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# The Use of a “Think-Pair-Share” Brainstorming Advance Organizer to Prepare Learners to Listen in the L2 Classroom

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The purpose of this study was to examine the effects of prelistening activities, particularly interactive brainstorming advance organizers that used a “Think-Pair-Share” structure, on the listening comprehension performance of L2 junior high school students. The term advance organizer is defined as a teaching activity that helps build or activate L2 learners’ prior knowledge for a listening task, or as the provision of support to promote learning. The results show that the participants who had the advance organizer of picture brainstorming scored substantially higher than those in the vocabulary brainstorming group or the control group. The differences between the vocabulary brainstorming group and the control group, however, failed to reach a significant level. The findings suggest that the use of certain advance-organizer activity in the prelistening stage helps L2 learners comprehend a text better, and that L2 learners agree with the effectiveness associated with the use of brainstorming advance organizers as an instructional strategy in helping them activate their prior knowledge, boost their confidence for the test, reduce their performance anxiety, make connections with their own life experiences, and inspire new thoughts.

## INTRODUCTION

Listening comprehension is an important language skill to develop because children learn through listening as they grow. Asher (1982) found that children have listened to their native language for at least 17,520 hours when they reach age 6. Unlike L1 listening, learners in an L2 context do not go through many hours of passive listening before they need to seriously attend to the messages they hear. Barriers to comprehension and additional processes that L2 listeners need to perform can make listening in a second language an arduous task (Flowerdew & Miller, 2005). Listening, in addition to its critical role in language learning and development, is actually used more than other language skills. Research indicates that people on average listen twice as much as they speak, four times more

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than they read, and five times more than they write (Morley, 2001). As the most used and most challenging of the four language skills, second or foreign language (L2) teachers should not overlook this skill, and L2 learners should be able to listen well and gain some level of comprehension from listening input.

Although listening competence plays a crucial role in second language acquisition and communication, little research has investigated how to use prelistening activities, particularly interactive brainstorming advance organizers, to engage L2 learners at the secondary level in a listening task. Vandergrift (2007) indicated that “L2 listening remains the least researched of all four language skills” (p. 191). For this reason, the purpose of this research was to determine the effects of brainstorming advance organizers that used a “Think-Pair-Share” structure on the listening comprehension of a culturally unfamiliar folk story for L2 junior high school students. A better understanding of the L2 listening process will help inform the theory and provide insights into the teaching of listening in the L2 classroom.

## LITERATURE REVIEW

The claim that the use of an advance organizer helps build or activate learner background knowledge or provides support to facilitate comprehension and retention of a text has been well-documented in L2 research. A systematic review of the L2 research on listening comprehension shows that advance-organizer design assumes various forms, such as question previewing, key vocabulary presentation, cultural background cues, a summary of video scenes with or without pictures, short lines of captions, and so on. Related research on the use of advance organizers as scaffolding to help students in the L2 classroom perform better in the listening comprehension process is to be reviewed as follows.

Herron, Hanley, and Cole (1995) investigated and compared the effect of two advance-organizer conditions on English-speaking college students’ retention of information in French videos. In the first organizer-aided condition, six short sentences that summarized the major scenes in a video lesson were read aloud to the students. In the second condition, the major difference was that each short sentence was presented together with a picture relevant to the context. The study findings suggested that students’ comprehension and retention of information in the videos was significantly enhanced in the picture-and-sentence condition because more contextually relevant prior knowledge about the video was activated before they were tested in the listening task.

Wilberschied and Berman (2004) conducted a similar study to Herron et al. (1995) to examine a total of  $N = 61$  elementary school students of Chinese as a foreign language in two advance-organizer conditions with the use of videos from authentic Chinese TV broadcasts. Despite a nonsignificant difference in listening comprehension between a summary of video scenes with pictures directly taken from the authentic video and a description of major scenes without any corresponding pictures, interview results from the young learners showed they liked the picture advance-organizer condition more than the one with text alone.

To investigate the effects of various advance-organizer formats on video comprehension and retention of college students enrolled in a semester-long French course, Herron, York, Cole, and Linden (1998) designed a study to compare comprehension of video in two advance-organizer formats, a declarative mode and an interrogative mode. Both advance organizer groups scored significantly higher on the retention test than did students in the control group, but no significant

differences in scores were recorded between the two advance organizer groups. The results suggested that the incorporation of advance organizers into lesson plans would encourage students to watch the video for confirmation of information previously presented in the advance organizer. When students were prepared in this way for a video-viewing listening task, they knew what to listen for and would not attack the task without a purpose, effectively reducing their viewing anxiety and boosting their confidence for listening success.

Chung (2002) examined the use of question previewing and vocabulary preteaching as advance organizers on English video comprehension of  $N = 188$  English as a Foreign Language (EFL) college students. The results showed that students taught with the use of multiple advance organizers (question previewing and vocabulary preteaching) is more helpful than a single advance-organizer condition or lack of advance organizers in facilitating listening comprehension of college-level EFL students for a multiple-choice and an open-ended listening comprehension tests. Despite the facilitative role of vocabulary instruction as an advance organizer in listening comprehension performance, Berne (1995) found that "previewing vocabulary items distracts listeners from attending to the content of the passage" (p. 326), and this activity was considered less effective in enhancing learner performance, compared to previewing questions. A later study by Chang and Read (2006) provided additional support to the findings of Berne. Four types of listening support were examined: previewing the test questions, repeating the input, providing background knowledge about the topic, and providing vocabulary instruction. The study found that, of the four types, vocabulary instruction was the least helpful, regardless of the language proficiency level of L2 learners. The ineffectiveness of vocabulary instruction/preparation prior to a listening task to improve listening comprehension was also manifested in Chang (2007), in which participants were given three different lengths of preparation time to study new vocabulary that would appear in a listening text. The results showed that significant differences between groups were only found in the vocabulary test, not in their listening comprehension performance, and that allowing students to study the new vocabulary 30 minutes prior to a listening test had the strongest impact on their levels of confidence and strategy use compared with the group given one-week preparation time and the control group.

The use of cultural background cues prior to a listening task has been suggested as an effective advance organizer in a number of studies (e.g., Chung, 1999; Herron, 1994). Li (2009) used a sequential mixed methods study to compare the effects of cultural background cues, question preview, and a summary of major scenes with accompanying photos on the video comprehension of  $N = 124$  EFL college students. The cultural background cues presented to the students were a list of 13 generalizations about the target culture relevant to understanding the video segment. The students read each statement, evaluated it, and marked it either probably true or probably false. Answers to the generalizations were provided on the back of the task sheet, and students checked against their own answers after they had completed the task. Each false statement was explained in the answer key section to heighten their awareness of the target culture. The results showed that students in the advance-organizer conditions of question preview or summary of major scenes with pictures outperformed those in the condition of cultural background cues. The reason the use of cultural background cues as an advance organizer was least effective could be because the cultural information in the advance organizer was related only indirectly to the video content, thus making it more challenging for students to make an association between the video content and the cultural information in the advance-organizer treatment.

Another mix methods study conducted by Jafari and Hashim (2012) also confirmed the effectiveness of advance organizers in improving the listening comprehension of  $N = 108$  EFL second-year university students. The results showed that the students who were exposed to either advance-organizer treatment (a list of key sentences or a list of vocabulary items) demonstrated significant improvement on the listening comprehension posttest compared with the control group.

With the advance of technology, two studies have shown that the use of advance organizers, in addition to facilitating comprehension, is useful in decreasing cognitive load for L2 learners. Lin and Chen (2006) investigated the effect of two types of advance organizers (i.e., question and descriptive advance organizers) on the listening comprehension of  $N = 86$  EFL university-level learners for an animation-based content lesson. The material used in the study was a 2,000-word physiology unit focusing on the human heart, its parts, locations, and functions during the diastolic and systolic phases, and 20 static visuals that were converted into animated visuals were presented in a question mode or descriptive mode. Participants had to complete four criterion tests: a drawing test, an identification test, a terminology test, and a comprehension test. The results showed that the question advance organizer was a more effective cognitive strategy compared with the descriptive advance organizer to facilitate EFL learners' comprehension of the content-based lesson and reduce their cognitive load. The descriptive advance organizer, consisting of single statements of important concepts prior to the new material, produced fewer stimuli. However, the information presented in the descriptive advance organizer was also held in the working memory, which in turn resulted in a less available working memory capacity to comprehend the new material. The authors concluded that such a descriptive advance organizer not only failed to provide cognitive support, but it also impaired comprehension. Li (2014) examined the effects of using episodic photos accompanied by corresponding short English captions as an advance organizer on the DVD video comprehension of L2 university-level learners to provide an alternative to the scenario of L2 learners experiencing sensory overload in a multimedia learning environment that contains pictures, printed words, and speech words. The study concluded that using advance organizers as an instruction strategy facilitated listening comprehension and effectively reduced participant dependence on target-language caption-reading input by 50% for initial comprehension.

The aforementioned literature documents the facilitative role of the advance organizer approach in the listening comprehension process. However, some problematic issues in previous studies are worth discussing. First, the advance organizers in previous studies were presented directly to students who were asked in a passive way to look at or to memorize the content of the advance organizers prior to a listening task. Simply introducing an advance-organizer activity to students is often not considered enough to spark their interest, engage them in the task at hand, and, most importantly, contribute to critical thinking skills. Some studies in reading comprehension, however, have indicated that a brainstorming session in the prereading stage will often help readers make connections with their own life experiences, thus engaging them and giving them a stronger purpose for reading (e.g., Ghabanchi & Behrooznia, 2014; Sharafi-Nejad, Raftari, Ismail, & Eng, 2016). Readers who are prepared for a reading task in this way are no longer reading for the purpose of reading. Rather, they are reading to discover whether their ideas or possibilities resulting from brainstorming are of any help in their reading process. Brainstorming, as noted in Feathers (2004), not only "provides plenty of materials for making prediction" (p. 82), but it also helps activate a learner's schema or prior knowledge, creating a learner who will think critically and comprehend more completely. The present study was to

examine whether a brainstorming advance organizer with a Think-Pair-Share discussion structure would also help L2 learners gain more interest in the listening task and enhance their listening comprehension. The second issue identified in previous research was that the study participants were L2 learners either at the primary level (e.g., Wilberschied & Berman, 2004) or at the tertiary level (e.g., Chung, 2002; Jafari & Hashim, 2012; Li, 2009, 2014). The literature offers little information on the use of brainstorming advance organizers to engage L2 learners at the secondary level in a listening task. Third, the inconsistent findings of vocabulary instruction as an advance organizer in facilitating listening comprehension performance (e.g., Berne, 1995; Chang, 2007; Chang & Read, 2006; Chung, 2002; Jafari & Hashim, 2012) warrant further studies. Finally, we are also interested in knowing L2 learner attitudes toward the use of brainstorming advance organizers in the listening task at the secondary level, and through a mixed method study, we could probe the study results in more depth. To bridge the research gaps and to provide L2 teachers with an effective approach to teaching listening, this study examined the following research question:

RQ: What are the impacts of different brainstorming advance-organizer conditions on the L2 listening comprehension of a culturally unfamiliar folk story?

From this research question, we derive the following hypotheses:

H1: Students who use brainstorming advance organizers in L2 listening comprehend a culturally unfamiliar folk story better than students who do not.

H2: Students who use picture brainstorming do better in L2 listening than students who use vocabulary brainstorming.

As an exploratory research question, we wanted to learn about student attitudes toward the use of brainstorming advance organizers in the listening task, particularly the effects of brainstorming advance organizers on affective factors, such as learner confidence and test anxiety, because L2 listening comprehension takes place at both conceptual and affective levels.

## METHOD

### Participants

A sample of  $N = 91$  L2 9th graders enrolled in three classes at the Makung Junior High School was used as participants. This junior high school is located in a city on an island off Taiwan and is considered a medium-sized junior high school with a total of approximately 1,200 students. The participants had studied English for seven years on average. The English instructor of the three selected classes was the same. According to the English instructor's judgment, the three classes could be different in their language proficiency level. To control for the possible initial difference before the main data collection effort, their listening performance on a standardized English proficiency test, the General English Proficiency Test (GEPT)—the Elementary Level, provided by their English instructor was compared using a one-way analysis of variance to minimize the threat to internal validity. According to the GEPT level descriptors available on the website ([https://www.ltc.ntu.edu.tw/E\\_LTTC/E\\_GEPT/elementary.htm](https://www.ltc.ntu.edu.tw/E_LTTC/E_GEPT/elementary.htm)), test takers who pass this level have the ability to understand and use rudimentary English language needed in daily

life, and this language level, generally corresponding to the proficiency level of A2 in CEFR, is what students are expected to achieve upon graduation from junior high school. No significant differences, however, were found among the three selected classes in their listening proficiency level,  $F(2, 84) = 2.49, p > .05$ . According to the survey results, four participants reported that they were already familiar with the origin of the St. Patrick's Day, and thus their data were removed. Only data from the remaining  $n = 87$  study participants were used for further analysis.

## Material

The purpose of this research was to determine the effects of brainstorming advance organizers on the comprehension of a culturally unfamiliar folk story for L2 learners. The origin of the St. Patrick's Day was selected as the listening text because this holiday is not a traditional holiday in Taiwan. The listening passage was created by modifying and editing information on several websites particularly designed for teaching holidays to learners of English as an L2. To ensure the appropriate difficulty level of the listening text for the study participants, the vocabulary words in the text were checked against the vocabulary size an L2 ninth grader needs to have upon graduation from junior high school. A study conducted by Yang (2006) showed that a ninth grader is expected to know about 1,200 words, according to the guidelines of grade 1–9 curriculum set forth by the Ministry of Education in Taiwan. After a thorough analysis of the listening text, the percentage of known words in the text was 95.5%. This figure was considered good enough because some studies have shown that text coverage ranging from 90–98% is needed for adequate comprehension to occur depending on different genres and the difficulty level of a text (Hirsh & Nation, 1992; Hu & Nation, 2000; Laufer, 1992; Nation, 2006; Schmitt, Jiang, & Grabe, 2011; Stæhr, 2009). There were 267 words in the listening text, and the text was spoken and recorded by a native English-speaking teacher at a rate of approximately 148 words per minute (wpm). The speed of 120–225 wpm was considered as the natural speech rate in several studies (e.g., Griffiths, 1992; Jones, Berry, & Stevens, 2007; Rost, 2005).

A multiple-choice listening comprehension test was developed and written in Chinese, the native language of students, rather than in English. L2 research has shown that language used in a test affected the score, and students who were allowed to use their native language during comprehension testing scored higher than those who were tested in their L2 (Field, 2000; Lee & Van Patten, 2003). The validity of the listening comprehension test was established through expert opinion. Each expert rated the construct validity of the listening comprehension test individually, using a five-point Likert scale with a range from 5 points (*highly relevant/appropriate*) to 1 point (*highly irrelevant/inappropriate*). The final version of the comprehension test comprised eight multiple-choice questions after eliminating two questions that were of low degree of relevance or appropriateness to the listening text. A pilot study conducted with a group of  $N = 18$  L2 learners who were similar in their proficiency level to the study participants showed that the correlation coefficient estimated by the split-half reliability approach was parallel, with a correlation coefficient of  $r = .86 (p < .05)$ . The validation process of the listening comprehension test replicates the study by Li et al. (2017).

Two types of brainstorming advance-organizer activities were prepared for this study based on a thorough discussion with the participant instructor and an experienced EFL teacher. One of the advance-organizer conditions was six bilingual key words/phrases accompanied by corresponding pictures. The six chosen key words/phrases relevant to the origin of the St. Patrick's

Day were organized into a brainstorming web and printed on a paper (see Appendix). The other advance-organizer condition was designed as scaffolding material to provide mental stimulation of the content in the upcoming listening text. It consisted of four pictures, and the pictures were printed on a paper and arranged in chronological order of the story about the origin of the St. Patrick's Day.

A seven-item posttest questionnaire including six items on a 5-point Likert scale (1 = *strongly disagree*, 2 = *disagree*, 3 = *no opinion*, 4 = *agree*, 5 = *strongly agree*) and one open-ended item was developed in the participants' L1 to elicit the participant attitudes towards using brainstorming advance organizers in the listening task and to screen out participants who were already familiar with the origin of the holiday prior to the listening task.

### Procedure

The data collection process took place in a regular classroom during the scheduled class periods. The three intact classes were randomly assigned to listen to the origin of the St. Patrick's Day. Participants in the two experimental groups (i.e., vocabulary brainstorming & picture brainstorming) were asked to follow a Think-Pair-Share discussion structure. The Think-Pair-Share, getting its name from the three stages of student action, is a cooperative brainstorming strategy developed by Lyman (1981). In the advance organizer of vocabulary brainstorming, each student was asked to "think" about what each word/phrase meant to the holiday. Then the students "paired" up to talk about the meanings each devised to increase the richness of ideas or possibilities from individual brainstorming. They compared their mental or written notes and identified the best or most convincing meaning(s). After they talked in pairs for a few minutes, a number of pairs, due to limited class time, were called on to "share" their thinking with the rest of the class. The class instructor did not tell them whether their predictions were correct, leaving them to verify their initial guesses in the subsequent listening task. In this way, the students followed a prescribed process that limited their off-task thinking, that is, things not relevant to the listening task at hand, and they listened to the upcoming text with a purpose, thus engaging them to pay closer attention to the events and information in the text. When they worked with others in this discussion structure effectively, they experienced a sense of inclusiveness or connections to others during the Think-Pair-Share process, and their engagement in the task would have been amplified as a result. Following the three-stage discussion structure, the listening text, which contained 267 words as previously described in the Materials subsection, was played only one time to avoid possible interference of multiple exposures to listening input in comprehension performance, and participants were given five minutes to complete the listening comprehension test. A posttest questionnaire was administered immediately after the treatment. The whole process took about 45 minutes.

Participants in the condition of picture brainstorming followed the same procedure as those in the vocabulary brainstorming condition. Each student was asked to think about each of the four pictures. Then the students paired up to talk about the pictures, identified the best answers, and wrote a short description of their answers below each picture. The class instructor called for some pairs to report their descriptions to the class. The instructor did not comment on their descriptions about each of the pictures, allowing them to discover whether their ideas or possibilities resulting from brainstorming had any merit. Then the listening text was played, and participants completed the listening comprehension test and the attitude survey.



For the class in the control condition used for a comparative purpose, the listening text was played without using any advance-organizer activity. Then the students completed the multiple-choice listening comprehension test and were asked to respond to only item 6 in the posttest questionnaire to screen out those who were already familiar with the holiday.

## RESULTS

### Brainstorming Advance Organizers and Listening Comprehension

To assess L2 students' listening comprehension performance, a multiple-choice listening comprehension test composed of eight items was used. Each question that was correctly answered was given a score of one point with a full score of eight. Table 1 summarizes the means of the listening comprehension test, divided by advance organizer condition, whereby participants had vocabulary brainstorming (VB), picture brainstorming (PB), and no advance organizers (i.e., the control group). The PB Group ( $M = 7.47$ ,  $SD = 0.97$ ) scored the highest, followed by the VB Group ( $M = 6.19$ ,  $SD = 1.14$ ); the control group ( $M = 5.83$ ,  $SD = 1.56$ ) scored the lowest.

Hypothesis 1 claimed that students who used an advance organizer had an advantage over those who did not. A one-way analysis of variance (ANOVA) was computed. The results revealed a significant effect and a medium effect size, ( $F(2, 84) = 14.04$ ,  $p < .001$ ,  $\eta^2 = .25$ ), as shown in Table 2. To test hypothesis 2, we determined whether any significant differences existed between the means for different advance-organizer conditions. The post hoc Tukey HSD Test was conducted. The post-hoc analyses, as shown in Table 1, indicate that the PB Group scored significantly higher than the VB group and the control group. The differences between the VB Group and the control group, however, failed to reach a significant level. The

TABLE 1  
Means, Standard Deviations, and Comparison Results of Treatment Groups on the Multiple-Choice Listening Test

<i>Treatment group</i>	<i>n</i>	<i>M</i>	<i>SD</i>
PB	30	7.47 <sub>a</sub>	0.97
VB	27	6.19 <sub>b</sub>	1.14
Control	30	5.83 <sub>b</sub>	1.56

*Note.* Means in the same column that do not share subscripts differ at  $p < .001$  in the Tukey honestly significant difference (HSD) comparison. PB = picture brainstorming; VB = vocabulary brainstorming.

TABLE 2  
Summary of One-Way ANOVA for Multiple-Choice Listening Test

<i>Source</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	$\eta^2$
Between Groups	44.04	2	22.02	14.04***	.25
Within Groups	131.71	84	1.57		

*Note.* \*\*\*  $p < .001$ .

multiple-choice listening test clearly reflects that the advance-organizer use, particularly in the picture brainstorming condition, led to increased listening comprehension of L2 junior high school students.

### Exploration of Participant Attitudes Towards Brainstorming Advance Organizers

The seven-item posttest questionnaire included six items on a 5-point Likert scale and one open-ended item to measure the participant attitudes towards using brainstorming advance organizers in the listening comprehension task. The open-ended item was designed to obtain qualitative information from the participants so as to probe the results in more depth.

The internal consistency reliability coefficient of the questionnaire (item 6 was excluded for analysis) was *Cronbach's*  $\alpha = .88$ , indicating that the advance-organizer use was in compliance with the claim that an advance organizer helps students understand learning material better by connecting what they have already learned with what they are about to learn. A further analysis of the questionnaire shows that the participants liked the procedure and agreed with the positive value associated with using advance organizers in a listening comprehension task, although vocabulary brainstorming was less effective compared with picture brainstorming. A verbal summary of the participant qualitative remarks in Item 7 revealed that the brainstorming advance organizers were also effective in helping the participants build background knowledge, boost their confidence for the test, reduce their test anxiety, make connections with their life experiences, and inspire new thoughts.

## DISCUSSION

The findings demonstrate that certain type of advance organizer was effective in facilitating listening comprehension for L2 learners at the secondary level. The PB group outperformed the VB group and the control group. No significant difference in comprehension performance was observed between the VB group and the control group. The findings generally correspond with those of previous studies and establish the value of previous research (e.g., Chung, 1999, 2002; Herron et al., 1995; Li, 2009, 2014; Wilberschied & Berman, 2004) on the use of advance organizers as an instructional technique in that advance organizers improve the measure of listening comprehension of target-language material by activating background knowledge, providing clues to upcoming aural input, and setting a specific purpose for listening.

The picture brainstorming condition, compared with the vocabulary brainstorming condition, provided content-based pictorial support and background knowledge to the information contained in the listening text, which made this type of advance organizer more meaningful and effective than the vocabulary brainstorming condition. In addition, looking at a series of pictures with descriptions is just like reading a summary of major scenes with accompanying pictures, and this reflects typical behavior because some people do read a short synopsis about TV programs and movies in the newspaper before they view them (Herron, 1994; Li, 2014). Thus, the familiarity of the task may have increased the students' comfort level with the listening task. Certain participants in this group reported, "*I feel relaxed when answering the comprehension questions after discussing the content pictures with my classmates prior to taking the test,*" and "*With pictures, I felt less anxious and relatively easy to concentrate on the listening task compared with listening to a text without pictures.*" Visual support in the form of pictures

contributes to interest and motivation, gives a sense of the context of the language, and provides a specific reference point or stimulus for the listener/viewer's attention (Wright, 1989). The availability of visual support in the listening task is another possible reason why students in the PB Group benefited more in this type of advance organizer than those in the VB group.

Compared with the PB group, the VB group was less satisfying in terms of improving listening comprehension performance. This outcome is consistent with that of previous research (Berne, 1995; Chang, 2007; Chang & Read, 2006). The ineffectiveness of key-vocabulary instruction in facilitating listening comprehension prior to presenting a listening text could be because the six key words/phrases were presented out of context. The L2 learners knew the meanings of newly presented words/phrases because each word/phrase in the advance organizer was presented with a Chinese translation equivalent. The L2 learners, however, might not have yet been ready to decode the new words/phrases presented in fast connected speech. Although vocabulary is often viewed as the basic building block of comprehension, building a strong vocabulary is not something that can be done overnight. It will take time and hard work. Their limited exposure to the new words/phrases presented in this brainstorming advance organizer might have explained why this type of advance organizer was considered less effective. In addition, remembering words without context can be boring, and therefore it may be a challenge to make this advance organizer a pleasant activity for learners (Folse, 2004). Alternatively, teachers in the L2 classroom could ask students to think about what each key word/phrase means in a listening text and then record their creative ideas resulting from brainstorming in short sentences. By discussing key words/phrases presented in context with the students, they would also learn to use context to understand several aspects of lexical knowledge, such as collocations, grammatical functions, and constraints on use.

Qualitative remarks from Item 7 in the questionnaire confirmed the effectiveness and value of advance organizers in building up or activating background knowledge (e.g., *"I got a good opportunity to listen to other people sharing their thoughts, helping me broaden my knowledge about the holiday I was not familiar with"*), boosting learner confidence (e.g., *"Through pair discussion and group sharing, I would know whether my hypothesis about the upcoming listening text was way off other students, and I felt secure for the listening task"*), reducing test anxiety (e.g., *"I feel relaxed when answering the comprehension questions after discussing the content pictures with my classmates prior to taking the test"*), making connections with life experiences (e.g., *"The creative ideas from my classmates seemed to remind me of something that I knew about when I was a 7th grader"*), and inspiring new thoughts (e.g., *"I was inspired by some novel ideas from my partner when discussing the words/phrases with him"*). Thus, the value of effective advance organizers in the L2 classroom should never be underestimated.

### Limitations and Suggestions for Further Research

Although this study has answered certain questions, the study results must be interpreted according to the following limitations. First, the participants were sampled from a junior high school located in the city. Compared with a city school, students who study in a rural school in Taiwan typically have limited learning resources. The findings, therefore, should not be generalized to students who study in a remote, rural junior high school. Future studies

could investigate L2 learners from different school locations, or L2 learners with different proficiency levels to provide additional informative results.

Second, this study was conducted during regularly scheduled class periods in the classrooms, which means we had limited time for presenting advance organizers. For each listening text, the content and the language usage also vary. The data collected from one class period might reduce the generalizability of the study findings. We suggest that future studies use a semester-long design in which students are exposed to various text genres to provide a reliable basis for evaluating their learning outcomes with the use of brainstorming advance organizers and for indicating their long-term progress in listening comprehension performance.

Third, as questioned by one of the anonymous reviewers, the relationship between listening passage length and appropriate number of comprehension questions to be tested, including understanding ideas at the local/global levels, is worth further studies.

## CONCLUSION

The study results show that certain type of brainstorming advance organizer benefits L2 learners at the secondary level by enhancing their listening comprehension performance, and that the advance-organizer use also has an effect on affective factors, such as boosting their test confidence and reducing their test anxiety. Listening has been the least effectively taught language skill in Taiwan; however, it has become an increasingly crucial topic to develop L2 learners' listening competence because a listening comprehension component is now included in numerous major language examinations in Taiwan. Given the important role of listening competence in second language learning and development, language teachers must understand that listening has both affective and conceptual components, and that listening instruction must consistently and vigorously address both simultaneously. As a result, the ongoing inquiry concerning effective advance-organizer activities that help engage L2 learners in a listening task should continue to be an important topic for future teachers to explore in the L2 classroom.

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APPENDIX

Sources: pictures/photos reprinted from a variety of web sites

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# Brainstorming Web

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

Happy Saint Patrick's Day  
聖派翠克節快樂

Guinness  
綠啤酒

shamrock  
酢漿草

snake  
蛇

green clothes  
綠衣服

dye the river green  
把河染綠

Saint Patrick's Day  
聖派翠克節

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