้งนี้คือเพื่อพัฒนาการเรียนรู้ภาษาบนเว็บ (WBLL) โดยใช้องค์ประกอบ การออกแบบเกมและเพื่อสำรวจความพึงพอใจต่อ WBLL เพื่อดำเนินการพัฒนา WBLL นั้น นักศึกษาเอก ภาษาอังกฤษเก้าสิบคนของมหาวิทยาลัยรังสิตได้รับการคัดเลือกอย่างตั้งใจ สำหรับกระบวนการเก็บรวบรวม ข้อมูล เครื่องมือวิจัยที่ใช้เป็นแบบสอบถามที่แบ่งออกเป็น 2 ส่วนหลักคือ ข้อมูลทั่วไป และข้อผิดพลาดทาง ไวยากรณ์ที่ผู้เข้าร่วมต้องปรับปรุง สำหรับการวิเคราะห์ข้อมูล ใช้ความถี่และเปอร์เซ็นต์ในการศึกษา พบว่า กวามรู้ด้านกำศัพท์และข้อผิดพลาดของประโยคเป็นความต้องการสูงสุด ผู้ตอบแบบสอบถามยังตระหนักว่าการ สะกดกำนั้นอยู่ในอันดับที่สาม หลังจากเสร็จสิ้น WBLL โดยใช้แอป Marvel, Freepik และ HTMLs เป็นเว็บไซต์ ที่ตอบสนองได้ ผลการวิจัยพบว่าผู้เชี่ยวชาญ 5 คนในสาขาเทคโนโลยีการศึกษามีความพึงพอใจสูงต่อ WBLL โดยมีค่าเฉลี่ยโดยรวมอยู่ที่ 4.24 สามารถบอกเป็นนัยได้ว่าการใช้องค์ประกอบการออกแบบเกมและการเรียนรู้ ภาษาบนเว็บสามารถเป็นกิจกรรมที่ผู้เรียนชื่นชอบและสามารถเป็นเครื่องมือในการพัฒนาความรู้ความเข้าใจ ของผู้เรียน อาจเล่นเป็นรายบุคกล เป็นกลุ่มเล็ก หรือเป็นกลุ่ม ขึ้นอยู่กับวัตถุประสงค์ของผู้สร้างเกม



Abstract

The purposes of this study were to develop web-based language learning (WBLL) using game-design elements and to explore the satisfaction towards the WBLL. To implement the development of WBLL, ninety English major students at Rangsit University were purposively selected. For the data collection process, the research instrument used was a questionnaire that was divided into two main parts: the general information and the grammatical errors that the participants required improvement. For the data analysis, frequency and percentages were employed in the study. It revealed that vocabulary knowledge and sentence errors were among the highest needs. The respondents also realized that spelling held the third spot. After the completion of the WBLL using the Marvel app, Freepik, and HTML5 as a responsive website, the findings showed that 5 experts in the field of educational technology had a high satisfaction towards the WBLL with an overall mean of 4.24. It can be implied that the use of game-design elements and web-based language learning can be an activity that learners favor and can be a tool for developing learners' cognitive. It may be played individually, in small groups, or as a group, depending on the purpose of the game creator.



กิตติกรรมประกาศ

งานวิจัยฉบับนี้สำเร็จสมบูรณ์ลงได้โดยได้รับความร่วมมือและความช่วยเหลือจากนักศึกษาชั้นปีที่ 3 วิทยาลัยศิลปศาสตร์ มหาวิทยาลัยรังสิต ที่ให้ความร่วมมือในการทดลอง ตลอดจนช่วยตอบแบบสอบถามและ สนทนากลุ่ม อันเป็นประโยชน์ต่อการเก็บข้อมูล เรียบเรียงข้อมูล วิเคราะห์ และศึกษาวิจัยซึ่งผู้วิจัยขอขอบคุณ ไว้ ณ ที่นี้

ขอขอบคุณ มหาวิทยาลัยรังสิต และผู้อำนวยการศูนย์สนับสนุนและพัฒนาการเรียนการสอน มหาวิทยาลัยรังสิตที่ให้ความช่วยเหลือในเรื่องการสนับสนุนทุนวิจัย ตลอดจนการให้คำแนะนำปรึกษาในเรื่อง ต่างๆ ขอขอบคุณภาควิชาภาษาอังกฤษ มหาวิทยาลัยรังสิตที่ให้ความสะดวกในการเก็บข้อมูลวิจัยขอบคุณศูนย์ RSU Cyber University ที่ให้ความช่วยเหลือ และสำนักหอสมุดมหาวิทยาลัยรังสิตที่ให้ความช่วยเหลือในเรื่อง การสืบค้นข้อมูลเป็นอย่างดี และผู้วิจัยยังได้รับความกรุณาจากผู้เชี่ยวชาญที่ปรึกษาโครงการ ในการช่วยแนะนำ การวิจัย ตรวจทานการเขียนวิจัย และบทคัดย่อจนสำเร็จได้ด้วยดี

ขอให้คุณประโยชน์จากการทำวิจัยครั้งนี้เป็นของทุกท่านที่มีส่วนช่วยเหลือให้งานวิจัยฉบับนี้สำเร็จ ลุล่วงได้ตามจุดมุ่งหมาย

Lassing and self

ศิราภรณ์ ศิริพัลลภ วรพล มหาแก้ว มิถุนายน 2565

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CHAPTER 1

INTRODUCTION

Chapter one presents an introduction to the study which is divided into four parts as follows:

- 1.1 Background of the Study
- 1.2 Purpose of the Study
- 1.3 Scope of the Study
- 1.4 Definition of Terms

1.1 Background of the Study

English has grown as a universal language used by people from all over the world and as the center of communication. For educational purposes, learners should be able to use the English language to enhance their knowledge since it has played a vital role as a criterion for admission for higher education.

Because of its importance, the instruction in the language classroom supported by the widespread use of the Internet has increased significantly because technology has advantages over other educational materials. Several studies support the concept of technology-supported language learning (Technology-enhanced language learning approach or TELL), the concept which was providing a language learning environment in which technology plays a role in fostering interactions between the learners and others to enhance cognitive enhancement. In addition to applying language knowledge, Bush (1997) said that it is not a concept of technology as just a tool for the learners to learn a language, but the interaction between the learners and others through technology will facilitate language acquisition.

To elaborate, with the help of the Internet, it allows the learners to practice English or

Grammar 24 hours a day (Warschauer, Shetzer and Meloni, 2000), which can serve as a platform for communication between the learners and others, as well as with other learners (Vogel, 2001). Information on the Internet reaches second language classrooms faster than other forms of technology such as television or video conferencing (Coiro and Leu, 2006). Moreover, the internet develops the ability of the learners from education's traditional system in the classroom. The learners will be able to learn, understand, and interact with technology in a more meaningful way (Pianfetti, 2001). In this regard, Web-based Language Learning (WBLL) is thought to be a breakthrough and alternative that has been considered motivational and effective blended learning curricula. According to Raine (2018), the amazingly impressive fact is that "There is now a wide range of very successful web-based language learning platforms, including the likes of Duolingo with 150 million users (Guliani, 2016), and Busuu with 70 million users (Salter, 2017)."

Apart from the astonishing features of WBLL, the game-design elements are regarded the contributing to the learners' need for self-learning and sustainable learning. Suksiri (2007) conducted a study with two groups of learners: learners through game-based learning and those through the traditional class. It was found that the group of learning through game media felt more eager to learn than the knowledge level of the learners at a higher level. The learners felt that they were more involved in learning, and those who learned through game media had more memory and understanding than those who learned through normal lectures.

Therefore, if the game is used as a means of teaching and learning, it would increase the learners' chances of seeing the correct English structure, which is a sentence that is suitable for daily use. It is a web-based language learning which learners can use on their mobile device for learning from any place by laying out the game layout for the learners to have fun and

challenge from playing games and engaging lessons from the content of the lesson to help motivate the learners to learn and develop themselves through sustainable learning.

1.2 Purpose of the Study

The study's goals are to develop web-based language learning through the use of a tool, as well as to investigate how satisfied people are with WBLL.

1.3 1.3 Scope of the Study

This study focuses on developing web-based language learning through the use of a tool the Marvel app, Freepik, and HTML5 as a responsive website.

1.4 Definition of Terms

WBLL (Web-Based Language Learning) refers to learning language through the use of the Web and exploiting Web materials, resources, applications or tools (Son, 2007).



CHAPTER 2

REVIEW OF THE LITERATURE

This chapter provides background knowledge related to this study. The details of this chapter are divided into three parts:

- 2.1 Communication
- 2.2 Web-based language learning
- 2.3 Related Research

2.1 Communication

2.1.1 Definition of Communication

The original meaning of "communication" according to The Oxford English Dictionary is "communication comes from the Latin root of communicate as communica-re, which means to make common to many shares". According to this definition, when people communicate effectively, they express their ideas and feelings in a way that is understandable and common to each other. They share information to each other. Therefore, communication is the process of people sharing thoughts idea and feelings with each other in commonly understandable ways. (Hamilton, Parker, & Smith, 1982)

According to Hamilton and Parker (1997), communication is a process of transferring thoughts and ideas from the senders to the receivers. When people communicate effectively, they express their ideas and feelings in a way that is understandable to each of them. Therefore, communication is the process of people sharing thoughts, ideas, and feeling with each other in commonly understandable ways. Whether you are communicating with only one person, a small group, or with many people, the same basic communication process occurs. The basic elements of the communication process are person A-B, stimulus and motivation, encoding

and decoding, code, channel, feedback, environment, and noise.

Person A-B could be the sender and receiver communicating at the same time as during the communication they will be both sending and receiving simultaneously. Before sending the message there will be two things that are stimuli, which can be both internal and external, and motivation. After being stimulated and motivated to communication, the sender will choose the form to communicate in, which is encoding. Then the receiver will try to understand the message, looking for clues to meaning, which was decoding. Code is the symbols that carry the message which has three basic communication codes: language, paralanguage, which refers to the non- verbal elements of communication used to modify meaning and convey emotion, and nonverbal. The medium selected to carry the message is a channel such as, face-to-face, memos, magazine, newsletters, radio, telephone, and television. After sending a message, feedback will be required to the verbal and visual responses to the message. Moreover, the environment is the one that the effective communicators are trying to control as much as possible. The environment includes: time, place, physical, and social surroundings. Noise, both internal and external, can be anything that interferes with communication by distorting or blocking the message (Hamilton & Parker, 1997). Thus, the communicator should understand the communication process and be aware of any interruption that might create misunderstanding.

Communication is the process by which people express their feelings, ideas, values and perceptions with symbols. These symbols are in the form of verbal and nonverbal communication. Verbal communication is communication between two or more people in the form of speaking, while nonverbal communication consists of a message that is not encoded in words. It includes body movement, facial expression, and voice qualities. Communication is a basic human activity. It is a skill that has been a major factor in the success or failure of most

endeavors. Neuliep (2003) stated that effective communication can ultimately lower or remove the walls and barriers of misunderstanding that separate human beings from one another.

2.1.2 English Communication Problems

According to Comstock (1985), the communication problems occur in the communication process. We are sending a message of our simple objective, but it is interpreted entirely different from our expectations. In the communication process words cause more problems than any other factors. Because not many words have a universal meaning, even when speaking the same language, words can get us into trouble. The meaning that each person assigns a word depends on that person's background, attitude, and past experience with the word.

Another problem is many words have more than one meaning or their meanings are vague. The use of ambiguous words arouses misunderstandings among people. Moreover, people in specialized fields also develop a specialized language or jargon. There are few problems if they talk to each other, but if people in different fields talk to each other using jargon, they may not be able to understand each other quite well. The word problems are related to the idea of assuming too much. The communicator assumes that the other person has the same technical background or meaning for a word that he or she has.

Another cause of communication problems which can occur between people who speak the same language and are from the same culture, and may even be of the same sex are behavioral preferences for either judging or perceiving. Speakers often are not clear themselves about what they mean, which almost assures that what they say will be unclear as well. Even when they know what they mean, they do not say it as clearly as they should. They may hide their true feelings or ideas intentionally or unintentionally. Either way, it is very common that when people from different cultures are trying to communicate, they often get confused about

the other's message. Even if their languages are the same, culture is an important role which people interpret the world. If their cultures are different, it is easy for the same statement to mean one thing to one person and something different to someone else. Thus, intercultural communication is especially prone to errors.

2.1.3 Communication Skill

Since we were born until nowadays, communication skills are all around us. We know that a communication skill is important and also wonder what actually means is. Communication skill is some kind of skill used in communication by from talking, body language to even listening. Many things can affect the way one can express her or his communication skills to others. Each person has different personal skills. Everybody has different ways of conveying some kind of communication skill with themselves (Essay UK, 2013).

The ability to communicate effectively with superiors, colleagues, and staff is essential, no matter what industry you work in. Workers in the digital age must know how to effectively convey and receive messages in person as well as via phone, email, and social media. Good communication skills will help get hired, land promotions, and be a success throughout your career. If someone has superb communication skills, he or she probably has an aptitude for clearly and collectedly conveying and receiving messages to and from others both verbally and through body language, including facial expressions, eye contact, arm movement, and posture. General communication skills are important for everyday communication in all situations when you are exchanging conversation with someone else. They are helpful from small talk to deep conversation (Alison Doyle, 2017).

2.2 Web-Based Language Learning

2.2.1 Definitions of Web-based language learning

WBLL is learning language through the use of the Web and exploiting Web materials, resources, applications or tools (Son, 2007)

Khan (1997) defines the term Web-based language learning as electronic learning or simply an e-learning website or program that can be made widely available anywhere in the world, as it takes the advantage of internet technology.

Similarly, Davidson and Rasmussen (2006) assert that WBLL is a website that is designed and customized to meet the specific learning needs of learners, by delivering the content online.

2.2.2 Importance of Web-based language learning

Web-based instruction offers learners unparalleled access to instructional resources, far surpassing the reach of the traditional classroom. It also makes possible learning experiences that are open, flexible, and distributed, providing opportunities for engaging, interactive, and efficient instruction (Kahn, 2001).

A number of researchers and practitioners (Allodi, 1998;Bell, 1998;Felix, 1999Felix, , 2001Li & Hart, 1996;Murray & McPherson, 2004;Son, 2005Son, , 2007 argue that the web offers a global database of authentic materials that can enhance language learning and teaching.

2.2.3 Development of Web-based language learning

The process of developing the Web-based language learning can be divided into three figures as follows:

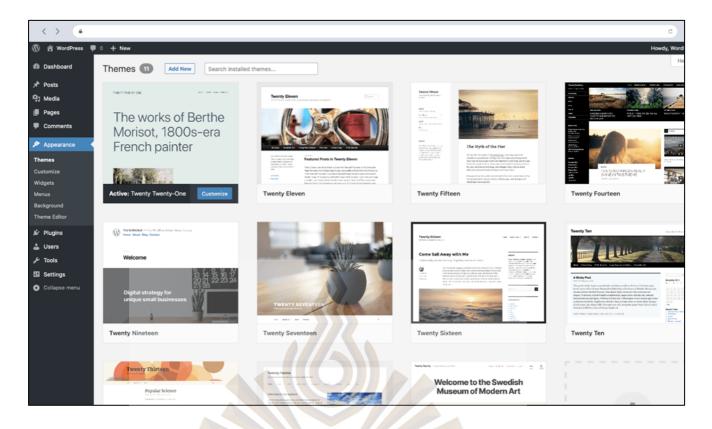


Figure 1: Install WordPress

The Web-Based Language Learning was designed using WordPress, a content management system (CMS) that allows you to host and build websites.

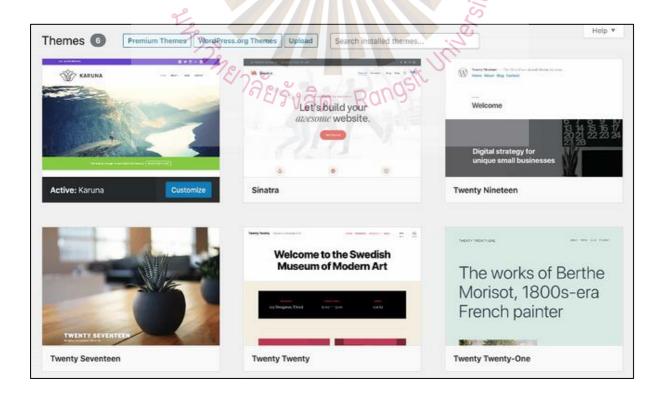


Figure 2: Choose your theme

You can personalize your WordPress website with one of the numerous themes and templates available, each with a variety of layouts, formatting styles, colors, fonts, and other visual options.

Once you've found the right theme, you can install it and start customizing.

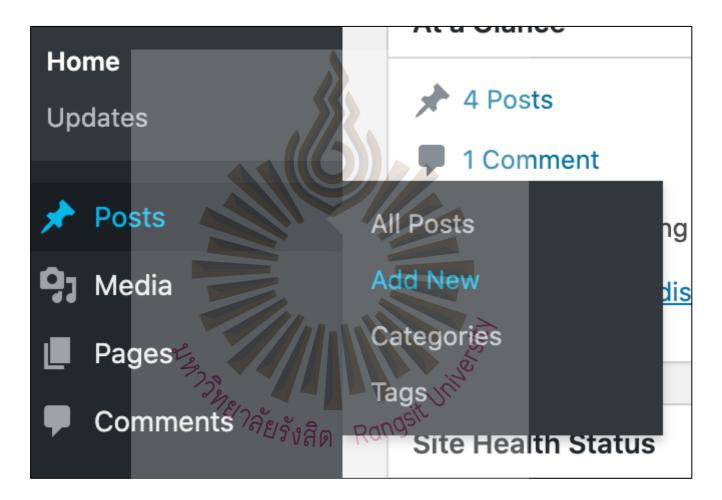


Figure 3: Add posts and pages

To add a post to your website, go to the admin dashboard, click "Posts" and then "Add New".

You can add a title for your post, place photos, change the format, and insert page elements via blocks and short codes. Click "Save Draft" to save your changes as a draft or click "Publish" to immediately take the post live.

2.3 Related Research

In the research, *Developing Web-based English Learning Applications: Principles and Practice* by Paul Raine shows that Web-based English language learning resources are in high demand, and educators may soon be expected to be able to design and build these resources in addition to advising and prescribing them to their pupils.

Similarly, in the research, *Web-Based English Language Learning* by Gülçin Nagehan Sarıca and Nadire Çavuş (2008) proposes that learning through the web is an alternative. Increasing online opportunities for students may have a positive impact on students. As a result, teachers should use more technological tools in their classes than they have in the past. Furthermore, university students anticipate learning or using web technologies in their classrooms and courses.

In another study, Web-Based Language Learning (WBLL) for Enhancing L2 Speaking Performance: A Review by Ngo Cong-Lem (2018) shows WBLL generally has a positive impact on learners' L2 language proficiency as well as on their affective factors, as it provides language learners with an unlimited number of online resources for language learning. Given the abundance of linguistic input available on the Internet, language learners should use L2 resources (e.g., web articles, TED Talks, and YouTube videos) to acquire linguistic knowledge while improving their background knowledge.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter presents the research methodology and is divided into three parts as follows:

- 3.1 Methodology
- 3.2 Samples and Data Collection
- 3.3 Data Analysis Procedures

3.1 Methodology

Since the development of web-based language learning has to follow many theories, many researchers, educators and scholars are mentioned in this section about their work, concepts and ideas.

According to Hutchinson and Waters (1994), they proposed the concept of how to design the web-based language learning:

"Designing a course is fundamentally a matter of asking questions in order to provide a reasoned basis for the subsequent processes of syllabus design, materials writing, classroom teaching and evaluation."

Based on the idea, using WH-questions as the basis for syllabus designing is as follows:

"Why does the learners need to learn?, who is going to be involved in the process?, where is the learning to take place?, when is the learning to take place?, what does the learners need to learn?, how will the learning be achieved?"

Moreover, Dubin and Olshtain (1990) provide an idea:

"A syllabus or a course outline should ideally describe: what the learners are expected to know at the end of the course (course objectives); what is to be taught or learned during the course; when it is to be taught and at what rate of progress; what are the different levels or stages; how it is to be taught (suggesting procedures, techniques, and materials); how it is to be evaluated (suggesting testing and evaluating mechanisms)."

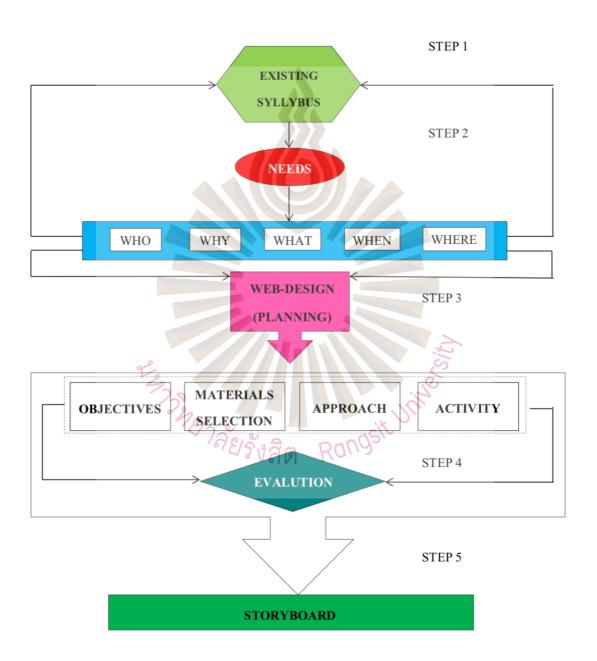


Figure 1 Steps to Design an English Web-Based Tutorial

Step 1 is to review the current course syllabus to ensure that web-based language learning fulfills the required standards. This course examines the language used in a variety of authentic texts, such as newspapers, articles, and advertisements, with the goal of providing knowledge about paraphrasing and plagiarism. Additionally, the students will also learn some other topics related to 'paraphrasing' and 'plagiarism' such as summarization, academic writing, and in-text citations.

Step 2 is associated with a desires analysis. This research study used survey research designs to implement the requirements analysis.

Step 3 is planning the website based on the topic of 'paraphrasing' and 'plagiarism' and others related to the topic such as summarization, academic writing, and in-text citations.

There are two main objectives for students:

- 1. To be able to understand paraphrasing and plagiarism, to paraphrase, and to avoid plagiarism in writing.
- 2. To be able to identify plagiarism in texts and documents.

Once the content is decided, each lesson will be designed and checked by the teacher.

The web design was created with WordPress. Also, part of the development is creating picture for the topics using Canva and searching for background images from the free website (Freepik).

3.2 Samples and Data Collection

This study used targeted sampling. The information gathered during the survey's administration. The following data obtained from the distributed questionnaire was used to interpret, classify, and complete the following data:

Part I: Respondents' background information, including gender, age, year of study, and grade average. The information was examined in terms of factors, frequency, and percentage.

Part II: Respondents' satisfaction towards Web-based language learning.

3.3 Data Analysis Procedures

For background information, we analyzed the data by factors, frequency, and percentage.

Regarding the satisfaction of the respondents towards the web-based language learning, the obtained data were analyzed in factors, degree of agreement, frequency, and percentage. The degree of agreement was analyzed using the following scale: 5 = Very high, 4 = High, 3 = Average, 2 = Low, and 1 = Very low



CHAPTER 4

RESULTS

This chapter presents the results of the study and is divided into three parts as it follows:

- 4.1 Needs Analysis
- 4.2 Development of WBLL
- 4.3 Satisfaction towards Web-Based Language Learning

4.1 Needs Analysis

We used the data gathered from the questionnaires to interpret, classify, and complete the following:

Part I: Background of the participants consisting of gender, age, studying year, and grade average. The data were analyzed in factors, frequency, and percentage. Thirty-six English-major students participating in English required at Rangsit University, out of which were male (16.7%) and female (83.3%). The majority of the respondents (58.3%) were 20 – 21 years old. Most of the respondents (63.9%) are third year learners. Lastly, 77.8% of the respondents are those with the grade 3.00 – 4.00.

Part II: Satisfaction of the respondents towards Web-based language learning. The data were analyzed in factors, degree of agreement, frequency, and percentage. Firstly, the majority of respondents (63.89%) agree that the lessons presented on the website are interesting and engaging. Secondly, 17 respondents (47.22%) agree that the topic is well & clearly divided. Thirdly, 19 respondents (52.78%) agree that the font size and style is friendly

and convenient. Lastly, 19 respondents (52.78%) agree that the website is quick, responsive, and interactive.

4.2 Results of the Development of Web-Based Language Learning 4.2 Development of WBLL

In practice, an outline of an English grammar game for online communication, ENG 212: Applied English Structure course, is created in a computer language to create a system in two parts.

1) Student section

The students can use the website on their mobile phone or tablet device and log into the game using their RSU email address. The content in this online game application is divided into sub-dialogue. The students will be the subject of those conversations. It is an interaction between the students and characters that the players can not control (Non-Player Character).

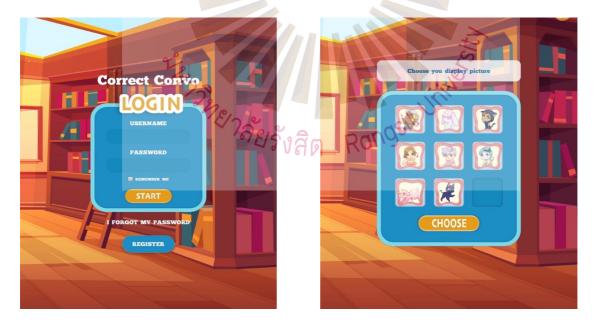


Figure 2 Login and Display Picture

According to Figure 2, the learners can choose the appearance of the character to be played. Once played, more characters will be unlocked, motivating the players to keep playing.



Figure 3 Content and Conversation

Figure 3 reveals the content or conversation that is divided into smaller chapters.

From easy to difficult, each chapter begins with an introductory story and summarizes the number of questions for each chapter no more than ten times.

The questions are for the students to choose to ask the non-player character (NPC).

Getting useful answers from the NPC can be a clue for answering the questions at the end of each story. The number of clues the players find affects their score and their chances of going to the end of the chapter to advance in the conversation.

The interface of the game includes character scenes, text and voice dialogues, as well as a point system, level (badge), leaderboard, and challenges between the learners and other players.

2) Teacher section

As the researcher plans to apply it to other subjects related to conversational learning,

the instructor or administrator has been drafted to be able to add content to suit other courses or content that requires a specific language.

Various ways are required to create an application or website for additional information from mobile devices for being able to add information and easily tracking the results of the students' usage.



Figure 4 Challenge and Score Board

The instructors or administrators are required to add course titles, course code, conversation title, and the level of difficulty of the conversation. Text and audio conversations are also a statistical data collection section to track the performance of individual learners or groups.

4.3 Satisfaction towards Web-Based Language Learning

The data obtained from five experts were interpreted as follows:

Table 1 Satisfaction of the Respondents towards Web-Based Language Learning

Satisfaction	Mean	Degree of Agreement				
		5	4	3	2	1
1. The usage of web game	3.80	1	2	2	0	0
interface		(20%)	(40%)	(40%)		
2. The user-friendly system	4.44	2	3	0	0	0

		(40%)	(60%)			
3. The font size and style:	3.80	-	4	1	0	0
user-friendly and convenient.			(80%)	(20%)		
4. The interactive system:	5.00	5	0	0	0	0
quickly responsive		(100%)				
5. Overall usage: user	4.20	1	4	0	0	0
friendly, convenient, and		(20%)	(80%)			
quick.						
The total average mean score	4.24					

According to Table 1, with the mean of approximately 3.80-5.00, the respondents agreed that there were two equal levels of satisfaction rated the least, which were "The usage of web game interface" and "The font size and style: user-friendly and convenient." In contrast, the highest-rated result was "The interactive system: quickly responsive," with a mean of 5.00. The second was "The user-friendly system" (Mean = 4.44) while the "Overall usage: user friendly, convenient, and quick" was ranked as the third level with a mean of 4.20.

The data obtained from thirty-six students was divided into two tables as follows:

Table 2: Background of the Respondents

Factors	Frequency	Percentage
Gender		
- Male	6	16.7%
- Female	30	83.3%
Age		

- 18-19 years old	d 1	2.8%
- 20-21 years ol	d 21	58.3%
- 22-23 years old	d 14	38.9%
- 24-25 years old	d -	-
Year		
- 1st year	-	-
- 2nd year	-	-
- 3rd year	23	63.9%
- 4th year	13	36.1%
Grade average		
- 00.00-00.99		9 ///-
- 1.00-1.99		-
- 2.00-2.99	8	22.2%
- 3.00-4.00	28	77.8%

According to table 1, the information in the first row is about gender, the total number of the respondents is 36. The number of males is 6 or 16.7%, and the number of females is 30 or 83.3%.

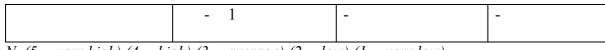
The second row is about age. The respondents can be divided into four age ranges. Most of the respondents are people at the age of 20 - 21 years old or 58.3%, followed by the age of 22 - 23 years old or 38.9%, and the age of 18 - 19 years old or 2.8%.

The third row is the year of study. The results show 23 respondents are third-year students or 63.9% and the rest, which is 13 are fourth year, which is 36.1%.

In the fourth row, the information is about grade average. 8 respondents have grade average of 2.00 - 2.99 or 22.2% and the rest which is 28 have grade average of 3.00 - 4.00 or 77.8%.

 Table 3: Satisfaction towards Web-Based Language Learning of the Respondents

Factors	Degree of Agreement	Frequency	Percentage
The lessons are	- 5	11	30.56%
interesting and	- 4	23	63.89%
engaging	- 3	1	2.78%
	- 2		-
	1		-
The topic is well &	- 5	17	47.22%
clearly divided	- 4	17	47.22%
	- 3	2	5.56%
	- 2	4	-
92	- 1	1/5/5/5/5/5/5/5/5/5/5/5/5/5/5/5/5/5/5/5	-
The font size and style:	24-5	19	52.78%
user friendly and	- ^{วล} ัยรังสิต โ	814U2210	38.89%
convenient.	- 3	3	8.33%
	- 2	-	-
	- 1	-	-
Quickly responsive &	- 5	19	52.78%
interactive	- 4	15	41.67%
	- 3	2	5.56%
	- 2	-	-



N. (5 = very high) (4 = high) (3 = average) (2 = low) (1 = very low)

According to table 2, in the first row, 11 respondents (30.56%) have very high satisfaction and agree that the lesson on the website is interesting and engaging, 23 (63.89%) have high and only one (2.78%) has average satisfaction.

In the second row, 17 respondents (47.22%) have very high satisfaction and agree that the topic on the website is well & clearly divided; the other 17 (47.22%) have high and only one (5.56%) has average satisfaction.

In the third row, 19 respondents (52.78%) have very high satisfaction and agree that the fond size and style is suitable and is user friendly and convenient; 14 (38.89%) have high and three (8.33%) have average satisfaction.

In the fourth row, 19 respondents (52.78%) have very high satisfaction and agree that the site is quickly responsive and interactive; 15 (41.67%) have high and 2 (5.56%) have average satisfaction.

CHAPTER 5

CONCLUSION, DISCUSSION, AND RECOMMENDATIONS

This chapter presents (1) the conclusion, (2) discussion, and (3) recommendations

5.1 Conclusion

To develop web-based language learning, the early stage involved needs analysis. This study employed quantitative methods for collecting and analyzing data. It can be summarized that most of the respondents found "Vocabulary knowledge," "Sentence errors," and "Spelling" as the most rated among all grammatical errors for them to be improved. After the needs analysis, the development of WBLL was based on the designed content and created by using the Marvel application, Freepik, and HTML5 as a responsive website, respectively. Lastly, the developed WBLL was rated by 5 experts who had high satisfaction with an overall mean of 4.24.

5.2 Discussion

For the discussion part, Web-based language learning can be integrated in teaching and learning: both can be compatible with academic service for society and caused educational innovation. In addition, participants in WBLL sessions were observed to have good attitudes toward WBLL and stated a desire to use more Web activities inside and outside of class time; the findings which are consistent with the work of Jeong-Bae Son (2008).

Therefore, learning through the web is an alternative, even very useful way of English learning & teaching. Students recently had the opportunity to learn English on their own via the internet. Teachers should take advantage of this opportunity because new technology and changing learning styles are compelling them to change their teaching methods as well.

5.3 Recommendations

The limitations of the study are as follows: firstly, no comparison group was employed in this study, thus, using a control group was strongly recommended for future studies.

Second is the implication criteria, which the learners who learn through game applications might have higher learning achievement than before studying. They could also be satisfied with the teaching and learning approach.

Based on the results and conclusions of this study, the following recommendations are made for further research.

- 1. Further research should use inferential statistics to analyze the collected data to get more details of results to draw a conclusion.
- 2. Internet-based language testing needs to be conducted by the test takers to see the effectiveness of the WBLL.

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References

- Brown, H. Douglas (2004). *Language assessment: Principles and classroom practices*. New York: Pearson Education.
- Bush, M.D., & Terry, R. (1997). Technology-enhanced language learning.
- Coiro, J., Malloy, J., & Rogers, A. (2006). Patterns of effective strategy use among adolescent online readers.
- Dubin, F., & Olshtain, E. (1990). Course design: Developing programs and materials for language learning. Cambridge: Cambridge University Press.
- Guliani, P. (2016). Duolingo Looks to Dominate the Mobile Education Market with New Flashcard App Tiny Cards. Retrieved

 From https://www.forbes.com/sites/parulguliani/2016/07/22/duolingo-looks-to-dominate-the-mobile-education-market-with-new-flashcard-app
- Son, J. B. (2008). Using web-based language learning activities in the ESL classroom.

 International Journal of Pedagogies and Learning, 4(4), 34-43
- Hasim, Z. (2005). Basic Steps for Developing English Language Web-Based Tutorials.

 **CALL- EJ Online, 7(1), Retrieved February 15, 2021, from http://callej.org/journal/7-1/Hasim.html
- Hutchinson, T.& Waters, A. (1994). ESP: A learning-centered approach. Cambridge:

 Cambridge University Press.
- Pianfetti, E.S. (2001). Teachers and Technology: Digital Literacy through Professional Development. *JSTOR*, *78(3)*, 255-262. Retrieved February 15, 2021, from https://www.jstor.org/stable/41483145
- Raine, P. (2018). Developing Web-based English Learning Applications: Principles and Practice. CALL-EJ, 19(2), 125-138
- Salter, P. (2017). Busuu is breaking down language barriers in nearly every country across

- the world. Retrieved from http://www.cityam.com/268678/busuu-breaking-down-language-barriers-nearly-every-country
- Suksiri, S. (2007). *The Study of Effectiveness of Game Based Learning Approach*. A thesis for the degree of Master of Science in Human Resource, National Institute of Development Administration.
- Vogel, D. & Klassen, J. (2001). Technology-supported learning: status, issues and trends.

 *Journal of Computer Assisted Learning, 17(2), 104–114.
- Warschauer, M., Shetzer, H., & Meloni, C. (2000). Internet for English teaching. Virginia: TESOL.







The research will be kept confidential and it is used for academic and educational purposes only. Thank you for your cooperation

PartI:General Information (ข้อมูลทั่วไป)

Turer. General Internation (voganose)						
Instruction: Please mark ✓in the box below. (คำชี้แจง: โปรคใส่เครื่องหมาย ✓ในช่องที่ตรงกับข้อมูลของท่าน)						
1.	Gender (IWA)		Male (ชาย)	☐ female ((หญิง)	
2.	Age (อายุ)		19 – 20 years	(19-20 ปี)	□ 20 – 21 years (20-21 ปี)	
	ไป)		22 – 25 years	্য (22-25 খ্র)	□ 25 years up (25 ปีขึ้น	
3.	Which year are you s	study	ving? (คุณกำลังศึกษ	บาอยู่ในชั้นปีใหน <i>ู</i>)	
	☐ First	year	·(ป้1)	☐ Secon	nd year (ปี 2)	
			Third year (1	(3)	☐ Fourth year (1 4)	
4.	How long have you be	een st	tudying English	า? (ระยะเวลา	ในการเรียนภาษาอังกฤษ)	
			3-5 years (3-51)		□ 5-10 years (5-10 ปี)	
	200		More than 10) years (มากก	j1 10 1)	
5. What is your level of English proficiency? (ความสามารถของคุณอยู่ในระดับใด)						
	**		Very good (คื	ท <i>โช)QUQ_{2i,}</i>	□ Good (ବି)	
			Fair (ปานกลาง))	□ Poor (แข่)	
			Very poor (แย่	มากๆ)		
1.	Grade Average (เกรดเฉ	เลี่ยรว	ນ)			
			0.00-0.99	1.00 -1	1.99	

 \Box 2.00 – 2.99

 \square 3.00 – 4.00

Part II: Satisfaction Survey (แบบสำรวจความพึงพอใจ)

Instruction: Please mark \checkmark in the box below which most describes your opinion on the application satisfaction survey. (กำชี้แจง: โปรดใส่เครื่องหมาย \checkmark ลงในหมายเลขแต่ละข้อที่อธิบายความคิดเห็นของคุณ เกี่ยวกับการใช้แอพพลิเคชั่น)

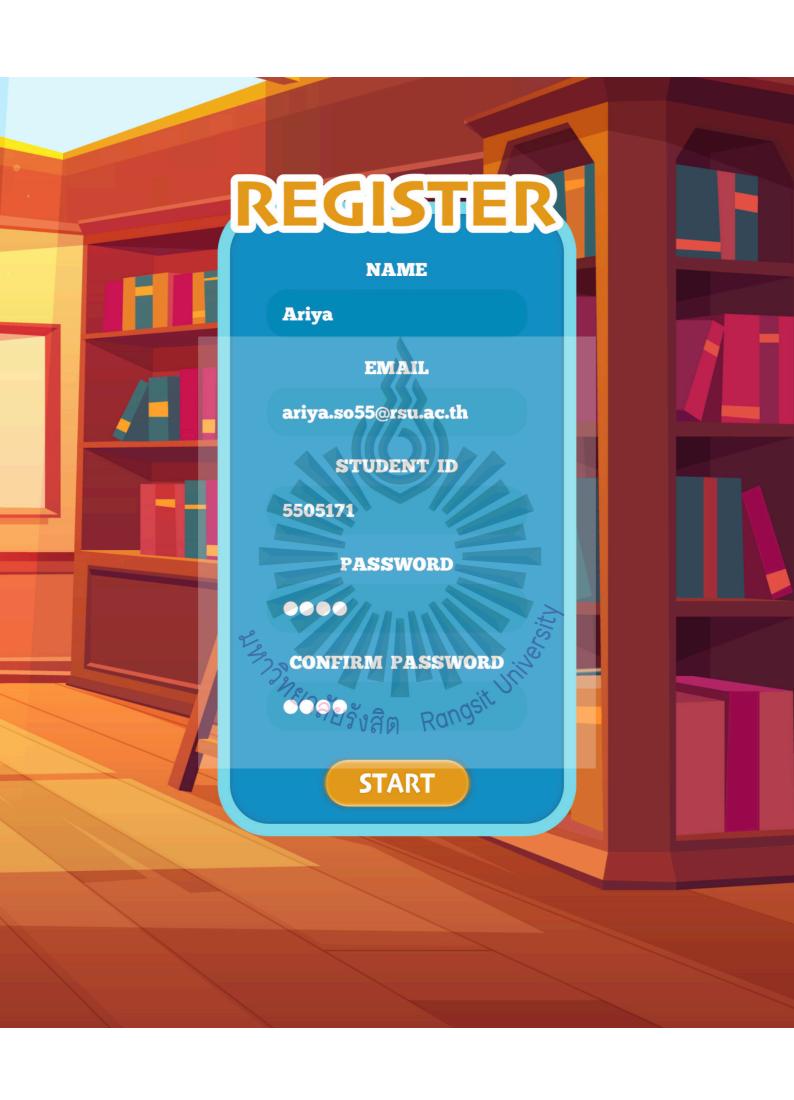
- 5 = Strongly agree (เห็นด้วยอย่างยิ่ง)
- 4 = Agree (เห็นด้วย)
- 3 = Neutral (ปานกลาง)
- 2 = Disagree (ไม่เห็นด้วย)
- 1 = Strongly disagree (ไม่เห็นด้วยอย่างยิ่ง)

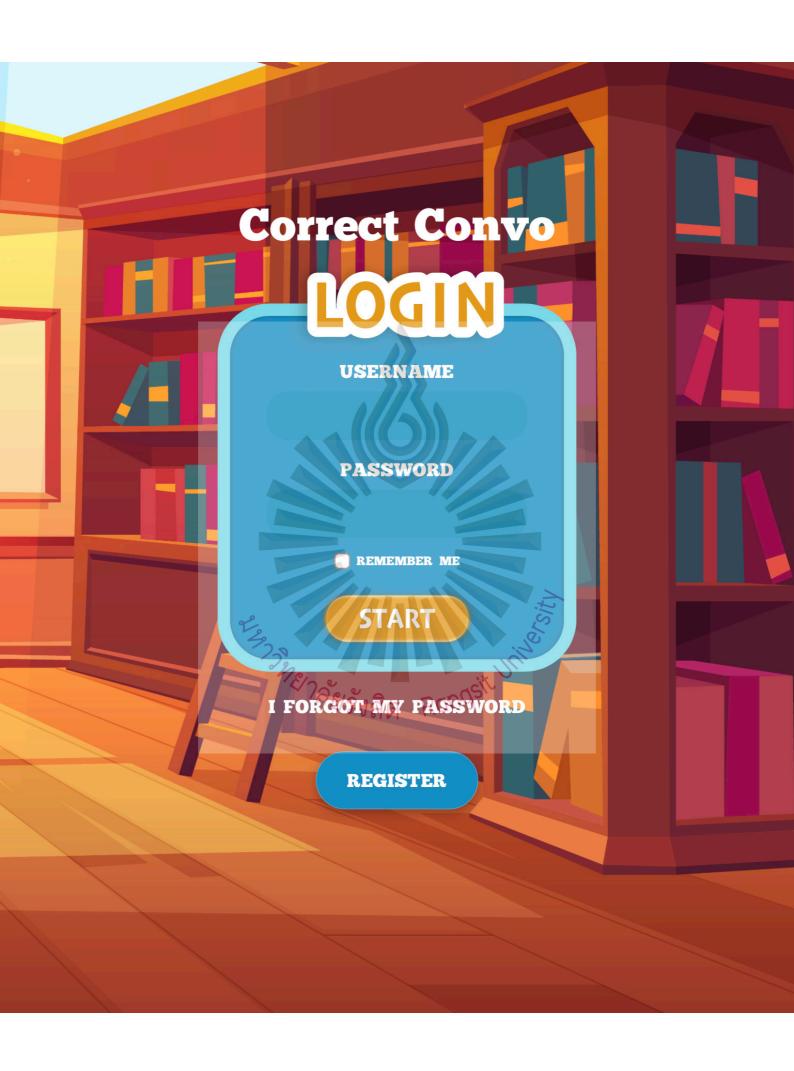
Satisfaction survey	1	2	3	4	5
1. The usage of web game interface					
2. The user-friendly system					
3. The font size and style: user-friendly and convenient					
4. The interactive system: quickly responsive					
5. Overall usage: user friendly, convenient, and quick					

Thank you for taking the time to complete this survey. I truly value the information you have provided. Your responses will contribute to my analyses of the texts and suggest new lines of approach to the corpus data. All information will be treated as strictly confidential.

भूश्री है। केंश्रिक Rangsit





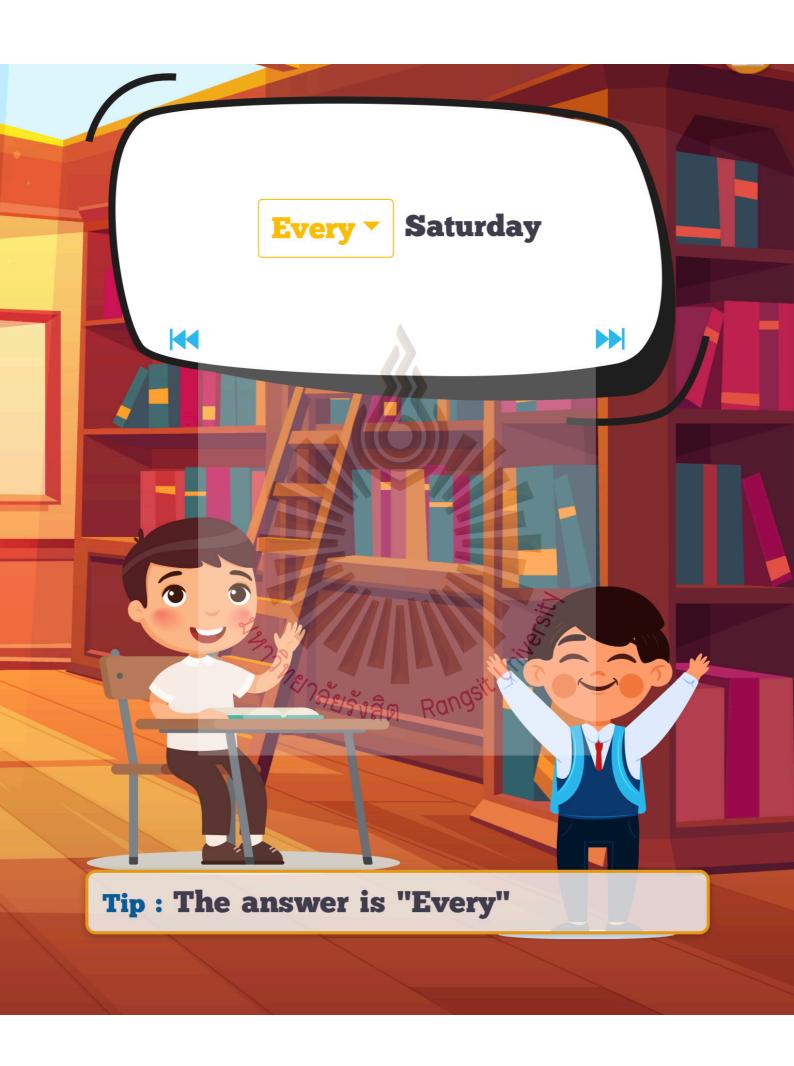




























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