

A Study of the Satisfaction Levels of Students Learning English in a 3D Virtual Immersive Environment

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Abstract

Rangsit University has a strategy to improve the quality of undergraduate students, emphasizing on internationalization. Information technology that is used to support this strategy is a 3D virtual immersive environment software called Second Life. The software has been used in English language classes such as ENL112 English Listening and Speaking and ENL122 Intermediate English Listening and Speaking. To study the students' learning satisfaction. Consequently, suggestions for improvement of using Second Life for English language learning will be proposed. The primary data were collected from the sample group using an online survey asking about personal data, behavior, satisfaction, suggestion, and other comments. The data analysis is descriptive using number, percentage, and 3-point or 5-point Likert Scale. It was found that 1) The average time that students spent in Second Life, the number of English language learning activities used in Second Life, user the friendliness, and the usefulness of Second Life for educational purpose were all moderate, and 2) students found that hands-on training given was inadequate. Students learnt better when practicing via Second Life, but also had some technical problems. Our suggestions are 1) students should be encouraged to use Second Life for self-learning, which will give students more occasion to practice English. A strategy to get students to practice English in Second Life as an extra-curriculum activity will be proposed; and 2) more hands-on training should be provided to the students upon request.

Keywords: *Second Life, virtual world, 3D immersive environment, education technology, English language practicing, self-learning*

บทคัดย่อ

สืบเนื่องจากยุทธศาสตร์ของมหาวิทยาลัยรังสิต ในการพัฒนามาตรฐานคุณภาพบัณฑิตเกี่ยวกับกลยุทธ์การจัดการเรียนการสอนที่ดีและมุ่งสู่ความเป็นนานาชาติ มรส.ได้นำเทคโนโลยีสารสนเทศในปัจจุบันมาช่วยส่งเสริมความเป็นนานาชาติ คือ โปรแกรมโลกเสมือนสามมิติสามมิติ (SECOND LIFE) โปรแกรมนี้ใช้ในรายวิชาภาษาอังกฤษ เช่น ในรายวิชา ENL112 การฟัง การพูดภาษาอังกฤษ และ ENL122 การฟัง การพูด ภาษาอังกฤษระดับกลาง ในการศึกษาครั้งนี้คือการศึกษาความพึงพอใจของนักศึกษาผู้ใช้โปรแกรม Second Life ในรายวิชาภาษาอังกฤษทั้ง 2 รายวิชา ข้อมูลระดับปฐมภูมิเก็บจากกลุ่มตัวอย่างโดยใช้แบบสอบถามออนไลน์ ซึ่งถามเกี่ยวกับข้อมูลส่วนตัว พฤติกรรม, ความพึงพอใจ ความคิดเห็น และข้อเสนอแนะ ส่วนการวิเคราะห์ผลใช้การบรรยายค่าตัวเลข ค่าร้อยละ ระดับความพึงพอใจ 3 และ 5 ระดับ ผลการศึกษาพบว่า 1) ระยะเวลาในการใช้งานโปรแกรม, จำนวนกิจกรรมการเรียนภาษาอังกฤษที่ใช้ผ่านโปรแกรม Second Life, ความยาก-ง่ายในการใช้งานโปรแกรม, และประโยชน์ของการใช้โปรแกรม Second Life เพื่อการเรียนการสอนอยู่ในระดับปานกลาง 2) ความพึงพอใจของการจัดการอบรมการใช้งานโปรแกรมอยู่ในระดับค่านักศึกษาเรียนรู้มากขึ้นเมื่อฝึกผ่าน Second Life แต่พบปัญหาทางเทคนิคบ้าง จากการศึกษาพบว่า 1) ควรส่งเสริมให้นักศึกษาใช้โปรแกรม Second Life เพื่อการเรียนรู้ด้วยตนเองเพิ่มขึ้น ซึ่งจะสร้างโอกาสให้ได้ใช้ภาษาอังกฤษบ่อยขึ้น กลวิธีที่จะให้นักศึกษาใช้โปรแกรม Second Life มากขึ้นจึงเป็นการใช้งานนอกเหนือหลักสูตร 2) จะต้องมีคู่มือการอบรมวิธีการใช้งานโปรแกรม Second Life ให้แก่นักศึกษาเมื่อมีการร้องขอ

คำสำคัญ: *เซเกนด์ไลฟ์ โลกเสมือน สิ่งแวดล้อมเสมือนสามมิติ เทคโนโลยีทางการศึกษา การฝึกทักษะภาษาอังกฤษ การเรียนรู้ด้วยตนเอง*

1. Introduction

Rangsit University has a strategy to develop the quality of undergraduate students, emphasizing on internationalization, and to prepare students for the ASEAN Economic Community in 2015. Consequently, information technology that is used to support this strategy is a 3D virtual immersive environment called Second Life. Developed by Linden Lab, a San Francisco-based software company, which invites people to be its residents with the statements "Enter a world with infinite possibilities and live a life without boundaries, guided only by your imagination". People have logged in to Second Life for many purposes,

i.e. meeting other people, working, educating and being educated, and having fun along the way. (Hassan et al., 2015).

In 2012, RSU's Center of Innovative Learning and Office of International Affairs joined hands to develop RSU Virtual Campus for the promotion of internationalization within Rangsit University. This is the first Thai learners' 3D virtual community where the students can log in to learn, play, hangout, and do any activity they are interested in that help them to improve their learning for internationalization purposes. Meanwhile, it has been used in the subjects from many faculties within the campus, especially in classes offered by Rangsit English Language Institute (RELI). This institute has put Second Life into the general education subjects for the freshmen since 2013. Center of Innovative Learning has provided a Second Life how-to website, trainings, and computer laboratory to support the students for smooth flow of using Second Life in English language learning.

2. Objective

The objective of this study is to study the students' satisfaction of English Language Learning in Second Life. The scope of the study will focus only on the student's point of view without looking at the grades. However, some feedback from the teachers will also be included in the discussion.

3. Materials and methods

3.1 Research Methodology, Population and sample group

The methodology used was quantitative research. The population of this study was the students enrolled in two English subjects: ENL112 English Listening and Speaking and ENL122 Intermediate English Listening and Speaking. In the 1st semester of the academic year 2015, the total number of students enrolled in these two classes was 3,175. The sample group of this study was 79 students from 5 sections, which represents the 88.89% confidence level according to Taro Yamane's sample size calculation formula (Israel, n.d.).

3.2 Collected data

The collected primary data from the sample group by using online questionnaire were:

- 1) Personal data, i.e. gender, age, year, faculty, section, subjects, and software skills.
- 2) User behavior, i.e. the period of time in which the sample group had used Second Life.
- 3) User satisfaction of English Language Learning in Second Life, i.e. the satisfaction to use Second Life as a tool to practice English Language skill and the reason, software user friendly, sufficiency of Second Life hands-on training, and the number of English language learning activities that use Second Life.
- 4) An open ended question asking for suggestions and other comments.

For Second Life assignment, the lecturers asked the students to use Second Life as an alternative tool for practicing English language skills, i.e. listening and speaking. They have to login to Second Life, find other foreign users to talk to, screen capture while they were talking and present their work in front of the class in English. The lecturer gave them scores from recorded VDO clip and their oral presentation. The researcher collected the data after the students had submitted the VDO clip and presentation. (See in the figure 1 and 2)



Figure 1 A group of students presented Second Life assignment to the lecturer and other students



Figure 2 A sample of students' interview of a foreigner in Second Life

3.3 Data analysis

The data analysis of personal data and user behaviors when using Second Life in English language learning is descriptive by means of number and percentage. The users' satisfaction on using Second Life in English language learning is explained using 3-point or 5-point Likert Scale.

4. Results

Following tables show the results of this study (cf. Table 1, 2, 3, and 4).

1) The personal data

Table 1 The personal data of the surveyed students

List	Number of students	Percentage
1. Gender		
Male	41	51.90%
Female	38	48.10%
2. Age		
Lower than 18	2	2.53%
During 18-22	79	96.20%
Over than 22	1	1.27%
3. Year		
1 st year	41	51.90%
2 nd year	23	29.11%
3 rd year	15	18.99%
4. Faculties		
Arts and Design	28	35.44%
Pharmacy	13	16.46%
Information and Communication Technology	10	12.66%
Business Administration	9	11.39%
Nursing	6	7.59%
Liberal Arts	5	6.33%
Accountancy	5	6.33%
Digital Art	1	1.27%
Communication Arts	1	1.27%
Engineering	1	1.27%
5. The subjects they were studying		
ENL112	50	63.29%
ENL122	29	36.71%

2) The user behaviors

Table 2 The user behaviors

List	Number of students	Percentage
6. Their Second Life experience before using in Class		
Never use	66	83.54%
Has not used long time ago	12	15.19%
Often use	1	1.27%
7. Use Second life besides the assignment		
No	66	83.54%
Yes	13	16.46%
8. The period of time which they used Second Life		
7 – 12 PM	43	54.43%
1 – 6 PM	20	25.32%
1 – 5 AM	7	8.86%
6 – 12 AM	6	7.59%
Others	3	3.80%

Table 3 The user satisfaction to the Second Life use (3-point Likert Scale) (number of students, percentage, and average)

List	Low	Moderate	High	Average
9. Average time that students spent in Second Life	14 (17.72%)	61 (77.22%)	4 (5.06%)	1.90 Moderate
10. Hands-on training	34 (43.04%)	45 (56.96%)	-	1.57 Low
11. The number of English language learning activities that use Second Life	15 (18.99%)	61 (77.22%)	3 (3.80%)	1.85 Moderate
				1.77 Moderate
Average				

Table 4 The result of students' satisfaction of using Second Life in English language learning (5-point Likert Scale) (number of students, percentage, and average).

List	Most unsatisfied	Unsatisfied	Moderate	Satisfied	Most satisfied	Average
12. User friendliness of the Second Life browser	6 (7.59%)	7 (8.86%)	34 (43.04%)	18 (22.78%)	14 (17.72%)	3.34 Moderate
13. The usefulness of Second Life for educational purpose	6 (7.59%)	15 (18.99%)	32 (40.51%)	17 (21.52%)	9 (11.39%)	3.10 Moderate
Average						3.17 Moderate

The collected data can be analyzed as follows:

1) The personal data of this study shows that the participants are mostly male, they are 18 – 22 years- old. Many of them are freshmen from Faculty of Arts and Design, and were studying ENL112 English Listening and Speaking. About their behavior, they had never used Second Life before, and use it only for doing assignment in English subject between 7 – 12 PM.

2) From the arithmetic mean of each of the three issues using 3-point Likert scale, the students thought that the average time that they spent in Second Life and the number of activities in Second Life for English language classes was suitable. They were moderately satisfied about the time and number of activities that use Second Life for practicing English language. However, the satisfaction in Second Life hands-on training is low, which means that they need more training to know how to use the software to accomplish the assignments. An overview of the three issues was moderate.

3) They thought that Second Life was a software which they could use, not too easy or hard to use. They agreed to use Second Life for educational purpose.

4) From the arithmetic mean of the 5-point Likert scale issues, the students were moderately satisfied with the software both by itself and for educational purpose.

5) There are both positive and negative comments about using Second Life for practicing English.

- Positive comments are, for example: *'Second Life can be used in learning effectively and easy to understand', 'It is interesting and can help with practicing foreign language', 'I like using Second Life', 'I can talk with the real foreigners', 'I can practice English with foreigners while having fun', 'It's easy to play', 'It is convenient and fun to use', 'I can learn more English vocabulary outside the learning hours', 'I meet new foreign friends and can practice English', 'I found the foreigners in Second Life friendly', 'It can simulate real life conversation', 'I could go anywhere', 'Users can make money from Second Life if they understand the system', 'I likes changing the appearance of the characters', 'Its benefits can be used in daily life', 'I know English language better'.*
- Negative comments are such as *'The foreign users didn't quite talk with me', 'It's difficult to create an account and play', 'I didn't have many people to talk to.', 'When I started talking to the foreigners, some of them are rude', 'I don't like playing games', 'I don't understand while talking to the foreigners', 'It seems like a match finding program more than a friend finding program', 'There are many other interesting software for practicing English than Second Life', 'It is an out-of-date software and has no value to use in learning', 'The software often lags (slow)', 'I didn't understand how to use Second Life'.*

6) Comparing this research results with other researches, we found that:

- Rangsit University's students feel that they have fun learning through Second Life. This goes with a study which said that *"...(2) Participants employed the rich linguistic input they had acquired and developed via other academic courses, and thus could put this into practice in a joyful, playful, and interactive environment that fostered working creatively while carrying out some tasks within SL. ... (4) SL connected language learning theory with practice, as it added new dimensions for language use and practice, which included identification with avatars and roleplaying..."* (Abdallah, et al., 2015)
- Rangsit University's students encountered some technical problems and seemed that it was difficult to use the same as the subject in other research. For example, *"Although the students encountered some technical problems, they preferred to conduct lessons on*

Second Life Platform.” (Can, 2015) However for this case, the period of time using SL was different from ours. This research took 10 weeks doing the activities in Second Life, while ours was a one-time activity for ENL112 and ENL122. Also, Lan’s research said, “...Some students not only expressed their desire for more SL classes, but also complained about the Internet connection sometimes being of poor quality....” (Lan, 2014)

- Our students had learnt more language skill when using Second Life and they agreed to use Second Life for educational purpose. This goes in line with the result of Sarac’s research, “... The results indicate that especially the teaching of ‘speaking and listening’ skills is fostered in an integrated way, and the teaching of writing and problem solving skills are also the strengths of using this environment in ELT....Since the speaking and listening skills are the very first ones to improve, SL environment should be introduced to both practitioners and learners....” (Sarac, 2014). Also, the result was similar to Lan’s research indicating that “In summary, learning Mandarin in SL significantly improved the oral performances of and learning attitudes toward Mandarin of the international students of Chinese. It also inspired them to engage more in the language-learning activities and to orally interact with others...” (Lan, 2014)

5. Conclusion and Discussion

This study has shown that the students are moderately satisfied with using Second Life in English language learning at Rangsit University. Looking at positive feedback, the students seemed to learn English effectively using Second Life while having fun at the same time. Moreover, the teacher felt that the students surprised them. They seemed to be at ease talking to foreigners in Second Life. They exhibited an opposite behavior in class such as being shy and did not want to talk to the teachers. Looking at some negative feedbacks, some points can be observed:

- A student felt that he/she didn’t have many foreigners to talk to. This depends on the place in Second Life and period of time the student went there. Some place can be empty and some can be very crowded. The students will need to learn how to spot a crowded place in Second Life such as popular places, live events, etc.
- A student felt that foreigners were rude which does not necessarily mean that they actually were rude. Maybe the foreigners were just being direct, which is something that Thai people are not good at. It is an opportunity for the students to learn about cultural differences, which is an important part of language learning. Also, a student felt that Second Life was like a match making program more than a friend finding program. Maybe it depends on the group of people that the student ran into, or the place they went,

The suggestions for improvement of using Second Life for English language learning purpose are as follows:

Firstly, the students use Second Life only when they have an assignment, which is one-time assignment. But Second Life should be used for self-learning, which will give students more occasions to practice English. A strategy to get students to practice English in Second Life as an extra-curriculum activity seems important. One time log-in can never equal life-long learning. More assignments in Second Life should be given in the beginning of the class in order to motivate the students. It depends on the lecturers who manage the class to choose suitable Second Life activities. The activities can be, for example, join Cypris Chat (a not-for-profit virtual world English and Japanese language learning community located in Second Life; (McKay, n.d.), role playing, guided tour, treasure hunt, etc. When the students know how it works in Second Life and see that it is useful for learning English, they will start to learn more by themselves.

In previous years, many Second Life hands-on training were provided to the students, which was time-consuming to the staff. But not many students showed up, therefore, hands-on training was stopped and the students started reading the online manual in the 1st semester of 2015. The result shows that the students need more training. Online manual is inadequate for the students who have different learning curve. More hands-on training should be provided to the students upon request.

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