USING MOODLE IN IMPROVING LISTENING ABILITIES IN ENGLISH FOR SPECIFIC PURPOSES OF VONGCHAVALITKUL UNIVERSITY STUDENTS

Mr. Josemari V. Cordova¹, Asst. Prof. Thawascha Dechsubha²
¹MA in TEFL student, Faculty of Humanities and Social Sciences, Nakhon Ratchasima Rajabhat University, Nakhon Ratchasima, Thailand
email: josemari_co@vu.ac.th
²Lecturer, Faculty of Humanities & Social Sciences. Nakhon Ratchasima Rajabhat University, Nakhon Ratchasima, Thailand
email: thawascha43@gmail.com

ABSTRACT

The objectives of this study were: 1) to investigate the effects of using Moodle in improving the ESP listening abilities of Vongchavalitkul University students; 2) to compare the students pre-listening and post-listening tests results; and 3) to find out the students’ opinion towards learning English for Specific Purposes using Moodle. The samples were 16 students who are majoring in Bachelor in Occupational Safety and Health enrolled in English for Careers during the second semester of Academic Year 2017 at Vongchavalitkul University, Nakhon Ratchasima. The students-samples were selected by purposive sampling. The instruments used in the research procedure were six lesson plans. The instruments used for data collection were: (1) English listening pre-test and post-test; and (2) questionnaire of students’ opinion. The data was statistically analyzed by using mean (\bar{x}), standard deviation (S.D.), and t-test. The results showed that the students’ listening abilities in ESP post-test mean score was significantly higher than the pre-test mean score at .05 level after learning through Moodle. In addition, the students had positive opinion towards learning towards learning English for Specific Purposes using Moodle.

Keywords: English for Specific Purposes – Occupational Safety and Health, Moodle, Listening Abilities, Moodle Mobile.

1. INTRODUCTION

Moodle is an example of a virtual learning environment or VLE and stands for Modular Object-Oriented Dynamic Learning Environment. It is a free, open-source e-learning tool, and a Learning Management System. It is developed on pedagogical principles and constructivist approach (Dougiamas et al, 2002) and used for blended-learning, distance education, flipped classroom and other e-learning projects in schools, universities, workplaces and other sectors (Costello 2013). It is a good alternative platform to offer an ocean of listening materials and has plenty of modules for language learning (Tang 2013).

Listening is one of the four language skills in English communications. It is a receptive skill but considered a “Cinderella skill” and is not given much attention in the EFL studies (Nunan 2002,
Thai students’ problems in listening comprehension are due to many factors: 1) It may involve the listener, 2) the speaker, 3) the content of the message, 4) any accompanying visual support, and 5) listening problems related to listening text (Grognet and Van Duzer 2003). English for Specific for Purposes (ESP) refers to teaching the English language to university students or people already in employment, with reference to the particular vocabulary and skills they need and will focus on one occupation or profession (Hewings 2002). The Association of Southeast Asian Nations (ASEAN) adapted English as the medium of communication. With the opening of ASEAN labor market, Occupational Safety and Health (OSH) professionals are directly needed in engineering, surveying, and architecture. The competition for OSH professionals is high favoring those who are adept in the English language and communications while it is Thai workers’ weak points. Thai government is trying to address this through technology and web-based applications. To tap the vast supplementary listening activities in English in the internet, English for Specific Purposes through Moodle and blended-learning needs to be utilized.

2. STATEMENT OF THE PROBLEM

This study tried to answer the following questions: a) What are the effects of using Moodle in improving the listening abilities in English for Specific Purposes of Vongchavalitkul University’s (VU) students? b) How will Moodle improve the VU students’ listening abilities in ESP? c) Will the students agree that Moodle is a good tool in improving their listening abilities in ESP?

3. OBJECTIVES

The objectives of this study were:

a) To investigate the effects of teaching English for Specific Purposes (ESP) using Moodle on listening abilities of VU students;

b) To compare the students pre-listening and post-listening abilities tests results; and,

c) To find out the students’ opinion towards learning ESP through Moodle.

4. CONCEPTUAL AND THEORETICAL FRAMEWORK

The concept of this study is teaching English for Specific Purposes (ESP) utilizing technology wherein Moodle delivers Occupational Safety and Health listening lessons. The respondents in this study are independent-learners, computer-literate, and have a basic knowledge of the topics in their native language. Students’ opinion towards learning ESP through Moodle is a primary source of data used in order to ensure authenticity. Figure 1 shows the conceptual framework of the study.
The theories used in this study are: (a) The social constructivism pedagogy (Dewey, Bruner, Piaget, and Vygotsky) which has been identified as the learning theory in the digital age where educators and students jointly explore, inquire, critique, and build their own knowledge effectively and efficiently (Lasic 2011); and, (b) Input Theory (Krashen 1981), where second language (L2) data which the learner hears became intake as assimilated in the inter-language system. It is viewed that acquisition takes place when the input is a little beyond the learner’s current level of competence which is termed as “the i + 1 level” (Krashen 1981).

5. BRIEF REVIEW OF LITERATURE

The studies on Moodle and ESP (Cedar 2013, Despotović-Zrakić et al 2012, and Kavaliauskienė 2011) showed that post-listening test results were higher than the pre-listening tests and showed significant statistical difference. Not only does Moodle-based teaching, e-learning, and online learning greatly improved students’ language competence (Ma Jing 2016, Banditvilai 2016) but it is also absolutely beneficial for the students’ listening skills improvement in English (Arzal & Tanipu 2014). In addition, learners with computer and technology skills improved their open-mindedness in terms of English listening and speaking (Ya-Ting 2012) because Moodle provides many opportunities to develop their abilities through meaningful activities uploaded in the platform (Diaz 2012), and has positively influenced the students in L2 listening (Spataro 2011). Moodle also strengthened learner’s independence and self-regulated learning skills (Wolters et al 2003, Barnard et al 2009 in Yamada et al 2015 : 72) because (1) the students become more organized in doing the course requirements even with no supervision (Alhotli 2015); (2) each student can work on different tasks with the “integrated learning environment” (Wu et al. 2012, in Soliman 2014); and, (3) it had effects on the students’ academic performance (Rymanova et al. 2015, Carbajal & Lopez 2014, and Arzal & Tanipu 2014).

Krashen (1996) suggested that listening must be higher than the level of the target learners and proposed Narrow Listening as an approach in teaching listening. This involves (a) repeated listening, (b) an interest in the topic, and (c) a familiar context. According Matsuzawa (2012), narrow listening entails L2 learners’ repeatedly listening to the Native English Speakers’ various accents and speech rates. Ellis (1984, 1997) contends that learning occurs when new information is linked to the knowledge already held by the learners’ background knowledge. In the same manner, Ratnapruks’ (2015) pedagogical approaches in teaching and learning listening in Thailand was also used. The English for Specific Purposes in this study was focused on Occupational Safety and Health (OSH). Increasing the amount of listening time in the second language classroom is one of the principles for teaching listening (Celce-Murcia 2001 : 89).
6. METHODOLOGY

a. Population and Sample

The population of this study was 35 students (19 first year, 16 second year) of Vongchavalitkul University majoring in Bachelor in Occupational Safety and Health during the second semester of Academic Year 2017. The 19 first year students were used for try-outs. The samples were the sixteen (16) second year VU students selected using purposive sampling.

b. Experimental Design

This study was pre-experimental research, one-group pre-test and post-test design. It was conducted at Vongchavalitkul University, Nakhon Ratchasima, Thailand during the second semester of 2017. The study’s experimental design is shown in Figure 2.

![Experimental Design Diagram]

Figure 2: The Experimental Design

O₁ represented the pre-listening ability test before implementing the ESP listening lessons through Moodle; X represented the experiment of teaching ESP through Moodle, and O₂ represented the post-listening ability test after implementing the ESP listening lessons through Moodle and the questionnaire.

c. Research Instruments

Experimental instruments were (1) six lesson plans in Occupational Safety and Health delivered through face-to-face instructions and Moodle, (2) pre- and post- listening comprehension tests, (3) a questionnaire of students’ opinion towards learning through Moodle.

d. Data Collection and Analysis

The experiment was for six weeks at three hours per week. Access to listening OSH lessons listening comprehension quizzes were automatically recorded in Moodle. The data in comparison of mean scores from pre-test and post-test of English listening ability were analyzed using Mean (\( \bar{x} \)), Standard Deviation (S.D.) and percentage. The comparison of English listening scores were analyzed by using t-test for dependent samples. The data collected from the questionnaire were analyzed using Mean (\( \bar{x} \)), and Standard Deviation (S.D.). The results from the data were descriptively analyzed to indicate the students’ opinion.

7. RESULTS

Table 1: Students’ pre-/post-tests listening activities raw scores, difference of scores and percentage

<table>
<thead>
<tr>
<th>No.</th>
<th>Pre-test of activities (20)</th>
<th>Listening Raw Score</th>
<th>Percentage</th>
<th>Post-test of activities (20)</th>
<th>Listening Raw Score</th>
<th>Percentage</th>
<th>Difference of Scores</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>3.00</td>
<td>15.00</td>
<td>9.00</td>
<td>45.00</td>
<td>6.00</td>
<td>30.00</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>5.00</td>
<td>25.00</td>
<td>8.00</td>
<td>40.00</td>
<td>3.00</td>
<td>15.00</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>3.00</td>
<td>15.00</td>
<td>11.00</td>
<td>55.00</td>
<td>8.00</td>
<td>40.00</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>1.00</td>
<td>5.00</td>
<td>6.00</td>
<td>30.00</td>
<td>5.00</td>
<td>25.00</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>3.00</td>
<td>15.00</td>
<td>12.00</td>
<td>60.00</td>
<td>9.00</td>
<td>45.00</td>
<td></td>
</tr>
</tbody>
</table>
Table 1 shows the students’ raw scores of pre- and post-tests, difference of scores and percentage. The pre-test mean score ($\bar{x}$) is 4.38, S.D. of 2.03, and a percentage mean of 21.88, while the post-test mean score ($\bar{x}$) is 11.38, S.D. of 3.22 and a percentage mean of 56.88. The difference of post-test and pre-test mean ($\bar{x}$) scores is 7.00 points, S.D. of 1.19 and a percentage mean difference of 35.00.

### Table 2: Comparison of pre-test and post-test scores, standard deviation (S.D.), and t-value of the listening activities to improve the listening abilities in ESP of VU students

<table>
<thead>
<tr>
<th>Mode of Assessment</th>
<th>N</th>
<th>$\bar{x}$</th>
<th>S.D.</th>
<th>T</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test</td>
<td>16</td>
<td>4.38</td>
<td>2.03</td>
<td>11.56</td>
<td>15</td>
<td>.000</td>
</tr>
<tr>
<td>Post-Test</td>
<td>16</td>
<td>11.38</td>
<td>3.22</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $p < .05$

Table 2 shows the comparison of pre-test and post-test mean scores ($\bar{x}$), standard deviation (S.D.), and $t$ of listening activities in improving the listening abilities in ESP of VU students using Moodle. The result showed that the post-test mean score ($\bar{x}$) of 11.38 was significantly higher than pre-test mean score ($\bar{x}$) of 4.38 at .05 level after learning through Moodle.

### Table 3: Mean value & interpretation of students’ opinion on ESP Lessons using Moodle

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>Mean</th>
<th>S.D.</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The OSH course in Moodle was well-planned to allow all students to participate fully.</td>
<td>4.31</td>
<td>.602</td>
<td>Agree</td>
</tr>
<tr>
<td>2. The Occupational Safety and Health (OSH) lessons’ learning objectives in Moodle were clear.</td>
<td>4.25</td>
<td>.683</td>
<td>Agree</td>
</tr>
<tr>
<td>3. The online activities on OSH uploaded in Moodle are easy to accomplish.</td>
<td>4.19</td>
<td>.981</td>
<td>Agree</td>
</tr>
<tr>
<td>4. I can use other features of Moodle like calendar, course filters, personal profile, external links etc.</td>
<td>4.13</td>
<td>.719</td>
<td>Agree</td>
</tr>
<tr>
<td>5. The OSH topics in Moodle are relevant to my future career.</td>
<td>4.12</td>
<td>.885</td>
<td>Agree</td>
</tr>
<tr>
<td>6. I can access and submit my work and quizzes in Moodle without any glitches.</td>
<td>4.06</td>
<td>.772</td>
<td>Agree</td>
</tr>
<tr>
<td>7. The topics, pronunciations, listening activities and OSH phrases in Moodle are new to me.</td>
<td>3.99</td>
<td>.772</td>
<td>Agree</td>
</tr>
<tr>
<td>8. OSH lessons using Moodle has helped me to stay focused on</td>
<td>3.99</td>
<td>.929</td>
<td>Agree</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>ITEMS</th>
<th>Mean</th>
<th>S.D.</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. The OSH lessons through Moodle application challenged me to learn independently.</td>
<td>3.94</td>
<td>.772</td>
<td>Agree</td>
</tr>
<tr>
<td>10. The OSH topics in Moodle are sufficient.</td>
<td>3.94</td>
<td>.772</td>
<td>Agree</td>
</tr>
<tr>
<td>11. The OSH listening topics in Moodle are interesting.</td>
<td>3.89</td>
<td>.885</td>
<td>Agree</td>
</tr>
<tr>
<td>12. There should be a higher OSH course uploaded in Moodle.</td>
<td>3.83</td>
<td>.834</td>
<td>Agree</td>
</tr>
<tr>
<td>13. I can use some useful expressions and common words and phrases related to OSH after the completion of the course in Moodle.</td>
<td>3.75</td>
<td>.775</td>
<td>Agree</td>
</tr>
<tr>
<td>14. I can understand the OSH listening activities in Moodle.</td>
<td>3.63</td>
<td>.885</td>
<td>Agree</td>
</tr>
<tr>
<td>15. My listening ability on basic OSH in English improved after the course completion in Moodle.</td>
<td>3.50</td>
<td>.730</td>
<td>Agree</td>
</tr>
</tbody>
</table>

**Total Mean**  
3.96 .100 Agree

Table 3 shows the mean value and interpretation of students’ opinion on ESP Lessons using Moodle which was Agree (\(\bar{x}=3.96\)). This means students’ positive opinion that ESP lessons in Moodle improved their listening abilities.

**8. MOODLE ANALYTICS AND OTHER FINDINGS**

1) Access to each listening activities vary between 55 seconds and 11 minutes and 32 seconds.

2) Based from the mean scores of ESP listening activities in Moodle, the students had difficulty listening and answering the following lessons: (a) Incidents, (b) Worksite Communications, (c) Worksite Safety, (d) Fire Safety, (e) Personal Protective Equipment (PPEs), and (f) The Right Tools for the Right Job.

3) The students’ complained that the audio activities in Moodle should be slower.

4) Glitches in internet connection were common but all the students were confident using their smartphones than their laptop computers. Hence, Moodle Mobile was utilized by the respondents.

5) Students were constantly conferring with one another of the OSH words and phrases that they heard. They were also concerned with their scores rather than completing the ESP listening activities in Moodle.

**9. IMPLICATIONS**

Self-regulated learning using Moodle and other mobile applications will be used in language learning the future. However, online lessons among the students might lead to procrastination. Based from Moodle analytics, some students just logged in to Moodle system but accomplished few activities. According to Rymanova et al (2015), “students are not always ready to fulfill all types of the activities developed in LMS Moodle, especially those that require academic skills to analyze, compare and annotate.”

**10. CONCLUSIONS**

It is concluded that through the use of Moodle, the listening abilities in English for Specific Purposes (ESP) of Vongchavalitkul University students improved. This study also proved that technology, online and mobile applications combined with the students’ collaboration and independence played vital roles in the improvement of their listening abilities. Further, this also

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confirmed that as long as specific lessons are provided and let the students study on their own pace and time, there is a chance of improvement. The constant communication of OSH students in their L1 should not be interpreted as impassive to answer the listening activities. Rather, this can be interpreted as corroboration given their cultural background. In addition, they liked that the system provided feedbacks after they completed the listening exercises. This helped them learn by correcting their mistakes.

11. ACKNOWLEDGMENTS
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12. CITATIONS AND REFERENCES
Duogiamas, M. “Social Constructionism as a Referent.” https://docs.moodle.org/31/en/Pedagogy#Social Constructionism as a Referent


