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The effect of content retelling on incidental vocabulary acquisition for Chinese EFL learners

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Abstract: As the foundation of English learning, the acquisition of vocabulary has always been a hot topic in the fields of second language acquisition and foreign language teaching. Contrasted with intentional vocabulary acquisition, incidental vocabulary acquisition (IVA) relates to lexical gains as a by-product of main cognitive activities. In the field of teaching English as a foreign language (TEFL) in Chinese high schools, the incidental acquisition of English vocabulary has increasingly attracted the academic attention in recent years. However, few empirical studies have focused on the incidental acquisition of English vocabulary engendered by doing content retelling tasks. In light of the inadequacy, this study adopted the quality audio-visual material as input and content retelling as output (forming an input-output-input circle), aiming at exploring the effect of retelling on Chinese high school EFL learners' IVA. Results indicated that learners who retold the content of the audio-visual material between two viewings can pick up more words. In this process, the attempted use of new words in oral reproduction plays a positive role in strengthening the immediate acquisition and long-term retention of the target words.

Keywords: incidental vocabulary acquisition; audio-visual material; content retelling; pick up and retention

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1. Introduction

As a fundamental component in communication and a basic element of language learning, vocabulary is considered as a cornerstone of language proficiency. In order for a foreign or second language learner to reach the intermediate or even advanced levels of proficiency, he/she need to acquire "many thousands of words" (Hulstijn and Laufer, 2001: 540). However, the cruel fact is, in class, the time for teaching vocabulary is limited. Only a small portion of class time can be allocated specifically for deliberate and direct vocabulary teaching and learning. Fortunately, learner's mental

dictionary can also be enlarged incidentally. As noted by Huckin and Coady (1999: 190), "Incidental acquisition is the primary means by which second language learners develop their vocabulary beyond the first few thousand most-common words."

With the rapid development of science and technology, education informatization has entered a new historical stage, offering EFL learners better opportunities to further develop their academic language skills. Owing to technological developments, vocabulary learning can be more interactive inside and outside of the classroom. Audio-visual input materials, which appear to have a huge advantage in information selection and arrangement, have recently gained more attention in the field of second language acquisition. In digital era, they can act as up-to-date forms to expand the ways students learn so as to meet their diverse needs. Holding the view that input alone is not sufficient in vocabulary learning, this study adopted content retelling task as output, considering its benefit of offering learners the chance to pick up words in the context and retrieve in the context created by themselves. Different from previous research, which usually followed a simple input-output sequence, this study forms an input-output-input circle. Under such circumstances, learners own the opportunity to watch the audio-visual material again and may compare their expression of the target words with the original use.

2. Literature review

2.1. Incidental vocabulary acquisition and retention

According to Nagy et al. (1985), who first proposed the term "incidental vocabulary acquisition" when studying L1 language acquisition, children acquire several thousands of words per year of their mother tone through learning in context. Instructions dealing with words, nevertheless, are impossible to "cover that much ground" (Nagy et al., 1985: 251). Since the proposal of IVA, numerous researchers have paid attention to it and conducted empirical studies to examine its role. Joe (1998: 357) noted that incidental vocabulary learning, as an effective way to learn word meanings in the context, happens without the specific intent on vocabulary. Richards and Schmidt (2010: 276) defined incidental learning as the process of learning something without specific intention. Contrasted with intentional learning, it also means learning one thing while intending to learn another. To sum up, incidental vocabulary acquisition relates to lexical gains as a by-product of the main cognitive activities where learners are not explicitly attached to vocabulary learning.

Since vocabulary acquisition (or vocabulary uptake) occurs in a comparatively short period, vocabulary retention refers to the process in which knowledge is preserved in the long-term memory, and can be located, identified and retrieved accurately in the future (Sousa, 2006). Craik and Lockhart (1972: 675) believed that retention is a function of depth. And the depth to which it is processed is determined by various factors, such as the amount of attention on stimulus, its compatibility with the analyzing structures, and the length of available time to process. Compared with vocabulary uptake, vocabulary retention includes more complex progress such as memorizing, recalling, and recognizing.

2.2. Vocabulary gains from audio-visual input

Researchers around the world have studied the relationship between textual input and learners' incidental vocabulary acquisition from different perspectives. Most studies examined learners' IVA

during reading (Douglas, 2016; Horst et al., 1998; Hwang and Nation, 1989; Min, 2008; Suk, 2017). But Laufer (2003: 275) argued that in instructed foreign language context, the content-focused reading alone is unlikely to be the best source of vocabulary acquisition. Reading alone has some unavoidable deficiencies, and the most obvious one is its slow proficiency. To deal with it, some researchers turn to listening input, but most of them admit that vocabulary gains are quite small under such circumstances (van Zeeland and Schmitt, 2013; Vidal, 2003, 2011). The data in Brown et al.'s (2008) study even demonstrate that none of the target items' meaning is retained by learners in the listening-only mode three months after encountering the input.

To compensate for the disadvantages of reading and listening input, the use of audio-visual materials has been suggested and won more and more attention. Neuman and Koskinen (1992), in a review of research on television as comprehensible input, confirmed the general benefits of multimedia on language learning. Multimedia expose viewers to both picture and sound messages, in which case, learners can form the word-meaning connection of new words more easily. Owing to its' entertaining nature, television is more interesting and attractive, creating a meaningful and appealing context. Two important studies conducted by Secules et al. (1992) and Weyers (1999) have also confirmed the positive role of audio-visual materials, which turned out to facilitate students' listening comprehension and help them be more confident and competent in communication. Both of the two studies support the pedagogical value of authentic video in bringing about language development.

In a nutshell, audio-visual input can more effectively influence the learners on account of the interplay between different representational modes of the target language. In the audio-visual context, language learners get involved in a more natural way. Besides, multimodality input fosters learners' motivation and enthusiasm through stimulating both visual and auditory sensory systems.

In an era of information explosion, students can have access to different types of resources, and are able to learn English in dynamic environments. The input materials of vocabulary acquisition are no longer limited to reading or listening alone. A tremendous amount of authentic audio-visual materials is available on the Internet, which can cater to different learning needs.

2.3. The role of output tasks

As indicated by Swain (1985, 1995), there is no automatic conversion from explicit to implicit knowledge, and learners' understanding ability and output ability are not absolutely balanced. In order to be fluent and accurate in foreign language, language learners need not only comprehensible input, but also comprehensible output. And the latter is of utter importance.

The important role of output activities has been emphasized by many scholars. Chinses scholar Wen (2008) put forward the "output-driven hypothesis" for the teaching of English-skill courses to English majors in China. According to her, output-driven tasks shorten the distance between input and output, and accelerate the process of transformation from declarative knowledge to procedural knowledge. For learners with intermediate level proficiency or above, this hypothesis conjectures that output is more powerful than input. Output-driven hypothesis as prototype, the production-oriented approach (POA) has been elaborated as a system through nearly ten years' research (Wen, 2015). Output conquers a predominant status in this system, because POA starts teaching with language production and ends with production. As for input, it functions as an enabler to help learners accomplish productive activities.

Defining output both as product and process, Anthony (2008) believed that output creates more opportunities for learners to deal with the new words, and "push" them in using them. Since exposure to input alone is not enough for non-native learners, a new concept called "intentionally targeting language output" is mentioned, which requires teachers to "scaffold students to produce precise, coherent, and appropriate language" (Anthony, 2008: 481).

To encourage learner's further engagement with target words, various output tasks have been recommended and examined. Some typical and most frequently used ones include: 1) matching the target words with their definitions (Hu and Nassaji, 2016; Laufer and Rozovski-Roitblat, 2011; Min, 2008; Paribakht and Wesche,1997; Peters, 2012); 2) providing the L1 translation of the target words, or translate L1 words into the English vocabulary from the reading text (Laufer and Rozovski-Roitblat, 2011; Min, 2008; Peters, 2012); 3) selecting words to fill gaps in the text, sentences, or text summary (Hulstijn and Laufer, 2001; Lu, 2013; Yang et al., 2017; Zou, 2017); 4) composition writing incorporating stipulated words (Eckerth and Tavakoli, 2012; Kim, 2008; Lu, 2013; Zou, 2017).

Although the output tasks mentioned above may provide language learners with more chance to use new words and increase the possibility of their acquisition and retention, more class time is inevitably devoted to language-focused learning. As a result, the time allocated for discourse comprehension is occupied to some degree. Some studies (Kim, 2008; Lu, 2013) adopted the composition writing task, but the learners were explicitly instructed to incorporate the target words in the task, and thus lost part of their initiative.

Nevertheless, it doesn't mean the incompatibility of content-focused activity and vocabulary acquisition. Nation (2007) recommended the integration of different strands and pointed out that language-focused learning could occur in the context of meaning-focused work. That is to say, students can try to do output tasks that are content-focused, and meanwhile, have an opportunity to learn vocabulary incidentally.

With the purpose to examine the role of generative processing in IVA, Joe (1998) asked learners to read and retell the content of a text to incorporate and clarify unfamiliar words. The results showed that more use and retrieval of target words in retelling was likely to be an indicator of better IVA. But for lack of the comparison between reading only or vocabulary-focused condition and content retelling condition, the contribution of retelling remained unclear. Sun (2017) offered evidence of the usefulness of content-focused generative activities, finding that the participants who were required to read the picture books and share their interpretation and opinions about the input text in groups outperformed those who read only, or read with vocabulary instruction. Although there was no clear demand that students should pay attention to and use the target words, such generative task was regarded to create opportunities for them to recycle particular words.

Nevertheless, Yang et al. (2017) to some extent doubted the effect of text-based tasks on vocabulary uptake where there was no explicit focus on the target words. Checking the task design, it is easy to find that when students were required to write a short essay on the related topic, there is no need for them to recycle the original text or related vocabulary. Therefore, there was no surprise that no target words were used in the essays. Consequently, in the delayed post-test, the learners' performance in this condition was inferior to that of the word-focused conditions. Differently, Rassaei (2015) set story summary writing tasks after reading input. It turned out that in this case, participants would use target words in their summary writing. The results supported the idea that summary

writing provided chance for learners to use the new words, thus consolidating vocabulary knowledge.

These are evidences which support that summing up or retelling the input material launches incentive to use the target words, and generates vocabulary learning. The results are in accordance with some related theory as well. Firstly, the adoption of content retelling is also in keeping with Swain's (1995) Output Hypothesis. Swain claimed that the activity of producing may bring learners' attention to what they do not know or only know partially. The language production stage reveals the gap between what they are able to say and what they want to say. At the same time, production of language creates the opportunity for learners to test their hypotheses about the use of target language. When they attempt to use certain grammar rule, they may wonder if the rule could bring about successful communication, or may lead to negative feedback.

In addition, retelling included all three basic elements of the Involvement Load Hypothesis (ILH), i.e., "need", "search", and "evaluation" in one task. First, it develops the need for learners to tap lexical resources they reckon useful in their output. Second, when there are lacunae in their oral performance, learners are motivated to search for missing pieces when they watch the video again. Third, the process of revisiting the video is also the process of evaluating. They reflect on how they performed by comparing their use of new words in the self-provided context with the model in the video. In this respect, ILH confirms the rationality of the input-output-input circle.

Finally, this output task can also fit into the framework of Technique Feature Analysis (TFA) which added "motivation" and "retention" based on ILH. When retelling, learners need to use the newly learned words, which is exactly the process of generation. And because the input text is not available when learners do the output task, they have to retrieve what they have heard from memory.

Since audio-visual material is selected as input material in this study, oral content retelling is adopted as the output task, considering the consistency in linguistic medium. In this respect, Nguyen and Boers (2019) studied the usefulness of input-output-input activities on IVA for Vietnamese EFL learners in college. Students needed to watch a TED Talk video twice and sum up the content in English after their first viewing. Their study shows that the summary task is indeed beneficial to IVA, but the vocabulary uptake rate is rather low.

Vocabulary acquisition has attracted considerable attentions. Although researchers have carried out many studies on this topic and got fruitful achievements, few studies have concentrated on the incidental acquisition of English vocabulary engendered by doing content retelling tasks. In addition, most studies have examined vocabulary learning from text-based input, but comparatively little is known about the effectiveness of audio-visual input. Further, most of the researches only focus on college students' IVA, but few on high school English vocabulary learning and teaching.

In light of the inadequacies, the present study adopted authentic audio-visual material as input, and content retelling as output, forming an input-output-input circle. It is intended to investigate the effect of content retelling on EFL learners' vocabulary uptake and retention through empirical research. Hence, the following two questions are addressed:

What is the effect of content retelling between two viewings of an audio-visual material on vocabulary acquisition?

Do students use or attempt to use target words in their retelling? If yes, is the (attempted) use of target words positively associated with the acquisition and retention of the meaning of these words?

3. Method

3.1. Participants

Two classes of Chinese senior high school learners of English (*n* = 68) participated in this quasi experiment. The participants, at the age of 15 or 16, were all grade 10 students of a secondary school, and were in their 7th year of formal English instruction. There were 34 participants in each group. A *t*-test for independent samples was carried out to evaluate the learning proficiency of the participants in the two groups, which indicated no significant difference: $F = 0.293$, $t = 0.146$, $p = 0.885 > 0.05$. Besides the participant learners, two English teachers were invited as the assistants in this experiment to help select the input material and target words, and second mark the vocabulary tests.

3.2. Instruments

3.2.1. Input material

For EFL learners, TED Talks have many obvious advantages. They are authentic and unmodified learning materials, which promote the development of language skills and can assist to cultivate students' learning ability. Since most of the TED Talks are relatively short (most 5–18 min), they are thus applicable for classroom English vocabulary teaching.

To select a proper input material, fifteen senior high school learners, who were roughly at the same English level with the participants, were invited to select the ultimate input TED Talk of the experiment. Based on their feedback, a TED Talk whose title is *Got a wicked problem? First, tell me how you make toast* was chosen as the input material.

Since most of the EFL learners in China have better English reading skills than listening skills, they are prone to count on reading skills to circumvent listening input. To advocate an all-round development, this study focuses on the listening component. The one-way academic listening, which resembles attending English lectures in the university, can equip students with the ability to adapt to learn from English lectures. Thus, a TED Talk without captions was used as the input material.

3.2.2. Target words

Considering the predictability of word meanings, participants' vocabulary level and the volunteer students' feedback, twenty words were selected as the potential target items in this study (see Appendix I). The actual target words for evaluating the effect of content retelling by making a comparison between the pretest and the posttest would be decided according to participants' pretest results.

3.2.3. Vocabulary knowledge test

To measure vocabulary knowledge, a meaning recall test was adopted in this study. It is a receptive knowledge test where target words are provided in English as hints, and participants are required to provide the word meanings in their mother tongue (L1). A learner can be acknowledged as knowing the meaning of a word, when he/she is able to recognize the word in listening and recall

the meaning.

Since the input material was a TED Talk video without captions, participants were not shown the target words in written form. To ensure the consistency in linguistic medium, spoken forms of the target words were supplied as prompts in the test. Records of general American English pronunciation of the target words were downloaded from the e-dictionary. The audio recordings were edited together to form a complete record with twenty-second intervals between each word. This interval had been proved by a pilot study to be long enough for participants to provide the L1 translations.

Altogether, the participants did the test three times: two weeks before the experiment, immediately after the experiment, and two weeks after the experiment, as pretest, immediate post-test, and delayed post-test, respectively. The two post-tests were used to examine the learners' vocabulary gain and retention. In order to avoid participants' recognition memory for the word sequence, the order of the target words was randomized each time.

3.2.4. Text comprehension test

Fifteen statements about the content of the discourse were designed to gauge the participants' understanding of the input material. Based on Wagner's (2002) two-factor model of top-down and bottom-up processing to operationalize academic listening comprehension, the true/false test included the three basic question types to test whether learners can: 1) recognize the purpose or main idea of the input; 2) make inferences about implication, logic connections, pragmatic meaning, or the speaker's attitude; 3) identify crucial supporting details and factual information. Examples of the questions of each type are listed as below: "The speaker finds a simple but effective way to solve problems—drawing how to make toast" (main idea); "By rearranging the sticky notes or cards with nodes, people analyze events step by step to make the whole process clear" (implicit); "The speaker mentions a website where people can find various practices which they can learn from" (factual).

3.3. Procedure

The whole process was divided into pretest, experiment, immediate post-test, and delayed post-test (see in **Table 1**).

The pretest was conducted two weeks before the experiment, whose main purpose was to check whether the participants had already known the potential target words, so as to decide the actual tar-

Table 1. Study design

	The retelling condition (*n* = 34)	The comparison condition (*n* = 34)
Pretest (2 weeks before)	Vocabulary knowledge test (1)	
Input	The first viewing	
Output	Participants made oral retelling (recorded) within 5 minutes.	Participants were given 5 minutes to recall and review.
Input	The second viewing	
Text comprehension test	A true/false test	
The immediate post-test	Vocabulary knowledge test (2)	
The delayed post-test	Vocabulary knowledge test (3)	

get words.

In the experiment, the participants in the two groups were asked to watch the TED video twice in an effort to answer the comprehension questions. They were encouraged to take out a piece of paper and take some notes. Learners in the retelling group were told that they would participate in the 5-minute content retelling task after the first viewing, and their oral retelling would be recorded. Those in the comparison condition were informed that they would have 5 minutes after the first viewing. During this period, they could review their notes and think over what they have heard.

The immediate post-test was administered instantly after the second viewing to check vocabulary acquisition. After that, all the participants were given the comprehension test, in which they were allowed to refer to their written notes, but the TED Talk video wasn't accessible.

The delayed post-test was carried out two weeks after the experiment to check the participants' retention of the target words. The words tested were the same, but with different sequence. It is worth mentioning that the participants weren't forewarned of the pretest, immediate post-test and delayed post-test.

3.4. Data collection and analysis

The pretest was administered with the aim to remove the words that participants had already known from the potential target word list, and decide the actual target words. From the studies collected in Ellis' book (1999), potential target words should be rejected if they have already been acquired by more than 10% of the participants. The pretest results showed that none of the potential words were known by over 10% of the participants. Therefore, there were 20 actual target words in this study.

The research aims to study the effect of content retelling on vocabulary uptake and retention. In the following parts, the term "uptake" is used to refer to the performance of vocabulary gain immediately after the task, and is measured by the outcome indicated in the immediate post-test. It is determined by subtracting the score of the pretest from that of the immediate post-test. "Retention", which refers to the performance of long-term IVA, is measured by the outcome indicated in the delayed post-test. Thus, it is calculated by subtracting the score of the pretest from that of the delayed post-test.

4. Results

The descriptive statistics for the scores obtained under the two conditions are presented in **Table 2**. Since there are altogether 20 target words in this study, the maximum score is 20.

As is shown above, the retelling group achieved higher mean scores in all the tests. Further anal-

Table 2. Vocabulary meaning gains (SD in parentheses)

Groups	Pretest scores	Immediate post-test scores	Delayed post-test scores	Uptake scores	Retention scores
Comparison	0.32 (0.59)	1.89 (1.57)	1.12 (1.07)	1.56 (1.38)	0.79 (0.95)
Retelling	0.35 (0.74)	3.77 (1.56)	3.18 (2.02)	3.41 (1.16)	2.82 (1.64)

yses were made with the aid of analysis of variance (ANOVA) tests, independent samples *t*-tests, paired samples *t*-tests, and Cohen's effect size *d*.

To assess whether difference lies in the participants' knowledge of the meaning of the target words under the two conditions before the experiment, an independent sample *t*-test was conducted. It revealed no significant difference between the two groups: $t = 0.18$ ($p = 0.53 > 0.05$). Therefore, it's reasonable to ascribe the cause of different word gains to the insertion of the content retelling output task.

One-way ANOVA tests for correlated samples were then conducted to gauge the difference in the learner's scores across the three tests. A significant difference was found: $F(2,66) = 99.34$, $p < 0.05$, Partial Eta Squared = 0.75. It means that at least one test's mean score is significantly different from the others. Then, paired samples *t*-tests were followed to further explore which one(s) is/are significantly different from the others.

Based on the *t*-tests for paired samples to examine which test is different from others, the alpha level of each pairwise comparison test is 0.016. The result showed that, in the content retelling condition, there are significant differences between pretest and immediate post-test ($p < 0.016$), and pretest and delayed post-test ($p < 0.016$). But no significant difference is found between the participants' immediate and delayed post-test scores ($p = 0.048 > 0.016$). It indicates that participants in this group significantly acquire more new words and retain vocabulary knowledge well over time. The same tests were done to the gauge the scores of the comparison group. In this condition, there is also a significant difference in the participants' scores across the three tests. And the differences between pretest and immediate post-test ($p < 0.016$), and pretest and delayed post-test ($p < 0.016$) reach significance as well. Different from what is shown in the retelling group, the difference between the immediate post-test and delayed post-test is also significant ($p = 0.008 < 0.016$).

Repeated independent samples *t*-tests were run to compare the size of vocabulary uptake and retention between the two conditions. The results showed that both the vocabulary uptake and vocabulary retention were significantly larger in the retelling condition than in the comparison condition, with $t = 6.011$ ($p < 0.001$) and $t = 6.245$ ($p < 0.001$), respectively. Cohen's effect size *d* was also computed to examine the difference in uptake and retention between the two conditions. Such a difference was consistently found to be large, with $d = 1.46$ in the case of the uptake scores and $d = 1.51$ in the case of the retention scores.

Since we have found that learners performed better in the retelling condition both in vocabulary uptake and retention, it needs to figure out whether their attempted use of the new words takes credit for the success.

After viewing all the videos which screened the participants' retelling performance, 6 out of the 20 target words were observed to be used in students' content retelling. Among them, "node" occurred most (30 tokens). Another frequently used word was "visualize" (19 tokens). The next one was "toaster" (9 tokens). Other words included "synthesize" (2 tokens), "refine" (2 tokens), and "fluidly" (1 token).

30 of the 34 participants incorporated at least one target words in their retelling. According to the pre-test, the participants didn't know the words before the experiment. After viewing the video, however, they successfully understood the meaning of the words, added them to their arsenal

of vocabulary, and involved them in their oral retelling to express ideas, in both semantically and grammatically appropriate ways. What's more, it deserves to be mentioned that they did not simply copy or make duplicates of the TED speaker's utterances. Instead, new expressions, sentences, and context were created. Here are some examples of how the target words were included in the content retelling.

S11: You can use **node**s and links to make our ideas into a systems model…Some Americans make bread with **toaster**, and some Europeans make with pan.

S24: They try to analyze the procedure, and they did it more **fluidly**… When we **visualize** our thoughts by drawing or writing notes, we can create our map and make our ideas more logical and clearer… So next time, when difficult problem shows up, we can make our ideas visible and touchable by using **node**s and links, especially in group.

S27: Also, people should make group notes. They will **refine** things again and again.

In the retelling videos, there are also some obvious long pauses (over 2 seconds). The pauses appear in the middle of a sentence, and certain target words are appropriate to fill in the blank. Below are some instances of the attempt.

S3: That is to make things visible, to [**visualize**] them. It can make our thoughts clearer.

S8: It is messy at first, but after the colleagues draw them [**collaboratively**], I mean, together, it is clearer.

S16: Many people stick notes in different order, and they [**refine**] to make complex things to be simple. People work [**collaboratively**], and group works better than individual.

The data showed that if the participants used the target words in their retelling, the uptake rate and retention rate of these words are 85.2%, and 64.8%, respectively. And what is interesting is that, even though learners may fail to utter the exact word in their output, the meaning of nearly half of those words were retrieved in the post-tests.

In the listening comprehension test, the participants in the retelling condition gained a mean score of 12.26 ($SD = 1.24$), and those in the comparison group gained 12.21 ($SD = 1.55$) out of the maximum score of 15. According to the t-test for independent samples, there was no significant difference between the two conditions, with $t = 0.17$, $p = 0.86 > 0.05$.

5. Discussion

The objective of this study is to examine the effectiveness of the content retelling output task. Turn first to vocabulary uptake. Our findings suggested that, the participants, when required to do the retelling task, learned 3 (15%) words out of the 20 target words on average. Though the lexical gain is arguably modest, it exceeded the gain in the comparison condition, where there was no insertion of the content retelling oral task between two viewings of a TED Talk video.

When it comes to vocabulary retention, findings were to some extent similar to what was found for uptake—participants in the retelling group outperformed their counterparts in the comparison group. The latter only memorized less than 1 (5%) word.

The scores of the retelling group didn't have significant difference between immediate post-test and delayed post-test. While for comparison group, the scores of the delayed post-test were significantly lower than that of the immediate post-test. It revealed that the content retelling output task was helpful for participants to entrench what they learnt in their long-term memory.

In the light of the outcome of vocabulary uptake, as well as retention, the potential benefits of implementing the content retelling task, a content-focused output task, are quite obvious. The use of content retelling follows two main principles: firstly, it should still focus on the content of the text; secondly, it should create opportunities for students' use of the new words, and thus lead to their vocabulary acquisition.

This research showed that when learners watched an audio-visual material twice with an insertion of retelling task, they acquired more words compared with their counterparts who were not required to do the output task. The announcement of the retelling task provided learners with a clear purpose to deal with the input material in the first viewing, and may thus listen attentively and notice some relevant words. Through retelling, learners reorganized and recreated the content according to what they saw, heard, and understood. They consolidated the word messages they encountered in order to use these words in the new context created by themselves. Especially, when the learners found their retelling incomplete, or noticed that some points were not clearly and accurately stated, they were motivated to seek for related words in the second viewing in order to fill in the information gaps or correct their mistakes. The three steps in the input-output-input circle are greatly interlinked. In this way, although learners were not stipulated to pay special attention to and use the new words, they were closely associated with these words with the guidance of this content-focused task.

In the acquisition and retention of vocabulary, the attempted use of new words played a predominant role. This productive attempt involved mental rehearsal with target words as well as deeper cognitive processing, in which learners not only remembered and developed a basic understanding of the words grammatically and semantically, but also tried to incorporate them in their own reproduction. With practical use and retrieval of the target words, the learning pathway was enhanced. Besides, EFL learners were more likely to be provided with better conditions for word generation owing to this task. When a new word was used in their oral retelling, learners were motivated to assess the appropriateness of this target lexical item in a new context. And when they met the word again in the second viewing, they evaluated their production by referring to the original model in the audio-visual input. Learners not only paid attention to particular meaning of the word, but also tried to find out whether it fits in the specific linguistic context. In this way, form, meaning, and usage were successfully combined in the meaningful context, leading to better opportunities to retain newly learned words in the long-term memory.

Different from what was designed by Yang et al. (2017), the content retelling task in this study entailed a greater need to incorporate relevant words from the original text. When the output task was more closely connected with the input material, learners were unconsciously guided to use the target words more. The general properties of the target word were explicitly connected with the word in the retrieval and generation. In addition, participants were also able to remember over half of the words which they were attempted to use at least two weeks later. According to Hermann Ebbinghaus' forgetting curve, after a day or two, we typically forget around 75% of what we have learned if not review or reinforce our learning. And about 14 days later, learners can only remember

less than 25%. Therefore, compared with the natural rate of forgetting, the outcome of this experiment is definitely gratifying.

Based on the research results, the words with the highest rate of acquisition in this experiment are "toaster", "visualize", and "node", which were exactly the top three words learners used in the retelling. It is thus reasonable to infer that there may be a significant correlation between students' attempted use and their vocabulary acquisition.

The results were in accordance with Swain's (1995) Output Hypothesis. To complete the retelling task, learners needed to grasp and remember some lexical terms. And after finishing retelling, they came to realize language deficiencies in their lexical resources. Thus, in the second viewing, it was more likely for them to pay attention to special words to fill the knowledge gaps. In this way, the input-output-input circle well promoted noticing, providing opportunities for learners to attend to lexical items at every step. Besides, the retelling task invited language learners to try new expressions and use the new words. This action may help preserve the newly encountered words in their memory. Again, during the second viewing, they were natural to check whether they used the new words correctly by comparing how they were presented by the speech speaker with their own use. Even though learners might fail to retrieve the exact pronunciation of certain word, the pauses and hesitations indicated their efforts of retrieval, and probably, they had already known the meaning of that word. Therefore, when revisiting the input video, they paid special attention to that word, leading to better acquisition and retention. In this respect, the second viewing was necessary and meaningful.

The findings also concurred with Laufer and Hulstijn's (2001) Involvement Load Hypothesis, and Nation and Webb's (2011) Technique Feature Analysis. When the learners actively uttered new words in the context, they recalled the target lexical items, and used them generatively in new ways they had not heard before. When combining the word with other words, they assessed whether it fitted in the new context at the same time. In the light of ILH, the involvement index of content retelling was fairly high—with the involvement index of 4 (+ need, + search, ++ evaluation).

In a nutshell, attempted use of the target words enhances both learner's uptake and retention of the meaning of the words.

6. Conclusion

This study focuses on the effect of content retelling on vocabulary uptake for EFL learners. Under the guidance of the existing researches and output theories, a quasi-experiment was designed and successfully conducted. Through systematic analysis of the statistical data, the major findings have been obtained. Firstly, content retelling is an effective output task, where EFL learner's practice in verbal rehearsal of what they have heard facilitates their vocabulary acquisition. Secondly, the attempted use of new words plays a predominant role in the acquisition and retention of vocabulary. In addition, this study suggests that significant vocabulary learning could occur through being exposed to audio-visual input. It should also be noted that this study is liable to some limitations. The first lies in the sample, whose size is not big enough, so the result may not represent the general vocabulary acquisition features of all the high school learners. And in this study, only one type of audio-visual input (TED Talk video) and one type of output task (content retelling) were examined. It needs further investigation to find out whether the same trend happens with other audio-visual

materials, and whether content retelling gets the edge on other meaning-focused productive activities. Finally, it is hard to define to what extent a word is regarded as useful or even essential in the retelling output. In the present study, words like "prominent", "spontaneously", and "intuitively" were not used in the retelling, and as a consequence, they were poorly acquired and recalled in the post-tests.

Conflict of interest

Acknowledgements

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Appendix I: Target words

Target words and their frequency of occurrence

inspection (2), sliced (1), toaster (4), illustrate (1), visualize (6), node (18), tangible (2), diagram (1), intuitively (1), trivial (4), prominent (1), emerge (3), spontaneously (1), fluidly (1), synthesize (1), collaboratively (1), refine (5), template (1), thorny (1), confront (1)