



การเพิ่มพูนความรู้ด้านคำศัพท์เพื่อการใช้เกี่ยวกับความหมายและรูปแบบและคำประぐรร่วม
ของนักเรียนระดับมัธยมศึกษาผ่านการสอนคำศัพท์โดยใช้สื่อโสตทัศนูปกรณ์บรรยาย
Enhancing Productive Vocabulary Knowledge of Form-Meaning and Collocation of
Secondary School Students Through Vocabulary Instruction Using Captioned
Audiovisual Materials

Nguyen Thuong Quynh¹ และ พรพิมล ศุขะวานี^{2*}

Nguyen Thuong Quynh¹ and Pornpimol Sukawatee^{2*}

บทคัดย่อ

งานวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาผลการสอนคำศัพท์โดยใช้สื่อโสตทัศนูปกรณ์และเสียงที่มีคำบรรยายใต้ภาพต่อการเรียนรู้คำศัพท์ของนักเรียนมัธยมศึกษา และ ศึกษาความเห็นของนักเรียนที่มีต่อการเรียนการสอนคำศัพท์โดยใช้สื่อโสตทัศนูปกรณ์และเสียงที่มีคำบรรยายใต้ภาพต่อการเรียนรู้คำศัพท์ กลุ่มตัวอย่างที่ใช้ในการศึกษาครั้งนี้ได้แก่ นักเรียนชั้น มัธยมศึกษาปีที่ 3 20 คน การสอนคำศัพท์โดยใช้สื่อโสตทัศนูปกรณ์และเสียงที่มีคำบรรยายใต้ภาพต่อการเรียนรู้คำศัพท์ใช้เวลาทั้งสิ้น 7 สัปดาห์ ตามขั้นตอนการเรียนการสอน 3 ขั้นตอน ประกอบด้วย ขั้นสังเกตเห็น (noticing) ขั้นค้นคืน (retrieval) และ ขั้นใช้อย่างสร้างสรรค์ (creative use) ด้วยการใช้สื่อที่มีคำบรรยายภาษาอังกฤษเป็นอินพุตสำหรับรูปแบบ ความหมาย และ คำประぐรร่วม เครื่องมือวิจัยประกอบด้วย แบบทดสอบคำศัพท์ก่อนและหลังเรียน และ แบบสอบถามความคิดเห็น ผลการวิจัยชี้ให้เห็นว่าการใช้สื่อที่มีคำบรรยายเป็นภาษาอังกฤษในการเรียนการสอนคำศัพท์นั้นมีประสิทธิภาพในการพัฒนาความรู้เกี่ยวกับคำศัพท์ของรูปแบบ ความหมาย และคำประぐรร่วมของนักเรียน อย่างไรก็ตามควรเลือกวัสดุและการสอนอย่างรอบคอบ

คำสำคัญ : การสอนคำศัพท์, ความรู้คำศัพท์เพื่อการใช้, คำบรรยาย, วัสดุภาพและเสียง

¹ นิสิตมหาบัณฑิตสาขาวิชาการสอนภาษาต่างประเทศ ภาควิชาหลักสูตรและการสอน คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

Graduate Student of Teaching English as a Foreign Language Division, Department of Curriculum and Instruction, Faculty of Education, Chulalongkorn University E-mail: thuongquynh.ng@gmail.com

² อาจารย์ประจำสาขาวิชาการสอนภาษาต่างประเทศ ภาควิชาหลักสูตรและการสอน คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

Lecturer of Teaching English as a Foreign Language Division, Department of Curriculum and Instruction, Faculty of Education, Chulalongkorn University E-mail: pompimol.s@chula.ac.th

* Corresponding author

Abstract

This study probed into the effects of vocabulary instruction using captioned audiovisual materials on productive vocabulary knowledge regarding form-meaning link and collocation of secondary students. In addition, the study explored students' opinions toward the vocabulary instruction using English captioned audio-visual materials. Twenty grade ninth students took part in this study. During the seven-week instruction, the class followed a three-stage process of vocabulary instruction adapted from Nation (2013), namely Noticing, Retrieval, and Creative Use, using English captioned videos as the input for learning form-meaning, and collocation. This study employed two research instruments: the pre and post productive vocabulary knowledge tests and the opinion questionnaire which aimed to gather students' opinions towards the vocabulary instruction and the captioned audiovisual materials. The results revealed that students' productive vocabulary knowledge of form-meaning connection and collocation significantly improved. Students also reported positive opinions toward vocabulary instruction and the captioned videos. The findings suggest that the use of English captioned videos in the vocabulary instruction is effective for students' development of productive vocabulary knowledge of form-meaning and collocation; however, materials should be carefully selected along with pedagogical instruction.

Keywords: vocabulary instruction, productive vocabulary knowledge, captions, audiovisual materials

Introduction

The area of vocabulary teaching and learning has attracted concern and become one of the core research topics in a large number of studies over decades as vocabulary is deemed crucial to students' communication capacity (Schmitt, 2010). Apart from the broad vocabulary size required to communicate, students also have to possess a certain amount of knowledge of each word so as to use it properly (Schmitt, 2010). As proposed by Nation (1990), there are two dimensions subsumed under vocabulary knowledge: receptive vocabulary knowledge and productive vocabulary knowledge. The former refers to words whose form and meaning can be identified through listening and reading, whereas the latter refers to the competence to use the words to speak and write. Nation (1990) expressed his viewpoint that it is inadequate to know the definition of a word; learners should also be able to apply it in practice. In other words, learning only the word form and meaning is insufficient; it is essential to be able to produce language using the correct form and meaning of a word in the appropriate context. Although the relevance of productive vocabulary knowledge is equivalent to that of receptive

vocabulary knowledge, teaching and learning productive vocabulary knowledge in the classroom is still overlooked. According to Webb (2005), vocabulary is taught chiefly through reading, listening, and receptive activities such as definition matching or searching for the meaning in a dictionary. In comparison with productive tasks, these activities are simple to design and assess. Webb (2013) also added that the doubt in the planning and time leads to less attention given to productive vocabulary teaching.

It is increasingly popular in investigating the use of different kinds of input to foster vocabulary learning, especially multimedia materials. Sydorenko (2010) pointed out three factors that advocate multimedia in learning vocabulary: its authenticity, motivation to students, and suitability to different learning styles of students. In the era when technology is pervasive, vocabulary is acquired not only from written text or audio but also from channels that combine various modes such as sound, images, and text. Research conducted to examine vocabulary learning through different modes of input (Feng, 2017; Hsu, 2014) shows that digital materials are more effective than traditional reading and listening ones. Among multimedia materials, many researchers have selected captioned audiovisual materials as the research topic to examine if this form of input is beneficial to students' word gain. There has been a considerable number of studies that employed captioned audiovisual materials, and findings from such studies revealed relatively similar results that students' vocabulary size grew after periods of watching videos with captions as compared to non-captioned videos (Bensalem, 2016; Danan, 2004; Faqe, 2017). It should be noted that studies related to captioned audiovisual materials on vocabulary learning concentrate mostly on receptive knowledge, particularly the incidental uptake after viewing captioned videos, for instance, unintentional vocabulary learning on meaning recognition and meaning recall (Peters & Webb, 2018), and collocation (Teng, 2019). Little research has been done on approaches or task types to enhance productive vocabulary knowledge. Lee and Park (2017) carried out a study to investigate whether captioned movies affect productive vocabulary knowledge. Findings revealed that the captioned movies positively affect productive vocabulary knowledge, but it is slight due to the lack of tasks with word repetition to enhance the word knowledge. Hill and Laufer (2003) conclude that it is challenging to master the productive level from just exposure and advise that learning vocabulary cannot rely on incidental learning as the primary source. As a result, it suggests that interventions while watching captioned videos should be

employed instead of watching-only so as to make captions more helpful in fostering and maximizing productive vocabulary learning. To the best of the author's knowledge, so far, no research has developed a vocabulary instruction using captioned videos as the input that can help students acquire vocabulary productively.

Consequently, the lack of empirical studies on which vocabulary instruction model blending with captioned audiovisual materials as input might enhance students' productive vocabulary knowledge motivated this current research to establish a vocabulary learning process. This study adapted Nation's (2013) three-stage cognitive process for vocabulary acquisition consisting of Noticing, Retrieval, and Creative Use. Nation's (2013) framework of vocabulary knowledge is divided into nine aspects; nevertheless, within the scope of this study, only two aspects were opted for as the central focus: form-meaning connection and collocation. The selection can be justified that among all of the nine aspects, form and meaning relationship is regarded the most important (Laufer & Goldstein, 2004; Webb, 2007), and according to Schmitt (2010), the establishment of form-meaning connection is the earliest step in vocabulary acquisition. Nevertheless, this is not considered a guarantee for the proficient and appropriate use of language (Webb, 2013). Other aspects need to be combined as well. There has also been a consensus in recent years that collocation plays a pivotal role in promoting accuracy and fluency (McCarthy & O'Dell, 2005; Wray, 2002). Understanding word meaning is insufficient because, without the knowledge of collocation, utterances and speech will be formed brokenly and unnaturally. Güler and Büyükkarci (2020) carried out a study with seventh-grade students in Turkey to find out the effects of captioned videos on collocation learning. Results on the posttest of the experimental group surpassed that of the control group, which means that captions are potential for collocation learning. As form-meaning and collocation are closely connected, Webb and Kagimoto (2009) in their study reaffirm the belief that the depth of knowledge for words will likely be strengthened if collocation instruction is added to the learning of form and meaning.

By conducting this study, the two research questions guiding the investigation were:

1. To what extent does the vocabulary instruction using captioned audiovisual materials improve students' productive vocabulary knowledge regarding form-meaning and collocation?

2. What are the opinions of students towards vocabulary instruction using captioned audiovisual materials?

Research Methodology

Participants

A cohort of 20 Matthayom 3 (equivalent to grade ninth) Thai students (04 males and 16 females) recruited from a public school in Nonthaburi province were the participants in this study. They were all from the Intensive Program (IP) and their age was 14 years old. The researcher employed purposive sampling to select the participants since this group of participants were available and consented to take part in the research. These students were assigned to an only intact group ($N=20$) for treatment. Their language proficiency was expected to be at the A1 level according to the CEFR. The experiment took place after class hours.

Materials

The selection of input and targeted words aiming for the instruction played an essential role in this study because it was also the foundation for the vocabulary tests. In terms of videos, the input materials that were chosen for this research project were seven videos retrieved from TED-Ed and Peekaboo Kidz. Three factors were taken into consideration when selecting the videos, namely length, level of difficulty, and familiarity with the participants. The procedure of selecting the targeted words started with screening all of the videos over three rounds. Firstly, the researcher played through all of the videos to select those with content that matched students' interests. Then the transcript of those selected videos was checked readability to ensure that the language level was appropriate to students' proficiency level. Only videos with suitable content and language level were chosen. Finally, the researcher picked the targeted words from those videos based on the word frequency list. The potential target words for this study were selected from British National Corpus (BNC)/COCA word frequency lists (Nation, 2012). The selection of target words for this research was mainly among the first 2000 most frequent word families.

Research Instruments

The Vocabulary Test

The construct of the productive vocabulary test was formed according to Nation (2013)'s framework of vocabulary knowledge. The primary purpose of the test was to examine

whether students' productive vocabulary knowledge of form-meaning connection and collocation could improve after the instruction. On that account, they were gauged via the 56-item vocabulary test comprising two sections: translation (form recall) to measure the productive knowledge of form-meaning connection and collocation gap-fill to measure students' ability to produce collocates. The first half of the vocabulary test was translation. The design of the items was adapted from Webb's (2005) translation test to measure productive knowledge of meaning and form. The second half of the test was developed based on Nation's (2013) construct of vocabulary knowledge, in which he defines the productive knowledge of collocation as words that must be used together. As a result, the author adapted Productive Vocabulary Levels Test (PVLT) developed by Laufer and Nation (1999) as a measure for productive knowledge of collocation. The total score that the participants can get is 84, which the maximum score for the first section – form recall test is 56 while the maximum score for the second section – collocation is 28. The translation test was handed out before the collocation gap-fill test to prevent the possibility that answers to the earlier section would impact the answers to the next section. The subsequent section includes a full description of the test.

The Opinion Questionnaire

After the post-test was administered, the opinion questionnaire was delivered to all of the 20 participants. This questionnaire investigated participants' difficulties during the treatment, what they liked about the instruction, the knowledge they might gain, and their overall evaluation of the materials and the instruction.

The questionnaire was made up of 14 questions and was separated into three parts: students' opinions on the vocabulary instruction, students' opinions towards using captioned videos in the instruction, and students' opinions to the difficulties that they encountered.

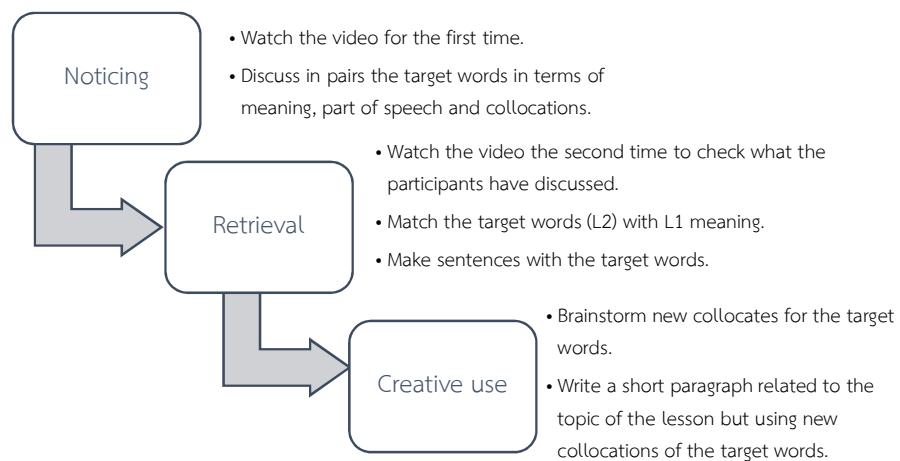
Instructional Design of Vocabulary Instruction Using Captioned Audiovisual Materials

Based on the reviewed literature, the author of this study strived to design a vocabulary instructional model adopting Nation's (2013) cognitive process consisting of three stages. Nation's cognitive process lays an emphasis on noticing, which prioritizes learners' attention to the target words. Learners begin perceiving the target words receptively at this stage. This is firmly supported by Schmidt's (1990) Noticing Hypothesis, which indicates that input is not

believed to be transformed into intake without being noticed. The process of learning vocabulary begins with noticing word form (Hulstijn, 2001); however, this does not guarantee that meaning recall might follow. The concept of noticing in Nation's process subsumes the negotiation component. Negotiating words is considered a sign for the noticing condition to occur, increasing the chance of words being learned (Newton, 2013). The current study, thus, added the pair discussion to the viewing in which students had the opportunity to discuss their guesses about the unknown words that appeared in the videos, including parts of speech, meaning, and collocation of the words. Research concerning the process of how receptive vocabulary knowledge can be turned into productive vocabulary knowledge (Faraj, 2015; Tahmasbi & Farvardin, 2017; Zhang, 2017) suggests that productive tasks should be added to the vocabulary instruction for the development of productive vocabulary knowledge. Accordingly, the last process, creative use, might be the ideal leverage to nurturing and reinforcing word production. Tasks in this process involved generating a new word to use in a new context based on the original understanding of the word, which might enhance productive knowledge of both form-meaning and collocation. Instructional activities for each stage in each learning session were planned as follows (see Figure 1).

Figure 1

Instructional Design of Vocabulary Instruction Using Captioned Audiovisual Materials in a Lesson



Procedures

The data collection procedure lasted for nine weeks. One week prior to the study, participants took the pre vocabulary test. Subsequently, the treatment was carried out within the seven following weeks with one lesson per week. Regarding the main study, participants got involved in seven lessons in which they watched a new video weekly. The duration for every lesson was 100 minutes, with 4-5 target words introduced from each video. After the experiment finished one week, the post vocabulary test was delivered to assess participants' improvement after the instruction. At the same time, the opinion questionnaire was distributed to collect more data about students' opinions towards the vocabulary instruction using captioned audiovisual materials.

Data Analysis

To analyze quantitative data, this study used Wilcoxon Signed-Ranks Test to compare the mean scores between the pre-test and the post-test, and Cohen's effect size. In addition, as part of the opinion questionnaire was designed in Likert scale questions, data obtained from these questions was analyzed using descriptive statistics such as mean scores and standard deviations.

Results

Research Question 1: To What Extent Does Vocabulary Instruction Using Captioned Audiovisual Materials Improve Students' Productive Vocabulary Knowledge Regarding Form-Meaning and Collocation?

Table 1

The Results of the Wilcoxon Signed-Ranks Test to Compare the Difference between the Pre and Post Vocabulary Test (N=20)

	<i>M</i>	<i>SD</i>	<i>MD</i>	<i>Z</i>	Sig. (2-tailed)	Effect size
Pre-test	35.65	17.75		-	< .001*	0.88
Post-test	51.25	15.04	15.60	3.93		

* $p < .05$

Results from Table 1 seem to indicate that participants enhanced their scores from the pre-test to the post-test with a mean difference of 15.60, $Z = -3.93$ ($p < .001$). The result revealed a significant difference between the pre-test and post-test mean scores at the significance level of .05. Additionally, in order to measure the magnitude of the effects of the vocabulary instruction using captioned audiovisual materials, the effect size was also calculated. Cohen's d was used to calculate the effect size in this research, and the result was $d = 0.88$, which is deemed large.

Let us take a closer look at the results of each aspect of productive vocabulary knowledge of the pre and post vocabulary test (Table 3). As depicted in Table 2, the post-test mean score of form and meaning aspect ($M = 34.6$, $SD = 11.92$) was significantly different from the mean score of the pre-test of form and meaning aspect ($M = 27.6$, $SD = 12.84$). The mean difference was 7. Similarly, regarding the collocation aspect, the post-test mean score ($M = 16.65$; $SD = 4.31$) was higher than that of the pre-test ($M = 8.05$; $SD = 5.98$). The mean difference was 8.6. These results suggested that students' productive vocabulary knowledge in two aspects form-meaning and collocation improved after they experienced the vocabulary instruction using captioned videos.

Table 2

The Results of the Wilcoxon Signed-Ranks Test to Compare the Difference of Aspects on Form-Meaning and Collocation of the Pre and Post Vocabulary Test (N=20)

	Pre-test		Post-test		MD	Z	Sig. (2-tailed)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Form and meaning	27.60	12.84	34.60	11.92	7.00	-3.78	< .001
Collocation	8.05	5.98	16.65	4.31	8.60	-3.93	< .001

* $p < .05$

Research Question 2: What Are the Opinions of the Students Towards the Vocabulary Instruction Using Captioned Audiovisual Materials?

In order to answer this research question, an opinion questionnaire designed with three parts was distributed to the students. The first two parts were five-point Likert scale questions in which students specified to what extent they agreed with a statement in five points: 5 = Strongly agree; 4 = Agree; 3 = Neither agree nor disagree; 2 = Disagree; and 1 = Strongly

disagree. The last part was open-ended questions. The data received from the opinion questionnaire was analyzed as presented below.

Table 3 presents the results obtained from the first part of the questionnaire, which aimed to investigate what students thought about the vocabulary instruction regarding the usefulness and relevance of the activities to vocabulary learning. The criteria for interpretation of the level of agreement: 1.00–1.49 = Strongly Disagree; 1.50–2.49 = Disagree; 2.50–3.49 = Unsure; 3.50–4.49 = Agree; and 4.5–5.0 = Strongly Agree.

It can be interpreted from Table 3 that the data showed a high level of agreement across items. Most of the participants found the tasks of the instruction useful ($M = 4.50$, $SD = 0.61$). Also, many of the participants agreed that the number of tasks was sufficient ($M = 4.25$, $SD = 1.07$) for them to learn the words. This can be evident in the responses from items 5 and 6 that participants agreed that they had enough opportunities to practice both word meaning and collocation with the mean score of 4.10 ($SD = 1.43$) and 4.15 ($SD = 1.45$) for items 5 and 6, respectively. The teacher's clear explanations received the second-highest mean score, which was 4.35 ($SD = 0.75$). Item 2 got the modest mean score ($M = 4.05$, $SD = 0.69$) which means that compared to other items, item 2 had more students who thought that the time to complete each task was to some degree insufficient.

Table 3

Students' Opinions Toward the Instruction (N=20)

	<i>M</i>	<i>SD</i>	Interpretation
1. The number of tasks in each stage is sufficient for learning the words	4.25	1.07	Agree
2. The time for each task is enough for me to learn	4.05	0.69	Agree
3. The tasks are useful to learn the words	4.50	0.61	Strongly agree
4. I have enough opportunities to practice word meaning	4.10	1.43	Agree
5. I have enough opportunities to practice collocation	4.15	1.45	Agree
6. The teacher's explanations are clear enough	4.35	0.75	Agree

The following part of the opinion questionnaire consisting of six items was intended to explore students' opinions towards the learning materials. Results are shown in Table 4 below.

Table 4*Students' Opinions Toward the Learning Materials (N=20)*

	<i>M</i>	<i>SD</i>	Interpretation
7. The contents of the videos are interesting	4.65	1.29	Strongly agree
8. The pace of the video is appropriate	4.45	0.83	Agree
9. The level of captions is appropriate to my level	3.90	0.72	Agree
10. The captions and the images enable me to guess the meaning of the unknown words	4.00	1.88	Agree
11. The captions enable me to match the aural and written form of words	4.45	1.47	Agree
12. The captions help me to realize the words that go together	4.30	0.80	Agree

By looking at Table 4, results demonstrate that most of the items tend to be positive as their mean scores can be interpreted as a high level of agreement. In terms of the opinions to the videos, the majority of students strongly agreed that the contents of the videos are interesting to them with the highest mean score ($M = 4.65$, $SD = 1.29$) and the videos' speed is fast enough ($M = 4.45$, $SD = 0.83$). Concerning captions, items 11 and 12 received higher mean scores than items 9 and 10. The mean score of 4.30 ($SD = 0.80$) indicates that captions help most of the students link the aural and written form. Also, they agreed that captions help them realize the collocates of the target words ($M = 4.30$, $SD = 0.80$). Albeit a lower level of agreement, the mean scores of item 9 ($M = 3.90$, $SD = 0.72$) and 10 ($M = 4.00$, $SD = 1.88$) still demonstrates that students found the level of captions appropriate to their language proficiency, and agreed that the captions and the visual clues supported meaning guessing.

Discussions

The Effects of Vocabulary Instruction Using Captioned Audiovisual Materials on Productive Vocabulary Knowledge of Form-Meaning and Collocation

The first research question inquired into the effects of vocabulary instruction using captioned audiovisual materials on productive vocabulary knowledge of form-meaning and collocation. In order to provide a more insightful evaluation of the results, the following section discusses factors that contribute to the improvement in productive knowledge of form-meaning and collocation.

By looking at vocabulary tests' results, it is evident that students achieved higher scores in the posttest than the pretest. In other words, vocabulary instruction using captioned audiovisual materials appeared to have positive impacts on productive vocabulary knowledge of both form-meaning and collocation. There are some possible explanations for these significant improvements, and the role of the captioned audiovisual materials was among the attributes. Audiovisual materials have long been proved to be beneficial to second language learning in terms of vocabulary learning and listening skills. Moreover, they motivate learners by the combination of vividly moving images and sounds, which evoke learners' preference for the new type of learning materials other than traditional printed or audio materials. The addition of captions to the audiovisual materials is deemed to be an innovative approach as it aids learning by the multi-sensory presentation of aural, pictorial, and textual information, which builds confidence in learning (Koskinen et al., 1993; Pattemore and Munoz, 2020). In the present study, most of the students admitted that their listening ability was not good enough, thus led to the fact that they encountered difficulties in recognizing words when watching videos in English. However, thanks to the captions, the gap between the English information load of the videos and students' proficiency was shrunk. As indicated in Table 4, with the high mean score of 4.45, students expressed their agreement that captions allowed them to figure out the exact words that they heard in the videos. Besides, the visual hints facilitated meaning guessing with the level of agreement of 4.00. These results suggest that captions and visual effects paved the way for students to link word form and meaning together as students had the chances to process as many channels as they could to infer the meaning.

Another explanation for this result could be that the noticing and creative use processes might have provided students with sufficient opportunities to fortify their productive knowledge of form-meaning and collocation. The noticing process chiefly involved directing deliberate attention to the target words. In the discussion task, students were divided into pairs to discuss word meaning, parts of speech, and collocates of target words. Students needed to invest more effort to analyze a word before the teacher gave them the explanations. The effectiveness of glossed full captioning on vocabulary acquisition was recognized in some studies (Hsu, 2018; Teng, 2020) as it reduces the time spent on inferring the meaning of a word. However, this study intended not to integrate glosses despite a large number of unknown words because it did not aim to assess students' text comprehension.

Instead, target words were disclosed to students before viewing, and extra focus was placed on the target word negotiation to increase the chances of meeting one word. The results highlight the effects of discussion on the vocabulary learning of form-meaning and collocation, which are consistent with Ma et al. (2017) and Carlisle et al. (2000) studies. They all concur that discussion results in a high level of interaction, which leads to vocabulary growth. Based on the responses obtained from the open-ended questions, most of the students felt interested and engaged with the discussion on account of its usefulness for understanding target words, albeit laborious.

The results also indicate that the improvement in productive knowledge of collocation is better than the improvement in productive knowledge of form-meaning with considerable progress increasing from the mean score of 8.05 to 16.65 (MD = 8.6). It can be said that the relationship between the noticing process and the creative use process is a reciprocal relationship as according to Nation (2013), the noticing process helps contribute to the creative use process as some alternatives or new phrases and terms might evolve during the discussion, which might enhance word retention. The productive knowledge of collocation improved since the discussion task required the analysis of words that co-occurred, which was a prerequisite for the creative use process. In the creative use process, students generated new collocates for the target words based on the collocational knowledge derived from the noticing process, then applied to write a short paragraph. That students made more progress on the productive collocation aspect implies that when students were exposed to words in a variety of meaningful contexts, they are more likely to learn them. Tahmasbi and Farvardin (2017) reported that paragraph writing using the target words spurred students to assess the appropriacy of those words in context. Indeed, students showed positive responses to the creative process, especially the word creation part and the writing activity.

Students' Opinions Toward the Vocabulary Instruction Using English Captioned Audio-Visual Materials.

Generally, according to the responses received from the opinion questionnaire, students held positive opinions toward the vocabulary instruction using captioned audiovisual materials. Based on the results of the opinion questionnaire, the vocabulary instruction using captioned audio-visual materials provides the students with numerous benefits. First, it motivates them to learn English through videos and activities. Students' responses

transparently revealed their motivation to learn. Second, the vocabulary instruction using captioned audiovisual materials created more opportunities for students' learning as they learned how to notice the words intentionally first, then get more familiarized with the noticing process. Students also learn the meaning and collocations of the words better due to the moving images, sounds as well as the aid of the captions for students with less capability of listening. Apart from positive comments on the instruction as well as the materials, there were the findings revealed that some of the target words are still relatively difficult for the students, plus the learning of collocation created some difficulties for them to acquire the word.

Recommendations

According to the findings, it is evident that the vocabulary instruction using English captioned audio-visual materials is beneficial for students' productive vocabulary knowledge of form-meaning connection and collocation and motivates the students to hold positive opinions towards learning English. However, there is still some room for development in the future. As this study was conducted on a small scale of 20 students, a larger sample should be carried out in further studies so that the results can be interpreted and applied to the population. In addition, the vocabulary instruction using English captioned audio-visual materials should be carried out with population at different levels to better examine its effectiveness and applicability to productive vocabulary knowledge of students of all proficiencies. Lastly, other task types and methods of measuring productive vocabulary knowledge are recommended to be designed in later studies.

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