International Journal of Engineering & Technology, 7 (3.25) (2018) 253-257

International Journal of Engineering & Technology

Website: www.sciencepubco.com/index.php/IJET

Research paper



Evaluating the Use of Hot Potatoes in Learning Academic Word List

Ali, Z[1]*

[1]*Centre for Modern Languages & Human Sciences, Universiti Malaysia Pahang, 26600 Pekan, Pahang, Malaysia*
**Corresponding author E-mail:zuraina@ump.edu.my*

Abstract

Technology has emerged as a powerful platform to assist learners in their learning. Moreover, a key aspect of learning using technology is its ability to reach audiences at anytime and anywhere. In the current study, Hot Potatoes is used to identify whether or not they are able to learn Academic Word List (AWL) in five (5) exercises namely JMix, JCloze, JCross, JMix and JMatch. Fifty-three words were selected for the purpose of testing their knowledge of the academic vocabulary. Online questionnaire was later administered to the students to examine the relationship between the effectiveness of using Hot Potatoes and its usefulness in learning 53 vocabulary in various forms of quizzes. Results from the study show that there are positive correlations between the two variables with high levels of effectiveness of using Hot Potatoes and its usefulness in learning vocabulary. In terms of effectiveness, the students who answer the survey believe that Hot Potatoes provides direct feedback by remarking students of their answers to be correct or wrong. Meanwhile, the platform is identified to be useful by its users due to its appropriate format of quizzes for cross-word puzzle, matching, fill-in the blanks, jumbled sentences, cloze text and multiple-choice questions. These format of exercises reinforce the learning of vocabulary. The contribution of this study, therefore, has been to confirm that developers who are teacher-researchers may not have to have programming knowledge in preparing online quizzes. Instead, with the use Hot Potatoes, interactive Web exercises can be developed by those who do not have such background.

Keywords: *Hot Potatoes; Academic Word List (AWL); vocabulary, teaching and learning, technology; quizzes*

1. Introduction

Technology has brought changes to the way Teaching and Learning (T & L) is conducted in the class nowadays. Its uses enable teachers and learners to benefit from one another beyond the four-wall of classrooms. In fact, the integration of multimedia has made materials for T & L becomes more interesting [1] as well as it is able to motivate students' learning [2] [3]. With its use, it seems reasonable that teachers need to be equipped with the knowledge of using technology as they are able to incorporate it in their lessons and assessment planning [4]. Moreover, the demand to use technology has been extensive nowadays due to the fact that learners are also advance in its uses. As a result, teachers need to be at least at par with the students in terms of the 'trick' that the platform can offer. In fact, learning can be optimized when teachers prepare learning materials that are tied up with their students' abilities in using technology [5]. In language learning particularly, Caromawati [6] argues that the use of Computer Assisted Language Learning (CALL) helps teacher to build their knowledge as they can evaluate the qualities of their self-developed learning materials. Yet, the learning to use technology, basically in learning language programming is not easy for those who are in the Social Sciences or Education backgrounds. With the use of Hot Potatoes, it seems that the solution has been found in satisfying the need for language teachers to develop teacher-made language tests and exercises.

The program namely Hot Potatoes is a free online authoring suite that integrates six [6] types of interactive quizzes in the forms of multiple-choice, short-answer, jumbled-sentence, crossword, matching/ordering and gap-fill exercises. The quizzes namely J-Quiz, J-Match, J-Cross, J-Cloze, and J-Mix. J-Quiz can be published in the World Wide Web as a stand-alone program. Developing the program does not require programming knowledge, and therefore, developers are not worried of how to add multimedia, edit scoring criteria, or customize feedback for correct or incorrect responses. Research on Hot Potatoes show that the program makes teaching and learning become more effective [7] as well as it can be an effective assessment for instructors who integrate technology in their pedagogy [8].

In the previous research that was conducted, it was observed that the use of Hot Potatoes is fundamental particularly in assessing students' understanding in lab equipment and lab safety rules [9] promoting intrinsic motivation of using technology [10], developing materials for Computer Assisted Language Learning (CALL), learning English Grammar [11]; among others. From the research, it shows that investigating the use of Hot Potatoes is a continuing concern within the field of education as the platform has been used to identify students' motivation, learn about science, publish materials for teaching and learning, develop e-test and learn grammar.

This paper, however, attempts to investigate the use of Hot Potatoes in assisting learners at tertiary education to learn vocabulary from Academic Word List (AWL). In particular, it examines the relationship between the effectiveness of using Hot Potatoes and its usefulness in learning 53 vocabulary in various forms of quizzes: J-Quiz, J-Match, J-Cross, J-Cloze, and J-Mix. Eighty students from Universiti Malaysia Pahang (UMP) were involved in the survey after they completed the quizzes that were developed by the teacher-researcher. The following heading explains in detail the studies that were conducted in the use of Hot

Copyright © 2018 Authors. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Potatoes in relation to its effectiveness and usefulness. In addition, vocabulary learning and vocabulary acquisition were also discussed. Last not but not least, AWL is also explained in the next section.

2. Literature Review

2.1. Effectiveness of Hot Potatoes

Reading instruction is more effective with the integration of Hot Potatoes as it provides a conducive reading environments among students [12]. The study employed Cloze type exercises and comprehension exercises that were created based on the manipulation tool. The study found that the treatment group outperformed the control group in the comprehension test. It was also found that the multiple-choice questions to test students' reading comprehension was useful. A timer was equipped in the exercise having different time allocation. In other words, the time that students will be spending for the exercise varies according to the level of difficulty of the texts. A drop-down menu was used by students to choose the correct answer. To enhance students' skills in reading, the researchers produced two (2) types of quizzes in that the first quiz was not timed while the second exercise was timed. If the students attempted to do the exercise for the second time, the arrangement of the questions would be reshuffled as to avoid them from guessing the answers. Overall, the researchers concluded that technology incorporation in language learning process was significant in developing reading skills among students.

Another study also employed Hot Potatoes in reading task and it was found that the program was effective compared to simple lectures and book reading in the classroom [13]. From the observation of the leaning process, students found that the program enabled them to receive direct feedback for learning vocabulary. This direct evaluation generated by the computer was useful to the students. The immediate feedback, clues of answer and evaluation triggered by the program seemed to be practical as the functions of the media (or buttons) facilitated their learning processes. Such was true as they could operate the program easily after getting explanation from the teachers. These features made their learning using Hot Potatoes to be motivating and appealing.

Meanwhile, Hot Potatoes was employed to determine whether instructors' teaching strategies was effective or otherwise [7]. The researchers identified that instructors' time was effective when Hot Potatoes was used since they did not have to explain the correct answers of the tests to the students. The latter became autonomous for the tool triggered answers on its own once they completed answering the tests. Overall, the usefulness of the program concerns with its ability to create offline and upload the teachers' materials on their personal websites. The program that is straight forward and descriptive in nature enables the development of interactive exercises for various teaching and learning purposes. In fact, it can be an alternative method in the course of preparing tests or assignments.

2.2 Usefulness of Hot Potatoes

Hot Potatoes is useful because it enables teachers to create quizzes with functions that are easy to be used [14]. For instance, the teacher-researchers in Safer [14] study argued that in preparing Quiz or Multiple choices activity, they were able to add texts or pictures easily on the ready-made template prepared by the authoring tool. In the matching activity, teachers might prepare a column for question on the left while their answers on the right. Rearranging words making it a correct sentence was another activity that teachers could prepare in JMix quiz in the study. In the cross-word puzzle, the activity provided students with clues as they were required to fill the crosswords by using correct words.

Using Blended Mode, it was found that Hot Potatoes was useful and easy to be used as a Learning Management System (LMS) [15]. Students were satisfied with its use due to the content of the materials they learnt matched with the quizzes that were designed for them. Yet, no difference was found in relation to gender satisfaction when Hot Potatoes was used as one of the creator programs for Blended Learning in addition to the use Moodle as a Learning Management System as its main platform using technology. The researcher found that students mostly used quizzes and were reported to be satisfied because of the nature of the program in giving immediate feedback of their success in learning the subject. Overall, students in the study reported that they were satisfied with the program for it is useful and easy to use.

Hot Potatoes was proved to be a useful platform in a Teacher Development Program (TDP) that involved in-service English lecture [6]. Respondents admitted that they did not only learnt to create teaching materials using the tool, but also able to evaluate its qualities. The researcher who collected data after organizing a workshop to teach the use of Hot Potatoes received a positive feedback from its attendees. It was reported that a student in her workshop was able to maximize the use of Hot Potatoes along with ability to enhance their Teaching and Practices (T & P). Also, from the workshop, it made the attendees realized that teachers were required to be in the students' shoes, and therefore, the latter needed to know the interests and requirements of the former.

Nonetheless, Sadeghi [16] argues that the question on whether or not Hot Potatoes is useful or otherwise is subjective depending on the creativity and skills of the teachers themselves. It was showed that that the tool was useful especially the feature of the Masher which enabled developers to collect a large number of different Hot Potatoes exercises in one test format. In fact, it could be a supplementary classroom work for the students. The researchers reported that the program has changed and facilitated the learning process in pedagogical settings. Its use was useful for both teachers and learners as it was able to support the conventional teaching principles and techniques. The study concluded that Hot Potatoes was a potential tool for web-based programs.

Another study also found that the usefulness of Hot Potatoes relied on the Masher [13]. The researcher claimed that the feature enabled developers to create interactive exercises by adding a reading text, timer, sound, video, graphics, and link. It could also function as a compiler of activities prepared by the developers. Sequence of exercises and other pages of teaching and learning materials that forms a unit could be grouped using the Masher. Besides that, it could be used to upload Web pages that was not created with the program. Overall, the researcher concluded that Hot Potatoes was a very useful program to promote interesting learning environment to the learners.

2.2 Vocabulary Learning

Vocabulary learning is an incremental process, thus, it may be a complicated process in language learning. Because of its nature, Schmitt [17] believes that the words must be exposed and applied multiple times for the learners to truly learn them. Nevertheless, it is not known of how much or frequent the learners are exposed to those targeted words as it depends on several factors such as the importance of the word or the relevance of knowing the word for the learners' present needs and whether they come across the word incidentally while pursuing other purpose or they consciously learning it. To further elaborate on this, vocabulary learning comes in two ways – intentional and incidental. The former means that the learners learn the words by doing or going through lessons and activities that explicitly targeted the acquisition of those words. For instance, the learners use a dictionary to look up for a certain word or they are given a list of new words in a matching activity [18]. On the other hand, incidental learning refers to the acquisition of new words from various contexts implicitly, without being given explicit instruction. In this case, the learning is said to be highly individualised and it depends on the language opportunities that the learners have to engage with [19].

Having said that, regardless of whether the learners pick up the words intentionally or incidentally, it is important to know that the process of learning the vocabulary is assisted by a few strategies. In learning vocabulary, there are a number of vocabulary learning strategies that can be applied [19]. First, is the use of dictionary in which the learners may utilise it in both receptive and productive ways [20]. The former enables the learners to gain information from the context where the word occurs and then choose the right entry to relate the meaning to the context. In the latter, the learners are able to find the intended word form, identify its grammatical aspect and collocations and check the spelling as well as pronunciation of the word before using it. A lot of studies have confirmed the significance of using dictionary by showing that learners with a dictionary learned more words in both immediate and delayed tests than those without access to a dictionary [21].

Next is phonological analysis which deals with the pronunciation of the phonemes. As the learners come across new words, they may face unfamiliar sound patterns of the words and it poses difficulty for them to store the words into their memory [22]. Thus, phonological analysis is an important strategy for English learners to strengthen their knowledge of sound patterns of new words, and subsequently facilitate the storage of new words in long-term memory. The strategies of morphology analysis include detecting relationships between words from the same word family, breaking words into smaller meaningful parts, or detecting the grammatical role of a word from syntactic context [23]. Also, it concerns with knowledge in having the awareness as well as practical knowledge the morphemic structure [24]. Nevertheless, many unknown words can be learned through examining the morphemic parts, such as prefixes, suffixes, compounds, and word roots [20, 23, 24]

Finally, contextual analysis as students are able to understand word meanings by examining text, looking at the "before" and "after" phrases and sentences that provide syntactic and semantic cues [23]. The use of context clues has been shown to improve learners' ability to infer vocabulary meanings of uninstructed words and performance in reading comprehension. Contextual analysis helps vocabulary learning in reading especially when students are exposed to a considerable amount of written texts [23].

2.4. Academic Word List (AWL)

AWL that is developed by Averil Coxhead is a list that contains 570 most frequent words that are derived from a broad range of academic texts. These words are divided into ten (10) groups. The words in the list are stand alone as they are not derived from the most frequent 2000 words of English from the General Service List. Therefore, the compiled list is specific to academic contexts. The list was produced to cater the needs of teachers as part of a program to prepare students at tertiary level. Also, it may be used by students themselves as they may learn the words for their learning at higher education institutions.

Nevertheless, AWL extends its use to specific field of areas in academia. Research was conducted in producing field- specific academic word list for instance in nursing and medicine; to name a few. In determining the AWL for nursing, a study was done finding the most frequent use of vocabulary in nursing research articles [25]. The research also determined the word family of the nursing of AWL. This was done by calculating the target words occurrence in corpus and 11 subject areas of nursing. Having all the target vocabularies compiled, there were 676 word families that were chosen to be included in the nursing of AWL. The researcher concluded that determining the nursing of AWL was necessary as it could be used by non-native English learners who were assigned to read and publish nursing articles in their non-native language i.e. English. Also, such list could strengthen their academic reading and writing proficiency among the non-native speakers.

Meanwhile, in medicine, a corpus-based was produced combining the word lists that were developed by Coxhead and Gardner and Davies [26]. This newly produced academic word list for medical is called Medical Academic Vocabulary List (MAVL). Also, it was 53% shorter than the one produced by another group of corpus-based in medical. The researcher believed that it would cater the needs of the of medical learners. One interesting finding from the study was found in the general use of English word or non-discipline-specific meanings in MAVL. A case in point was with the words 'arrest', 'block', and 'vessel'. It is understood that 'vessel' is the vocabulary that is used in medical field, yet the words 'arrest' and 'block' are also used in general or in non-medical areas. As learners, in particular medical students, the researcher believed that they were required to have the vocabulary knowledge of these words.

3. Methodology/Materials

3.1. Research Sample

The study employed 80 engineering and technical students of which were 45 males and 35 females from UMP. There were chosen based on convenience sampling in that they were selected because they enrolled in the researcher's class. Their participation in the study was voluntary and their involvement in completing the questionnaire was done in or outside the class hours. As far as sampling of words in the current study is concerned, every 15th word occurrence in the AWL was selected as the target vocabulary. In total, 53 main words and their word families were employed in investigating the relationship between effectiveness and usefulness of Hot Potatoes in learning AWL.

3.2. Research Instrument

An online questionnaire using Google Form was used to collect data for the study. It comprises of three (3) sections wherein the first part of the questionnaire concerns with having input of the participants' demographic information such as name, matric number, faculty, gender, race, current English subject taken and scores of the previous English tests e.g. Malaysian University English Testing (MUET) or Preparatory Intensive English (PIE); a placement test that was designed by Department of English Language, UMP. Using Likert Scale from 1 to 5, the second section that consists of seven (7) items requires participants to rate their opinions pertaining to the design of Hot Potatoes. In Section 3 of the questionnaire, items on the effectiveness of Hot Potatoes having ten (10) items are formulated. The final section that consists of another ten (10) items identifies participants' feeling on the usefulness of Hot Potatoes. Both, Section 3 and Section 4 use Likert Scale to gauge participants' perceptions on the variables. In the current study the Cronbach alpha coefficient was .95

3.3. Research Material

Hot Potatoes is used as the research material in the current study. The completed exercises are available at this link: http://www.languages.dk/online/anna/. Twenty (20) exercises catering 53 vocabularies are designed for the purpose of investigating the use of Hot Potatoes in learning vocabulary. In particular, there are two (2) JCloze exercises, 11 JMix exercises, four (4) JQuiz exercises, two (2) JMatch exercises and one (1) JCross exercise that were prepared for the current study. In the Jumbled Sentence Exercise i.e. JMix 7, students are required to arrange all the words in correct order to produce a complete sentence. Customized buttons i.e. 'Check', 'Undo', 'Restart' and 'Hint' can be used by them for navigation through the particular exercise.

Meanwhile, JCloze 2, using a gap-fill format is designed for the current study. The exercises require students to fill-up the blank space with correct vocabulary. 'Check' button is used to check whether their answers are correct or otherwise. Meanwhile, 'Hint' button provides assistance in providing them with a free letter if

they are not able to determine the appropriate vocabulary to be inserted in the blank space. They may also use the icon or hit the button "[?]" for clues.

3.4. Data Collection

In collecting data for the current study, participants were first required to complete the quizzes that were designed using Hot Potatoes in their respective classes. They were instructed to complete answering the instrument 20 to 30 before the class ended. Some students chose to do the exercise outside the class hours as well. In addition, for students who were absent on the day the teacher-researcher instructed them to fill-up the questionnaire, texts via WhatsApp were delivered to them asking them to complete answering the instrument. The instruction for the students to do the exercise as well as to answer the questionnaire in and outside the class must be interpreted with caution because the teacher-researcher merely instructed and wrote the text asking the their favour to complete the two (2) tasks. Therefore, it was beyond the teacher-researcher's control if they refused to fulfill the tasks. In Meanwhile, manual scoring sheets were provided to them as well although Hot Potatoes identified participants' answers to be right or wrong for each question. This was necessary for the purpose of analyzing the items which they scored poorly. Such would ensure appropriate remedy could be carried out in that it could identify the kind of grammar mistakes; to name a few, that was made by the students from the analysis. Nevertheless, the presentation of the data in the current study concerned with the data obtained from the questionnaire alone. Students' scores, however, were not discussed in the study.

3.5. Data Analysis

Participants' opinions on the design, effectiveness and usefulness of Hot Potatoes were used to analyze the data for the current study. However, in this paper only the variables; effectiveness and usefulness of Hot Potatoes, were analyzed using Pearson Product-Moment Correlations to identify their relationships.

4. Results and Analysis

The results of the correlational analysis are shown in Table 1**.** The relationship between perceived effectiveness and perceived usefulness was investigated using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. From the analysis, it was found that there was a strong, positive correlation between the two variables [r=–.91, n=80, p<.0005], with high levels of effectiveness of using Hot Potatoes and its usefulness in learning vocabulary; particularly AWL. This means the more students perceive the effectiveness of Hot Potatoes, the more they perceive the tool to be useful in their course of learning vocabulary.

Table 1: Correlational analysis on effectiveness and usefulness of Hot Potatoes

		Total Effectiveness	Total Usefulness
Total Effectiveness	Pearson Correlation Sig. (2-tailed) N	1 80	.913** .000 80
Total Usefulness	Pearson Correlation Sig. (2-tailed) N	.913** .000 80	1 80

These relationships may partly be explained by the interactive features of Hot Potatoes. In the current study, students were provided with hints if they were not able to answer an item. For instance, in Gap-fill exercise (JCloze) as in answering this question; "We have set ourselves a series of goals to _____ by the end of the month", they were given hints: 'a _ h i _ _ e'". Students, therefore, would insert appropriate alphabets to determine the correct answer. This interactive features corroborated with Setiawan [4] a study that found that Hot Potatoes was able to provide direct feedback in their course of learning vocabulary. The direct feedback that was received directly made students felt that Hot Potatoes was a useful program to learn vocabulary. It was reported in the study that they could learn various vocabularies using the program compared to learning vocabulary using conventional method. Also, the exercises or quizzes that were developed using Hot Potatoes seemed to be facilitating their understanding of the vocabulary. In her study, not only students found that Hot Potatoes was useful, the teachers also had the same opinions. The latter claimed that the program was able to create their vocabulary lessons. They would install the program to their personal computers as it would allow them to create various interactive exercises that could be used for their teaching and learning materials.

Moreover, the observed correlation between effectiveness and usefulness might be explained by the appropriate format of the quizzes that are available in Hot Potatoes. In the current study, 'JMatch 1' requires students to match meaning of a word on the right to the target vocabulary on the left. The format seems to be appropriate for students to enrich their understanding on the meaning of a target vocabulary. This result was consistent with the data obtained by Alimah [11] concerning Cloze Test in Hot Potatoes. The researcher found that the quiz was effective thereby making it useful to test students in the primary school to learn grammar directly as well as learn vocabulary indirectly. The study that employed pre and post-tests in gauging students' vocabulary achievement reported that Cloze Test (or JCloze in Hot Potatoes) was able to assist students to learn vocabulary since majority of them (n = 14) achieved excellent scores (85 – 94%) in the tests. It seemed that the program was useful and provided positive effects to the students in learning grammar and vocabulary. The researcher concluded that Hot Potatoes Cloze Test was effective to gauge students' grammar achievement and vocabulary enrichment. In fact, students at the age of eight (8) was able to complete the tests using the program. The teachers, on the other hand, should be creative in choosing appropriate techniques as well as integrating technology which they found relevant to their teaching and learning assessments.

Also, a strong relationship between effectiveness and usefulness of Hot Potatoes in learning vocabulary was due to the fact that the program can be integrated in flipped learning classroom [8]. The researchers found that it was a useful resource to reinforce language learning. Their study employed non-graded Hot Potatoes quizzes to teach students English components i.e. vocabulary and grammar. In particular, the researchers commented that using Hot Potatoes was useful as it was an effective tool that could embed mini-quizzes when creating screen-cast videos. Students could watch the videos or screencasts while listening to online lecturers. Later, they could complete reading assignment as well as online quizzes. In learning vocabulary, it was achieved when students listened to their peers' presentations. Such enabled students to acquire vocabulary and expose them to a variety of topics; at the same time, receiving extensive listening practice. Although the researchers argued that producing such teaching materials was time consuming, it was however, a worth effort since they could use the materials in the subsequent semesters.

The factor in that Hot Potatoes' quizzes can be edited might explain the relatively good correlation between effectiveness and usefulness of the program [27]. Using HTML to export the quizzes, it made it possible to edit the source files, and thereby, making the exercises or activities in Hot Potatoes became more personalized. The fact that the program uses HTML also meant that students might do online quizzes on any computer provided that they have browsers. Therefore, they could complete the assigned quizzes offline if the resources were shared with the students. Yet, in the current study, students were required to be directly connect-

ed to a computer or the Internet since the quizzes were published in a Web Page. As far as editing for teachers is concerned, the program provided free editing for the text of the buttons and text boxes and these features also meant that they could design activities in different languages. Since Hot Potatoes supports Unicode data; a character encoding standard that is widely used and accepted for programming, teachers can therefore, design activities using multilingual text.

5. Conclusion

The aim of the present research was to investigate the relationship between effectiveness and usefulness of using Hot Potatoes in learning AWL. Results from the study show that there is a strong correlation between the two variables in assisting students to learn 53 target vocabulary. The data suggests that Hot Potatoes can be used as a teaching material for students at tertiary level. The ease of using the program benefits the teachers who do not have programming language as it provides customized buttons and templates that they can use in preparing online exercises. Such finding enhances our understanding that technology enables the development of online quizzes at a great ease. Moreover, the free authoring tool does not require additional features to be purchased since they are already build-in as found in Vargas [27] study. Such is true since it can be installed and does not require users to comply to a particular Operating System (OS), and therefore, can be used with Windows, Mac, and Linux.

Acknowledgement

This research work is supported by Universiti Malaysia Pahang under the Project RDU1603144.

References

[1] Khiyabani H GB, Ghabanchi Z. Using multimedia in teaching vocabulary in high school classes. Journal of Advances in English Language Teaching. 2014;18(2):1-11. Khiyabani H GB, Ghabanchi Z. Using multimedia in teaching vocabulary in high school classes. Journal of Advances in English Language Teaching. 2014;18(2):1-11.

[2] Ciampa K. Learning in a mobile age: an investigation of student motivation. Journal of Computer Assisted Learning. 2014;30(1):82-96.

[3] Ali Z, GM, Ismail R, Muhammad NN, Abidin NA, Malek NA Digital Board Game: Is there a need for it in language learning among tertiary level students?. . In MATEC Web of Conferences EDP Sciences. 2018; 150(05026):1-5.

[4] Setiawan E. The Use of Hot Potatoes for Teaching Vocabulary at The Eleventh Grade of SMA Bodhisattva. International Conference on Education and Language (ICEL) 20-21 May; Indonesia: Universiti Indonesia; 2016. p. 232-41.

[5] Zuraina Ali JM, Roselan Baki, Ahmad Fauzi Mohd Ayub. Second Language Learners' Attitudes towards the Methods of Learning Vocabulary. English Language Teaching 2012;5(4):24-36.

[6] Caromawati C. Evaluating A Synchronous Online Teacher Development Program On Creating Call Teaching Materials. Indonesian EFL Journal,. 2017;3(2):159-70

[7] Syamsudin S, & Kurniawati, L. . Using Hot Potatoes Program for Reading Test Instrument in English Teaching Learning Process. Indonesian Journal of English Teaching. 2016;5(2):242-54.

[8] Khalil R, M. Rania, and Shadia S. Fahim. "Assessment as a Learning Tool in a Flipped English Language Classroom in Higher Education." (2017).

[9] Rodríguez R, Blázquez, M., López, B., Castro, M., San Cristobal, E., & Martín, S. (2014, October). In , 2014 (pp. 1-8). IEEE. Educational games for improving the teaching-learning process of a CLIL subject: Physics and chemistry in secondary education. Frontiers in Education Conference (FIE); Spain: IEEE 2014. p. 1-8.

[10] Sanchez-Elez M, Pardines, I., Garcia, P., Miñana, G., Roman, S., Sanchez, M., & Risco, J. L. . Enhancing students' learning process through self-generated tests. Journal of Science Education and Technology. 2014;23(1):15-25.

[11] Alimah PM. The Effectiveness of Using "Hot Potatoes" To Teach Students "Simple Present Tense" At SMPN 1 Ngunut Tulungagung 2015 [Available from: http://repo.iain-tulungagung.ac.id/1863/20/ARTICLE.pdf.

[12] Hassan Taj I, Ali, F., Sipra, M. A., & Ahmad, W. . Effect of Technology Enhanced Language Learning on EFL Reading Comprehension at Tertiary Level. Arab World English 2017;8(1):108-29.

[13] Bakti EP. Hot Potatoes in Language Learning 2014 [Available from: https://www.slideshare.net/rosejuhi9/hot-potatoes-in-language-learning-30407650.

[14] Safer F, & Salam, U. . Developing Hot Potatoes-Based Materials for English Teaching and Learning at SMK. Jurnal Pendidikan dan Pembelajaran. 2015;4(1):1-14.

[15] Dos B, 17(1), 121-128. Developing and evaluating a blended learning course. Anthropologist. 2014;17(1):121-8.

[16] Sadeghi N, & Soleimani, H. (2015). 5(11), 2407. A description and evaluation of hot potatoes web-authoring software in educational settings. Theory and Practice in Language Studies,. 2015;5(11):2407-15.

[17] Schmitt N, Cobb, T., Horst, M., & Schmitt, D. . How much vocabulary is needed to use English? . Language Teaching. 2017;50(2):212-26.

[18] Hulstijn JH. Intentional and incidental second language vocabulary learning: A reappraisal of elaboration, rehearsal and automaticity Cognition and Second Language Instruction. Cambridge Cambridge University Press; 2001. p. 258-86

[19] Deng H, & Shao, Y. (2011, October). . In : mLearn 2011 Conference Proceedings, Beijing, China. mLearn (pp. 24-31). editor Self-directed English vocabulary learning with a mobile application in everyday context. 10th World Conference on Mobile and Contextual Learning; 2011 October Beijing

[20] Nation PE, 31-45. Small Corpus Studies and ELT. In: Mohsen Ghadessy AH, Robert L. Roseberry, editor. Small corpus studies and ELT. Using small corpora to investigate learner needs: Two vocabulary research tool. Amsterdam: Library of Congress; 2001. p. 31-47.

[21] Macaro E. Fourteen features of a language learner strategy 2005 [Available from: http://www.crie.org.nz/research_paper/1Ernesto_Macaro_WP4.pdf.

[22] de Jong PF. Phonological awareness and the use of phonological similarity in letter–sound learning. Journal of Experimental Child Psychology. 2007;98(3):131-52.

[23] Scott JA, & Nagy, W. E. . Developing word consciousness. In: Kame'enui JFBEJ, editor. Vocabulary instruction: Research to practice. New York: Guilford Press; 2004.

[24] Carlisle JF. Morphological awareness and early reading achievement. In: B. FL, editor. Morphological aspects of language processing. New Jersey: Erlbaum; 1995.

[25] Yang MN. A nursing academic word list. English for specific purposes. 2015;37(27-38).

[26] Lei L, & Liu, D. . A new medical academic word list: A corpus-based study with enhanced methodology. . Journal of English for Academic Purposes,. 2016;22(42-53).

[27] Vargas JPZ, s1. , (20), . Considering the Use of Hot Potatoes in Reading Comprehension. Revista de Lenguas Modernas. 2014(20):309-21.