

Impact of Processing Various Textual Genres on the Incidental Acquisition and Retention of L2 Vocabulary

Thi Quyen Nguyen *

Nguyen, Thi Quyen. (2023). Impact of processing various textual genres on the incidental acquisition and retention of L2 vocabulary. *English Teaching*, 78(2), 139-164.

This study investigated the effects of processing three types of texts, namely expository texts, narrative texts, and a combination of both known as twin texts, on incidental vocabulary acquisition and retention in L2 learners. College freshmen ($N = 109$), who were lower to upper intermediate learners of English, were assigned into a control group and three experimental groups representing different reading conditions. Over a period of seven weeks, the experimental groups engaged in two reading sessions to read their assigned texts accompanied by output tasks and input enhancement. The participants' receptive and productive vocabulary gains were measured with an immediate posttest and a delayed posttest to assess retention. Results revealed significant impacts of text genres on L2 incidental vocabulary learning and retention. Processing twin texts and expository texts yielded significantly greater vocabulary gains than processing narrative texts alone. These effects might be due to different processing mechanisms required for texts structured in distinct ways. Expository texts are informative and explanatory in nature, providing explicit and contextually rich information for word comprehension and retention.

Key words: incidental vocabulary acquisition, text genres, expository text, narrative text, twin text

*First Author: Nguyen Thi Quyen, Lecturer, School of Languages, International University, Vietnam National University HCMC; Quarter 6, Linh Trung Ward, Thu Duc City, Ho Chi Minh City, Vietnam; Email: ntquyen@hcmiu.edu.vn

Received 31 March 2023; Reviewed 17 April 2023; Accepted 30 May 2023



© 2023 The Korea Association of Teachers of English (KATE)

This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0, which permits anyone to copy, redistribute, remix, transmit and adapt the work, provided the original work and source is appropriately cited.

1. INTRODUCTION

Having a broad range of words at one's disposal is undoubtedly helpful for learning a second language (L2). Currently, there is an increasing amount of research focused on ways to improve L2 learners' vocabulary knowledge and size. Reading has been found to have a beneficial impact on expanding learners' vocabulary, and this finding has been supported by a consensus among researchers (Pulido, 2007; Waring & Takaki, 2003). This type of vocabulary acquisition is called "incidental" acquisition because it occurs as a result of comprehension-oriented activities or cognitive exercises rather than as a primary goal of reading.

Despite the acknowledged advantages of reading for expanding vocabulary, recent studies have brought up concerns about whether all reading materials have an equal impact on incidental vocabulary acquisition. According to Huckin and Coady (1999), texts that involve learners personally could be more effective in promoting vocabulary learning. Additionally, Pulido (2007) underscores the possible effect of familiarity with the topic on text comprehension, processing, and vocabulary acquisition. Strikingly, text genre has been mostly neglected as a factor in L2 vocabulary acquisition research. This omission is noteworthy considering its significance in shaping the reading experience.

It is important to consider how exposure to different text genres can impact learners' vocabulary growth. Gardner's (2004) study shed light on this aspect by examining the effects of reading texts with different structures on the acquisition of new vocabulary items. The study focused on elementary school children, who were native English speakers, and compared the lexical outcomes of their exposure to narratives and expository reading materials. The findings revealed that children experienced greater growth in their lexical repertoire when engaged in narrative reading materials.

Although these insights highlight the importance of investigating the impact of text genre on L2 vocabulary acquisition, the current research on the relationship between text genres and vocabulary acquisition has mainly focused on the L1 population. It is only recently that scholars have begun to investigate the effects of reading different genres, including narrative and expository texts, on vocabulary development among learners. One of the earliest investigation is found in Shokouhi and Maniati (2009). This study examined whether there were variations in learners' incidental vocabulary acquisition when exposed to these different types of texts. According to the study results, expository texts were found to be more effective than narratives in improving readers' incidental learning of unfamiliar words. This suggests that learners exposed to expository texts exhibited greater vocabulary gains compared to those who read narrative texts.

Despite extant research on this subject, our current knowledge regarding the impact of processing diverse text genres on incidental vocabulary acquisition and retention in L2

learners remains limited. The objective of this study is to fill the gap in knowledge by investigating the impact of different types of texts on the long-term acquisition and retention of vocabulary. Specifically, it seeks to address questions such as whether different text types yield varying levels of vocabulary acquisition, which genre proves most effective for vocabulary learning, and whether combining different text types in reading activities enhances vocabulary knowledge. The anticipated outcomes of this study involve gaining deeper insights into the variables that influence vocabulary acquisition and retention, as well as supporting the advancement of more effective teaching materials and methodologies for L2 education. Teachers and developers of L2 reading materials can benefit significantly from these research findings, as they can utilize them to inform their instructional strategies and develop better learning materials.

2. LITERATURE REVIEW

2.1. Incidental Vocabulary Learning and Retention

After learners acquire their initial vocabulary through explicit instruction, they tend to expand their knowledge primarily by reading extensively. Huckin and Coady (1999) describe this as guessing or inferring the meaning of unfamiliar words from context. This type of reading allows learners to incidentally accumulate vocabulary knowledge. Several factors are known to contribute to a learner's ability to master a new word in a specific context. These factors include the amount of exposure, inferencing strategies, and the usefulness of the context in aiding learners' inferences. Vocabulary retention, a concept closely associated with incidental vocabulary learning, is frequently examined in relation to learners' long-term memory for words. It encompasses the capacity to store newly acquired words and retrieve them accurately and efficiently when necessary (Folse, 2006). Several factors are believed to impact the retention of vocabulary acquired through reading activities, such as the frequency of encountering words, the depth of text processing, and the richness of contextual information. To date, multiple theories have been proposed to explain the cognitive processes involved in vocabulary acquisition and retention through text engagement.

Craik and Lockhart (1972) introduced the Depth of Processing framework, which has had a profound impact on our understanding of reading comprehension and vocabulary learning. The Depth of Processing framework posits that the extent to which information is mentally processed during reading is pivotal for text comprehension and retention. According to this framework, engaging in deep processing, which entails actively attending to the meaning and significance of the text, enhances comprehension and improves the likelihood of

retaining vocabulary in the long term. Conversely, shallow processing, which primarily involves decoding the phonological aspects of words, may not result in durable retention of vocabulary. The framework highlights the importance of active engagement, critical thinking, and making meaningful connections to enhance reading comprehension and promote effective vocabulary learning. Numerous studies have supported the principles of the Depth of Processing framework, showing that readers who engage in deeper processing strategies demonstrate improved comprehension and better retention of vocabulary compared to those who engage in shallow processing (e.g., Bird, 2012; Folse, 2006; Hummel, 2010). Folse (2006), for instance, investigated the impact of different types of written exercises on L2 vocabulary retention. The findings of the study indicate that output-oriented exercises, which emphasize active production and application of vocabulary in meaningful contexts, lead to significantly better vocabulary retention compared to traditional exercises. The article suggests that engaging learners in tasks that require them to actively use and manipulate target vocabulary facilitates deeper processing and strengthens memory traces, leading to improved retention. Nevertheless, some critics argue that the framework's hypothesis is underspecified, as it remains unclear how different levels of processing are operationalized (Hulstijn & Laufer, 2001). This criticism calls for further clarification and specification of the framework's concepts and measurement methods.

The Involvement Load Hypothesis, introduced by Hulstijn and Laufer (2001), provides a framework to measure and operationalize the depth of processing in vocabulary learning. According to this hypothesis, the degree of cognitive involvement and engagement learners have with new words significantly impacts their acquisition and retention. Involvement load encompasses cognitive and motivational factors, such as needs, searches, and evaluations, reflecting learners' willingness to engage in a reading task. Different types of tasks or activities can vary in their involvement load, determined by the cognitive effort and depth of processing required. This is quantified using an index called the involvement index. Tasks with higher involvement load, such as meaningful and elaborative activities, engage learners in more complex cognitive processes, leading to more effective vocabulary learning outcomes.

The Involvement Load Hypothesis has been influential in guiding vocabulary instruction and research. It emphasizes the importance of providing learners with meaningful and engaging learning experiences that encourage active processing and deeper understanding of new words. This framework has sparked further investigations into the effectiveness of various instructional techniques and has contributed to the development of evidence-based vocabulary teaching practices. For example, Laufer and Rozovski-Roitblat (2015) conducted a study on foreign word learning and retention, examining task type effects and frequency effects. By manipulating task types with varying involvement indices and the quantity of encounters, they discovered that tasks inducing higher involvement load resulted in

significantly greater retention of words compared to the number of encounters alone. This finding suggests that how learners engage with the word is potentially more important than the frequency of encounters. Overall, the Involvement Load Hypothesis provides valuable insights into optimizing vocabulary instruction and underscores the significance of meaningful and engaging learning experiences in promoting effective vocabulary acquisition and retention.

The meta-analysis conducted by Huang, Willson, and Eslami (2012) revealed that greater cognitive load during a reading task leads to increased incidental vocabulary acquisition. The meta-analysis included six published and six unpublished articles, which were selected based on specific criteria. The articles were analyzed to calculate effect sizes and identify mediator variables, such as design quality, output task types, time spent on task, genres of text, and text-target word ratios. The results showed that reading with an output task can improve vocabulary acquisition and retention, longer time spent on task is associated with greater incidental lexical gains, combining expository and narrative texts is more effective than using either one alone, and expository text is more effective for vocabulary learning than narrative text. These findings can serve as a valuable resource for future studies investigating the impact of different factors on vocabulary acquisition through reading.

The literature has explored various factors that may influence vocabulary gains and retention through reading, including the effect of reading different genres of texts. Huang et al.'s (2012) meta-analysis found that different types of texts can result in different amounts of vocabulary acquisition. However, this comparison is questionable since each study examined only one text type and had different designs, tasks, and materials. In order to conduct a meaningful analysis, a study that is specifically designed to measure the impact of text genres is necessary. As a result, more research is needed to examine the possible impact of text genres on incidental vocabulary acquisition and retention. This paper will provide further details on why text genres may be an important factor that impacts the amount of vocabulary knowledge gained.

2.2. Why Text Genres Matter

2.2.1. An overview of text genres

Text genres encompass a variety of written or spoken texts that exhibit similar features concerning their content, structure, purpose, and style. These genres manifest across diverse communication mediums, including literature, journalism, advertising, academic writing, and everyday conversations. Examples of commonly encountered text genres consist of narrative, expository, argumentative, poetry, and drama. Among these genres, narrative and expository hold particular significance as they have been extensively studied and are

frequently exposed to L2 learners.

Narrative and expository texts have distinct characteristics that set them apart from one another. Narrative texts, such as novels and short stories, follow a structured format that includes setting, theme, mood, plot, and characters, and are focused on telling stories about people and their actions and motivations. The primary purpose of narrative texts is to entertain, making them typically well-structured, familiar, and predictable to readers (Berman & Nir-Sagiv, 2007). On the other hand, expository texts aim to communicate information and ideas about a particular subject rather than entertain, and they typically include descriptions, definitions, and explanations of ideas, arguments, and definitions in formats like essays, textbooks, and manuals. Expository texts follow a pyramid structure, introducing a theme first and then delving into it in-depth later (Graesser & Goodman, 1985).

According to empirical research, there are genre-based differences between expository and narrative texts. One study found that narrative texts contain more connectives and third person singular pronouns, which improve cohesion and comprehension (Clinton et al., 2020). Expository texts, on the other hand, are organized less cohesively and require more explicit logical inferences. Another study found that the lexical composition of narrative and expository texts differs significantly, with expository texts containing more specialized vocabulary and academic terms (Gardner, 2004). Narrative texts, on the other hand, tend to use more general words and unique words associated with characters. In addition, Crossley and McNamara (2012) found that narrative texts tend to have lower lexical semantic analysis values than expository texts, indicating that expository texts have greater conceptual overlap. Finally, it has been shown that informational texts are generally composed with more complex syntax than narrative texts, with a higher number of words per clause (Beers & Nagy, 2011).

Empirical research indicates that readers mentally represent and process texts differently, depending on various factors such as related expectations, reading goals, and schemas (Berman & Nir-Sagiv, 2007; Clinton et al., 2020; Narvaez et al., 1999; Zabrocky & Moore, 1999). For narrative texts, readers construct a mental model by activating background knowledge from everyday life experiences, while expository texts demand in-depth knowledge relevant to the theme/topic of the texts. Although readers may sometimes lack the necessary background knowledge for comprehending a narrative, they can compensate for this by understanding the overall schemas and story grammars. Reading for study requires frequent evaluation, repetition, and identification of knowledge-based coherence breaks, while reading for entertainment does not (Clinton et al., 2020). While expository texts are generally thought to be more challenging to comprehend than narrative texts, some studies on inferential comprehension suggest that this assumption is not necessarily true, as shown by Wolfe and Woodwyk (2010).

Overall, studies suggest that readers may find expository reading more difficult than

narrative reading due to a potential lack of necessary background knowledge and familiarity with rhetorical structures (Taylor & Beach, 1984). However, the academic and technical language used in expository texts may also contribute to significant vocabulary development (Gardner, 2004). Table 1 below outlines the variations between these two types of texts.

TABLE 1
Summary of the Differences Between Expositions and Narratives

Criteria	Narrative Text	Expository Text
Text purpose	Focus on entertaining	Focus on informing
Organization	More organized around temporal and causal connections	Less structured by temporal and causal connections
Lexical composition	More general words	More academic words
Interpretation	Multiple interpretation	Single interpretation
Processing	Tend to be easier to process	Tend to be more difficult to process

2.2.2. Twin texts

Twin texts, also known as paired texts, are a combination of two different genres of texts, such as narrative and expository, that share a common theme. While they may vary in terms of length and the number of target words, they are distinguished by their genre (Camp, 2000). Twin texts are often used in reading units to explore a common theme by integrating a fiction and non-fiction text. The goal of using twin texts is to promote intertextuality, which is the ability to make connections between texts and content areas (Chi, 2012).

Previous studies with twin texts are mostly concerned with how reading twin texts can enhance critical reading and thinking skills of learners, particularly young children (Camp, 2000). A few studies have explored the benefits of incorporating intertextuality into grade schools, including strengthening background knowledge, facilitating reading comprehension, promoting critical thinking as well as creating lively classrooms and enriching students' engagement (Ciecierski & Bintz, 2016; Soalt, 2005; Taliaferro, 2009).

Regarding the use of intertextuality in L2 classroom is concerned, there seems to be a scarcity of studies which examine how pairing texts could promote literacy and reading comprehension. Ward, Schell, Brown and Thomason (2019) explored an instructional model based on laddering various text genres for English language learners, with a focus on specialized vocabulary, enhancing reading comprehension and writing competency. Pairing texts, according to Soalt (2005), offer learners with different lenses on the same topic and a wider range of conceptually relevant notions and help learners to make deepened connections across texts and content areas. It is thus reasonable to expect that pairing texts could help English learners to widen their lexical repertoire and, given better connections with texts, could help them better retain learned words.

2.3. Text Genres Effects on Incidental Lexical Learning

The impact of diverse text genres on the incidental acquisition of vocabulary has been the subject of substantial research interest. Huckin and Coady (1999) discovered that incidental vocabulary acquisition is often more effective when learners have a personal interest in the texts. Meanwhile, Pulido (2007) explored the impact of familiarity with the topic on text comprehension and vocabulary acquisition, underscoring how topic familiarity can impact both processes. However, there is limited research on the relationship between L2 vocabulary acquisition and text genres. In this review, we will examine previous attempts to determine the connection between text genres and incidental vocabulary learning and retention in both L1 and L2 learner populations.

Gardner (2004) conducted a study exploring the lexical disparities between expository and narrative texts among upper elementary education students and their potential impact on vocabulary acquisition. The findings revealed significant differences in lexical content between the two genres. Expository texts contained more academic and technical vocabulary, while narrative texts had a higher frequency of general words, making them more suitable for incidental vocabulary acquisition. Unique words in narratives were typically associated with characters' names, whereas in expository texts, they were more content-specific or theme-related. While expository texts were generally more challenging for students compared to narrative texts, they were more likely to facilitate substantial vocabulary growth due to the academic and technical words they contained. However, the generalizability of these findings to L2 learners remains uncertain as Gardner's study focused on L1 children.

Furthermore, researchers have conducted meta-analyses to examine the impact of text genres on readers' retention of content, linguistic features, and inferential comprehension (Clinton et al., 2020; Mar, Li, Nguyen, & Ta, 2021). Clinton et al. (2020) reviewed 19 studies and found that reading narratives resulted in better inferential comprehension compared to reading expository texts, possibly due to structural differences between the two genres. Narrative texts, with their temporal structure and character goals, facilitated inference-making. On the other hand, the varying structures of expository texts made it more challenging for readers to comprehend their content without effective text processing skills. Mar et al. (2021) conducted a meta-analysis of 150 effect sizes from 75 samples and revealed that recalling and comprehending narrative texts was comparatively easier than expository texts. However, it is important to note that these studies focused on L1 learners, and it remains unclear whether improved comprehension and content retention directly translate to enhanced vocabulary learning and retention, especially among L2 learners.

Following these inquiries, Shokouhi and Maniati (2009) conducted an experiment on L2 learners to investigate the influence of text genre on incidental vocabulary acquisition during the reading process. The study included 40 EFL students whose mother tongue was Iranian

with limited vocabulary knowledge. The participants were split into two groups, with one group reading narratives and the other reading expository texts. After the reading sessions, three types of vocabulary tests were administered to measure the participants' incidental vocabulary gains. The findings revealed that expository texts were relatively more effective in promoting the incidental learning of unfamiliar words among readers compared to narratives. The findings indicate that the level of cognitive processing resources used by readers and the degree of cognitive elaboration they engage in to comprehend the material varies depending on the genre. These distinctions in cognitive processing and engagement might account for the differential effects on incidental vocabulary acquisition while reading.

In another recent work by Peirooliya and Pourmohammadi (2019), text genres effects were examined in relation to incidental verb learning through glossing. In this pre-test post-test design experiment, 30 Iranian EFL learners were randomly assigned to two groups. One group received glossed narrative texts, while the other group received glossed expository texts. The findings of the study suggest that the type of text had a significant effect on learners' incidental verb learning. The group that read glossed narrative texts outperformed the group that read glossed expository texts in terms of their ability to acquire and retain verbs. The researchers attribute this difference to the narrative texts' ability to provide a context-rich and engaging learning experience, which facilitates better understanding and memory consolidation.

The studies examined in the previous section have emphasized the influence of text genre on vocabulary learning and retention, indicating that learners demonstrate improved long-term retention when exposed to a diverse range of text types. However, there is inconsistent evidence regarding which type of text, narrative or expository, is more effective in promoting vocabulary growth. Additionally, there has been limited research investigating the advantages of combining different text types, such as incorporating both narrative and expository texts on the same topic, within the L2 classroom. As discussed in Section 2.2.2, the use of twin texts for reading has been shown to enhance critical reading and thinking skills, particularly among young learners. This approach has also demonstrated positive effects on vocabulary acquisition and retention by offering learners multiple perspectives and reinforcing vocabulary knowledge through contextual reinforcement. Consequently, it is reasonable to anticipate that pairing texts could assist English learners in expanding their lexical repertoire and, by establishing stronger connections with the texts, contribute to better retention of acquired words. Further research is needed to explore the effectiveness of using twin texts on vocabulary development in L2 settings.

2.4. Models of Text Comprehension

The construction-integration model, introduced by van Dijk and Kintsch (1983), is widely recognized as the predominant framework for understanding text processing. This model posits three levels of comprehension in reading: surface level, textbase level, and situation model level. At the surface level, readers focus on comprehending individual words, phrases, and the syntactic relationships between them. Moving to the textbase level, readers construct a semantic representation of the text by connecting propositions and organizing them into larger units. The highest level of comprehension involves the construction of a mental model of the text by integrating the textbase with prior knowledge. Research by Kintsch (1994) has shown that readers who successfully construct a textbase representation demonstrate better recall of the meaning conveyed in the text compared to those who only comprehend individual words and phrases. However, readers who can also construct a situation model representation, which involves connecting the textbase to their existing knowledge and applying it in new situations, are more likely to transfer their understanding to novel contexts.

If L2 learners encounter unfamiliar words in a novel text, this can interrupt their mental representation of the text's meaning, which has significant implications. If the break in understanding caused by an unknown word is important, readers usually stop and attempt to infer the meaning of the word in order to fill the gap in their mental representation of the text (Zwaan & Brown, 1996). Nonetheless, in certain cases, this interruption becomes less significant, and learners proceed to create their mental representation of the text using other factors that contribute to the coherence of the situation model besides vocabulary. Various factors, such as text structure, vocabulary, and genre, have been identified as affecting the formation of a coherent situation model (Zwaan & Brown, 1996).

We now delve into a more in-depth discussion of how text genres affect the construction of a mental model of text comprehension. Previous studies on text types have shown that people tend to respond differently to various types of texts, with notable distinctions observed between narrative and expository texts (Best, Floyd, & McNamara, 2008; Bowyer-Crane, 2002; De Beni, Borella, & Carretti, 2007; Denton et al., 2015; Suh & Trabasso, 1993; Zwaan, 1994). Hence, it is reasonable to assert that the construction of a mental model and the subsequent comprehension of a text are significantly influenced by the text's genre. The fundamental idea is that the genre of a text influences how readers use their cognitive resources, in a manner that matches the expectations and features of that particular genre.

3. METHODS

3.1. Research Questions

Based on the previous literature review, it is evident that studies related to incidental vocabulary acquisition and retention have not given sufficient consideration to the impact of text genres. Additionally, the majority of research has focused on the influence of individual text types on vocabulary acquisition, without addressing whether the combination of text types improves incidental vocabulary learning and retention compared to individual text types. To address these gaps in the literature, the present study was designed to answer the following research questions:

- 1) Does processing different text genres, namely narrative and expository, and combined text genres lead to differences in incidental vocabulary gains?
- 2) Does processing different text genres, namely narrative and expository, and combined text genres lead to longer retention of vocabulary gains?

3.2. Participants

At the beginning of this study, 152 students registered for participation to receive additional course credit, but only 109 freshmen from a higher learning institution in Vietnam were selected for the study after excluding 43 students who did not meet the following two criteria. The first criterion was that learners whose language proficiency and vocabulary levels were three standard deviations away from the average were excluded to maintain measurement accuracy and comparability of vocabulary gain among the different treatments. The second criterion was to exclude participants who missed one or both of the reading sessions from the analysis.

In this research, we employed two tests, namely the 5000-word level Vocabulary Levels Test (Laufer & Nation, 1999, henceforth VLT) and the Oxford Quick Placement test (henceforth QPT) to measure the size of the participants' vocabulary and their level of proficiency. The VLT includes 120 questions, and various studies have validated its reliability, ranging from .61 to .80. The VLT in our study showed a Cronbach's α coefficient of .78. The QPT test evaluates English grammar and vocabulary components and consists of 60 multiple-choice items, and it has been validated through various studies. Our study achieved a Cronbach's α coefficient of .92 for the placement test.

The control group and three experimental groups were formed by randomly assigning the remaining 109 students. There were no significant differences in vocabulary size and proficiency scores among the groups. Each of the four groups' demographic information and their test scores are presented in Table 2.

TABLE 2
Groups' Demographics and VLT Test Scores

Group	N	Age	QPT Scores (maximum 60) and <i>SDs</i>	VLT Scores (maximum 120) and <i>SDs</i>
Narrative group	25	18	40.26 (4.65)	93.32 (4.61)
Expository group	31	18	41.12 (3.51)	94.15 (5.12)
Twin text group	24	18	39.28 (3.67)	92.64 (6.09)
Control group	29	18	41.37 (3.14)	93.15 (5.14)

Note. QPT = Oxford Quick Placement test; VLT = Vocabulary Levels test

3.3. Instruments

3.3.1. Reading texts

This study utilized two expository texts and two narrative texts that were authentic materials in English. Each narrative and expository text shared a common topic, and they were carefully chosen and slightly modified to guarantee similar length, vocabulary characteristics, and levels of difficulty (refer to Table 3 for details). In the initial screening of possible texts to be included in this study, several criteria have been set, including the average length (ranging between 500-800 words), the topic (preferably unfamiliar to the participants), the lexical coverage (at least 80% of the words belong to the first thousand word families), readability index (measured by Flesch Kincaid) that are suited to intermediate and advanced learners (B1-C1).

The first pair of texts have a mutual theme, which is the California Gold Rush of 1849. The expository text was modified from Pearson Scott Reading Street, intended for fifth-grade American students, and it gives a historical and societal context of the event, highlighting the story of John Sutter. Conversely, the narrative in the form of a poem recounts comparable storylines and depicts the events surrounding the historical figure named John Sutter following the Gold Rush (1849).

The second pair of texts in our study is centered around wire walker Phillip Petit, who walked between two of the tallest towers in the world. The expository text, taken from an article by Morgenstern (2008) in *The Wall Street Journal*, provides a biography of Petit. Regarding the narrative text, Gerstein's (2003) illustrated book, *The Man Who Walked Between the Towers*, was chosen and then transformed into a digital narrative. The expository text underwent editing to make it more readable and concise, with suggestions for improvement obtained from an online tool.

These texts were selected because they were unfamiliar to participants, based on a preliminary survey. According to Pulido (2007), unfamiliar topics may facilitate incidental vocabulary acquisition. To ensure that the vocabulary level of the expository texts aligned with the participants' level based on the Vocabulary Levels Test (Laufer & Nation, 1999),

the VocabProfile software was employed. The Flesch Kincaid readability test was also conducted to assess the texts' difficulty level, with the corresponding CEFR levels provided for reference. For each text, Table 3 displays the lexical profile as well as the level of reading difficulty.

TABLE 3
Lexical Characteristics of the Four Texts

Text	Word Count	Sentences Count	K1 (%)	K2 (%)	Readability (Flesch Kincaid)
Expository text 1	569	54	83.81	5.75	70.5
Narrative text 1	616	56	84.49	6.76	71.4
Expository text 2	597	53	86.04	7.53	69.3
Narrative text 2	527	50	82.71	6.04	72.9

Note. K1 = 1000 most frequent word families; K2 = 2000 most frequent word families

3.3.2. Output tasks

To aid L2 vocabulary learning, output tasks are crucial and demand more mental effort than input. According to the research conducted by Swain (1995) and Hulstijn and Laufer (2001), various activities such as multiple-choice reading comprehension, collaborative spoken production, and written summary completion can enhance L2 vocabulary learning. In this study, the participants completed these three output tasks after each reading session. These tasks were aimed at confirming their understanding of the reading material, recalling details or arguments with a partner while receiving feedback, and completing a written summary in the form of gap-filling (see Appendix A for a sample of the output tasks). The activities were conducted within a 40-minute timeframe, with the instructor providing feedback.

3.3.3. Target words

To ensure ecological validity, we selected 30 target words for our tests, 16 from the narrative texts and 14 from the expository texts. We used real words instead of nonsense words. However, we conducted a pilot study with 20 students to ensure that learners didn't have prior knowledge of the target words. The participants were assessed on 60 vocabulary items extracted from the four texts to determine their ability to recognize the form, recall the meaning, and recall the form. Thirty vocabulary items that had the lowest accuracy rates, including academic words from the English academic word list and off-list words identified

by VocabProfile, were selected for analysis as they only appeared once in the reading materials. All the target words were highlighted in boldface, following Laufer's suggestion, to increase their salience to learners and ensure they were perceived. Highlighting also helps control for the noticing effect in vocabulary acquisition.

3.3.4. Measures of vocabulary gains

Two measures, translation production (TP) and translation recognition (TR), were employed in this study to assess vocabulary enhancement. These assessments were carried out before the treatment, immediately after the treatment, and again four weeks later in the delayed posttest. There are tests that evaluate different aspects of vocabulary knowledge, namely productive knowledge and receptive knowledge. In order to ensure reliability, each test consisted of 30 target words and 20 distractors, with the arrangement of items randomized across both groups and tests.

During the translation production task, participants were instructed to interpret, clarify, or describe the target words in their native language, and their responses were assessed based on their ability to do so effectively. The instruction was given in Vietnamese. An example of the translation production is given below:

Giải thích nghĩa của từ sau bằng tiếng Việt
(Explain the meaning of the following word in Vietnamese)
pickaxe: _____

Concerning scoring methods, a completely incorrect answer would receive a score of zero, a partially correct answer would receive half a score, and a completely correct answer would receive a full score. This task was validated with a highly reliable Cronbach's α of .81.

In the translation recognition task, participants were asked to select the correct meaning of the underlined target word from a multiple-choice test to evaluate their receptive knowledge of meaning. To prevent meaning inference and assess learning, target words were presented in low-context sentences. To minimize guessing, each item contained the correct meaning, three distractor options, and a fifth option of 'I don't know.' Among the three distractor options, one is phonologically or orthographically similar to the target word, one is contextually proximate, and one is schematically appropriate. The task instruction and the five options were given in Vietnamese. An example of the translation recognition is given below:

Lựa chọn nghĩa tiếng Việt cho từ gạch chân trong câu sau:

(Choose the Vietnamese equivalent for the underlined word given in the following sentence)

A prospector found diamonds in Canada's frozen northwest.

- A. thợ thăm dò (Prospector)
- B. thợ mỏ (Miner)
- C. người bảo vệ (Protector)
- D. thợ khoan (Driller)
- E. Tôi không biết nghĩa của từ (I don't know)

In the above example, for the target word *prospector* the choices given were (A) prospector (correct), (B) miner (contextually approximate), (C) protector (close spelling and pronunciation to the target word), (D) driller (schematically appropriate). The participants' response was scored as either correct (1) or incorrect (0). This task was validated with a Cronbach's α of .78.

3.4. Procedures

The research was conducted in two phases. The initial stage was the pre-experimental phase, which involved enlisting participants and conducting proficiency and Vocabulary Levels assessments on the enrolled individuals. Based on the results of these evaluations, further screening was carried out to guarantee that the language proficiency and vocabulary size of the participants were comparable. Individuals who met the eligibility requirements were given an informed consent form to sign. Subsequently, they were randomly allocated to one of four groups: a Control group and three experimental groups - Expository group, Narrative group, and Twin-text group (refer to the Participants section for additional information).

Over the course of seven weeks in the experimental phase, the participants were administered a pretest during the first week. In the subsequent two weeks, the three experimental groups received lessons on reading. To maintain consistency in the reading treatment across all groups, a Vietnamese instructor moderated all the sessions and followed a unique lesson plan for each session. During the reading sessions, the participants independently read the designated texts and performed three output tasks, as mentioned previously. During the third week, the experimental group participants completed an immediate posttest on the target words. In contrast, the control group did not receive any reading treatment and took both the pretest and immediate posttest without the treatment. To evaluate vocabulary retention, a delayed posttest was administered to all participants four weeks after the treatment.

3.5. Data Analysis

Although the same test was administered to all four groups at three different intervals, the scoring method varied among the groups. The Expository group's performance was evaluated based only on the target words encountered in the expository texts they read, while the Narrative group's results were based solely on the target words found in the narrative texts. The final analyses for both the Twin-text and Control groups included the performance of all target words.

4. RESULTS

4.1. Summary of Results

Table 4 reports the accuracy rates for all groups on various tests, which include the percentage of correct answers for both translation production and translation recognition.

TABLE 4
Summary of Results for Different Tests

Group	Pre-test		Immediate Posttest		Delayed Posttest	
	TP	TR	TP	TR	TP	TR
	% correct (<i>SD</i>)					
Narrative	11.34 (6.45)	12.84 (7.67)	28.03 (5.45)	32.81 (7.67)	21.33 (6.45)	26.14 (7.52)
Expository	11.51 (5.82)	12.91 (5.69)	31.52 (5.42)	39.56 (3.56)	24.84 (4.63)	29.56 (5.69)
Twin-text	11.82 (3.04)	12.21 (4.27)	36.81 (4.78)	42.21 (5.34)	26.81 (3.72)	28.06 (3.24)
Control	10.43 (3.58)	11.63 (4.03)	9.49 (3.66)	9.30 (4.02)	9.78 (3.47)	9.09 (4.55)

According to Table 4, the average accuracy rates for the immediate posttest and delayed posttest were higher for the three experimental groups than the pretest, which ranged from 10% to 12%. This is equivalent to approximately 3 accurate responses out of 30 items for the Control group and the Twin-text group, and 1 to 2 accurate responses out of 15 items for the Narrative group and Expository group. Thus, the experimental groups' increased vocabulary size was a result of being exposed to the given reading materials, which suggests that the use of reading materials resulted in an increase in vocabulary acquisition among learners, irrespective of the text genres. In particular, the group of participants who read twin texts demonstrated the largest improvement in vocabulary, as evidenced by a 36.81%

increase in productive vocabulary knowledge from the pre-test to the intermediate posttest, as well as a 42.21% increase in receptive vocabulary knowledge from the pre-test to the intermediate posttest for the same group. The Twin-text group continued to have the highest accuracy rates among the three experimental groups in the delayed posttest, with a rate of 26.81%. The Expository group and the Narrative group had accuracy rates of 24.84% and 21.33%, respectively. This indicates a minimal decline in vocabulary retention.

In summary, the participants who read twin texts exhibited the most substantial vocabulary improvements and retention. Additionally, individuals who were provided with expository texts exhibited larger improvements and better retention compared to those who were given narrative texts.

4.2. Genre-based Effects on Incidental Vocabulary Gains

To investigate the effect of various text genres on the incidental acquisition of vocabulary by learners, we conducted MANOVA tests. Additionally, we conducted Shapiro-Wilk tests to ensure the validity of our results by checking for multivariate normality, and we found that all p -values were higher than .05. The findings indicated a notable variation in the enhancement of receptive vocabulary among four groups across two time points (pre-test and immediate posttest), with a statistical significance of $F(6, 210) = 33.279$ and $p < .001$. The main reason for the distinction was due to variations between the groups in the immediate post-test, as indicated by the statistical analysis ($F(3, 105) = 220.901$, $p < .001$). The pairwise comparison results presented in Table 5 indicated that a follow-up analysis conducted through Tukey's test revealed a significant enhancement in receptive vocabulary knowledge after reading twin texts compared to narrative texts ($p < .001$). Nonetheless, the effect of reading twin texts on receptive vocabulary knowledge was not significantly different from that of reading expository texts ($p = .27$). Moreover, participants who read expository texts showed a remarkable increase in their ability to understand new words through reading compared to those who read narrative texts, and this difference was statistically significant ($p < .001$).

TABLE 5
Pairwise Contrasts Between Groups for Receptive Vocabulary Gains

Comparisons	diff	lwr	upr	p adj
Narrative vs. Control group	0.301	0.256	0.328	.000***
Expository vs. Control group	0.235	0.294	0.274	.000***
Twin-text vs. Control group	0.328	0.291	0.368	.000***
Expository vs. Narrative group	0.066	0.104	0.031	.000***

Twin-text vs. Expository group	0.027	-0.010	0.063	.27
Twin-text vs. Narrative group	0.095	0.054	0.131	.000***

Note. *** $p < .001$

The difference in productive vocabulary knowledge gains between the pre-test and immediate post-test was statistically significant for all four groups ($F(6, 210) = 31.374, p < .001$). Furthermore, the statistical analysis of the immediate post-test revealed a significant distinction between the groups ($F(3,105) = 153.18, p < .001$). Upon conducting a more detailed analysis using Tukey's test, it was concluded that reading twin texts led to significantly higher improvements in productive vocabulary knowledge compared to all other genres of texts ($p < .001$) as indicated in Table 6. Unlike the significant expansion in receptive vocabulary knowledge, there was no noticeable difference observed between the Expository and Narrative groups in terms of the improvement in productive vocabulary knowledge ($p > .05$).

TABLE 6
Pairwise Contrasts Between Groups for Productive Vocabulary Gains

Comparisons	diff	lwr	upr	p adj
Narrative vs. Control group	0.218	0.184	0.252	.000***
Expository vs. Control group	0.183	0.249	0.218	.000***
Twin-text vs. Control group	0.271	0.234	0.307	.000***
Expository vs. Narrative group	0.034	0.07	0.000	.055
Twin-text vs. Expository group	0.053	0.018	0.089	.001***
Twin-text vs. Narrative group	0.008	0.05	0.123	.000***

Note. *** $p < .001$

4.3. Genre-based Effects on Vocabulary Retention

To evaluate the retention of vocabulary knowledge, the pre-test and delayed post-test results were compared and presented in Table 7, and a significant difference was observed between the four groups and the two time points, with an F -value of 31.145 and p -value less than 0.001. The group difference in the delayed post-test was the main driver of this difference, with an F -value of 91.704 and p -value less than 0.001. Tukey's post-hoc test was used to compare the groups pairwise, and several interesting findings were revealed. Firstly, it was found that the primary reason for the distinction in the retention of receptive vocabulary was due to variations between the experimental groups and the control group.

The retention of receptive vocabulary did not significantly vary among the three experimental groups, indicating that the impact of diverse genres on receptive vocabulary knowledge diminished after a certain duration (Table 7). Secondly, the data in Table 8 demonstrates that there were significant differences in how well the Expository group and Twin-text group retained productive vocabulary compared to the Narrative group. The difference between the Expository group and Narrative group was significant ($p = .05$), and the difference between the Twin-text group and Narrative group was also statistically significant ($p < .05$). The results indicate that the impact of different text genres on the retention of productive vocabulary knowledge remains strong. Both the Twin-text group and Expository group showed significantly lower rates of lexical attrition compared to the Narrative group.

TABLE 7
Pairwise Contrasts Between Groups for Delayed Receptive Vocabulary Gains

Comparisons	diff	lwr	upr	<i>p</i> adj
Narrative vs. Control group	0.203	0.169	0.241	.000***
Expository vs. Control group	0.171	0.131	0.207	.000***
Twin-text vs. Control group	0.188	0.152	0.226	.000***
Expository vs. Narrative group	0.033	0.070	0.002	.081
Twin-text vs. Expository group	0.016	0.053	0.024	.722
Twin-text vs. Narrative group	0.020	0.021	0.059	.590

Note. *** $p < .001$

TABLE 8
Pairwise Contrasts Between Groups for Delayed Productive Vocabulary Gains

Comparisons	diff	lwr	upr	<i>p</i> adj
Narrative vs. Control group	0.151	0.114	0.183	.000***
Expository vs. Control group	0.114	0.082	0.152	.000***
Twin-text vs. Control group	0.168	0.135	0.205	.000***
Expository vs. Narrative group	0.034	0.072	0.157	.05*
Twin-text vs. Expository group	0.020	0.016	0.057	.47
Twin-text vs. Narrative group	0.053	0.017	0.092	0.001**

Note. * $p < .05$. ** $p < .01$. *** $p < .001$

5. DISCUSSION

The aim of this research was to examine how diverse text genres affect the acquisition and retention of vocabulary among L2 learners. Specifically, the study aimed to compare the effects of reading only expository texts, only narrative texts, or a combination of both genres on the learners' vocabulary knowledge. The study employed pretest, immediate posttest, and delayed posttest measures on both experimental and control groups. The results demonstrated that the learners who read twin and expository texts together had the greatest improvement in vocabulary, while those who exclusively read expository texts came in second place in terms of vocabulary gains. Although the group assigned narrative texts did acquire some incidental vocabulary, they learned fewer new words compared to the other two groups. Regarding vocabulary retention, the group that read twin and expository texts together encountered the lowest degree of attrition. Although there were mainly negligible distinctions between the twin text and expository groups, both of these groups were markedly dissimilar from the narrative text group. Taken together, these results indicate that the presence of expository texts may have been the primary influence contributing to the outcomes observed in this study.

All experimental groups performed better than the control group, indicating that the addition of reading texts, regardless of genre, is already an effective method for vocabulary learning. This is consistent with previous research such as de Bot, Paribakht, and Wesche's (1997) explanation that text processing necessitates learners to form text meaning and focus on the relationship between lexical form and its reference. Moreover, the use of output tasks and textual enhancement during reading in the experimental groups is expected to result in a significantly greater increase in vocabulary learning. Studies have shown that incorporating such techniques leads to greater cognitive engagement, and subsequently better retention of newly learned vocabulary (Hulstijn & Laufer, 2001). Output tasks, for instance, serve as a means for language learners to evaluate the appropriateness of their lexical knowledge for their intended communication (Swain, 1995).

The primary outcome of this study suggests that a combination of text genres, along with an expository text, results in higher vocabulary gains and better retention compared to solely processing a narrative text. It is worth noting that there is no previous research that examines the impact of twin texts on incidental vocabulary acquisition. To better understand these findings, it is necessary to consider the mechanisms involved in the process of text comprehension. By doing so, we can facilitate further discussions on incidental vocabulary acquisition from a genre-based approach.

The construction-integration model proposed by van Dijk and Kintsch (1983) is widely accepted as the dominant account for text processing. According to this model, there are three levels of comprehension in reading: surface, textbase, and situation model. The surface

level involves understanding individual words, phrases, and syntactic relationships, while the textbase level involves building a semantic representation of the text by connecting propositions and organizing them into larger units. The highest level of comprehension involves constructing a mental model of the text by integrating the textbase with prior knowledge. Kintsch (1994) found that readers who successfully construct a textbase representation are better at recalling meaning than those who only comprehend individual words and phrases. However, they are less likely to apply their understanding in new situations than those who can also construct a situation model representation. In this research, the textbase level and the situation model of the construction-integration model are particularly relevant for explaining the findings.

In terms of constructing a textbase representation, it is more difficult to construct a textbase representation for narrative texts than other types of texts, as shown by latent semantic analysis (LSA), a method for assessing the ease or difficulty of constructing a textbase. Texts with more conceptual overlap are considered more cohesive and thus it is easier to construct a textbase level of representation. Surprisingly, Crossley and McNamara (2012) found that narrative texts tend to have lower LSA values than expository texts, indicating that expository texts have greater conceptual overlap. This means it is easier to connect concepts across words in expository texts than in narratives. This improved conceptual connectivity in expository texts may facilitate incidental word learning and retention, which may explain why processing expository texts results in better vocabulary gains than processing narrative texts.

Readers create and update their understanding of a text's meaning using both bottom-up and top-down processes in the situation model. They work to maintain the coherence of the text and address any discontinuities that may arise during the process. While unknown words can disrupt this mental model, text-related factors like genre can make them less of a threat (Zwaan & Brown, 1996). Studies show that readers respond differently to narrative and expository texts, with the genre of the text affecting how readers allocate their processing resources to match its demands (Best et al., 2008; Bowyer-Crane, 2002; De Beni et al., 2007; Denton et al., 2015; Zwaan, 1994). In easier-to-process genres such as narrative texts, readers tend to rely on inferencing and generate causal bridging inferences. On the other hand, they prioritize discovering unknown words in expository texts (Shokouhi & Maniati, 2009; Suh & Trabasso, 1993). This could be the reason why the Twin-text and Expository groups demonstrated better results in acquiring new vocabulary than the Narrative group: they may have been more attentive in identifying new words while building the coherence of the text.

6. CONCLUSION

The main aim of this research was to examine how processing different text genres, namely expository and narrative, affect the incidental acquisition and retention of vocabulary among individuals who are learning a foreign language. Specifically, the study examined the effects of processing expository, narrative, or both text genres on learners' vocabulary gains and retention. The study's findings showed that the L2 learners who engaged with both twin texts and expository texts experienced more favorable outcomes concerning incidental vocabulary acquisition and retention. However, we advise being careful when interpreting these results as there is insufficient theoretical support in the current literature. Indeed, further research is necessary to provide more definitive evidence of the impacts of processing various text genres on L2 learners' vocabulary acquisition and retention.

The findings of this study have important pedagogical implications for L2 vocabulary teaching and learning. Firstly, the considerable benefit of utilizing expository texts or combining a narrative text with an expository text on the same topic cannot be underestimated when it comes to facilitating readers' incidental acquisition of unfamiliar words. Secondly, this research underscores the significance of exposing L2 learners to expository texts repeatedly. This emphasizes the importance for teachers and material designers to prioritize the use of expository texts as a means to enhance incidental vocabulary learning and retention among L2 learners.

Although the study offers valuable information regarding how L2 learners' vocabulary acquisition and retention can be affected by processing different text genres, there are some limitations that should be taken into account. One possible confound in the design of this study is the utilization of actual target words in the primary tests, which could have resulted in some learners having prior knowledge of some of the tested items. In addition, the study did not consider various personal factors that may affect vocabulary learning, such as motivation, cognitive skills, and learning preferences, which have been found to have a significant effect on vocabulary acquisition. Therefore, more research is required to investigate the possible benefits of utilizing twin texts in second language learning while also considering these variables. This area of study is still in its infancy, and more empirical evidence is needed to draw definitive conclusions.

Applicable levels: Secondary, tertiary

REFERENCES

- Beers, S. F., & Nagy, W. E. (2011). Writing development in four genres from grades three to seven: Syntactic complexity and genre differentiation. *Reading and Writing: An Interdisciplinary Journal*, 24, 183-202.
- Berman, R. A., & Nir-Sagiv, B. (2007). Comparing narrative and expository text construction across adolescence: A developmental paradox. *Discourse Processes*, 43(2), 79-120.
- Best, R. M., Floyd, R. G., & McNamara, D. S. (2008). Differential competencies contributing to children's comprehension of narrative and expository texts. *Reading Psychology*, 29(2), 137-164.
- Bird, S. (2012). Expert knowledge, distinctiveness, and levels of processing in language learning. *Applied Psycholinguistics*, 33(4), 665-689.
- Bowyer-Crane, C. (2002). *The relationship between reading comprehension and online inference generation in children*. Unpublished doctoral thesis, University of York, England.
- Camp, D. (2000). It takes two: Teaching with twin texts of fact and fiction. *The Reading Teacher*, 53(5), 400-408.
- Chi, F. (2012). Searching for intertextual connections in small group text discussion. *Journal of Research in Reading*, 35, 251-266.
- Ciecierski, L., & Bintz, W. (2016). Twin texts: A way into the content area. *Middle School Journal*, 47(4), 32-44.
- Clinton, V., Taylor, T., Bajpayee, S., Davison, M. L., Carlson, S. E., & Seipel, B. (2020). Inferential comprehension differences between narrative and expository texts: A systematic review and meta-analysis. *Reading and Writing*, 33, 2223-2248.
- Craik, F. I., & Lockhart, R. S. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behavior*, 11(6), 671-684.
- Crossley, S. A., & McNamara, D. S. (2012). Predicting second language writing proficiency: The roles of cohesion and linguistic sophistication. *Journal of Research in Reading*, 35(2), 115-135.
- De Beni, R., Borella, E., & Carretti, B. (2007). Reading comprehension in aging: The role of working memory and metacomprehension. *Aging, Neuropsychology, and Cognition*, 14(2), 189-212.
- de Bot, K., Paribakht, T. S., & Wesche, M. B. (1997). Toward a lexical processing model for the study of second language vocabulary acquisition: Evidence from ESL reading. *Studies in Second Language Acquisition*, 19(3), 309-329.
- Denton, C. A., Enos, M., York, M. J., Francis, D. J., Barnes, M. A., Kulesz, P. A., ... Carter, S. (2015). Text-processing differences in adolescent adequate and poor

- comprehenders reading accessible and challenging narrative and informational text. *Reading Research Quarterly*, 50(4), 393-416.
- Folse, K. S. (2006). The effect of type of written exercise on L2 vocabulary retention. *TESOL Quarterly*, 40(2), 273-293.
- Gardner, D. (2004). Vocabulary input through extensive reading: A comparison of words found in children's narrative and expository material. *Applied Linguistics*, 25(1), 1-37.
- Gerstein, M. (2003). *The man who walked between the towers*. New York: Macmillan.
- Graesser, A. C., & Goodman, S.M. (1985). Implicit knowledge, question answering, and the representation of expository text. In B. Britton & J. B. Black (Eds.) *Understanding expository text* (pp. 109-171). Hillsdale, NJ: Lawrence Erlbaum.
- Huang, S., Willson, V., & Eslami, Z. (2012). The effects of task involvement load on L2 incidental vocabulary learning: A meta-analytic study. *The Modern Language Journal*, 96(4), 544-557.
- Huckin, T., & Coady, J. (1999). Incidental vocabulary acquisition in a second language: A review. *Studies in Second Language Acquisition*, 21(2), 181-193.
- Hulstijn, J. H., & Laufer, B. (2001). Some empirical evidence for the involvement load hypothesis in vocabulary acquisition. *Language Learning*, 51(3), 539-558.
- Hummel, K. M. (2010). Translation and short-term L2 vocabulary retention: Hindrance or help?. *Language Teaching Research*, 14(1), 61-74.
- Kintsch, W. (1994). Text comprehension, memory, and learning. *American Psychologist*, 49(4), 294.
- Laufer, B., & Nation, P. (1999). A vocabulary-size test of controlled productive ability. *Language Testing*, 16(1), 33-51.
- Laufer, B., & Rozovski-Roitblat, B. (2015). Retention of new words: Quantity of encounters, quality of task, and degree of knowledge. *Language Teaching Research*, 19(6), 687-711.
- Mar, R. A., Li, J., Nguyen, A. T., & Ta, C. P. (2021). Memory and comprehension of narrative versus expository texts: A meta-analysis. *Psychonomic Bulletin & Review*, 28, 732-749.
- Morgenstern, J. (2008, August 8). Documentary 'Man on Wire' hits the heights. *The Wall Street Journal*. Retrieved from <https://www.wsj.com/articles/SB121814568466422035>
- Narvaez, D., van den Broek, P., & Ruiz, A. B. (1999). The influence of reading purpose on inference generation and comprehension in reading. *Journal of Educational Psychology*, 91(3), 488-496.

- Peirooliya, M., & Pourmohammadi, M. (2019). Effect of text type on Iranian intermediate EFL Learners' verb learning through glossing. *International Journal of English Language and Translation Studies*, 7(2), 39-43.
- Pulido, D. (2007). The effect of topic: Familiarity and passage sight vocabulary on L2 lexical inference and retention through reading. *Applied Linguistics*, 28(1), 66-86.
- Shokouhi, H., & Maniati, M. (2009). Learners' incidental vocabulary acquisition: A case on narrative and expository texts. *English Language Teaching*, 2(1), 13-23.
- Soalt, J. (2005). Bringing together fictional and informational texts to improve comprehension. *The Reading Teacher*, 58(7), 680-683.
- Suh, S. Y., & Trabasso, T. (1993). Inferences during reading: Converging evidence from discourse analysis, talk-aloud protocols, and recognition priming. *Journal of Memory and Language*, 32(3), 279-300.
- Swain, M. (1995). Three functions of output in second language learning. In G. Cook & B. Seidlhofer (Eds.), *Principle and practice in applied linguistics: Studies in honour of H. G. Widdowson* (pp. 125-144). Oxford, England: Oxford University Press.
- Taliaferro, C. (2009). Using picture books to expand adolescents' imaginings of themselves and others. *English Journal*, 99(2), 30-36.
- Taylor, B. M., & Beach, R. W. (1984). The effects of text structure instruction on middle-grade students' comprehension and production of expository text. *Reading Research Quarterly*, 19(2), 134-146.
- van Dijk, T. A., & Kintsch, W. (1983). *Strategies in discourse comprehension*. New York: Academic Press.
- Ward, N., Schell, R. F., Brown, C. L., & Thomason, B. (2019). Pairing fiction and nonfiction texts to promote literacy and language development of adolescent English learners. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 92(6), 193-201.
- Waring, R., & Takaki, M. (2003). At what rate do learners learn and retain new vocabulary from reading a graded reader? *Reading in a Foreign Language*, 15(2), 130-163.
- Wolfe, M. B. & Woodwyk, J. M. (2010). Processing and memory of information presented in narrative or expository texts. *British Journal of Educational Psychology*, 80(3), 341-362.
- Zabucky, K. M., & Moore, D. (1999). Influence of text genre on adults' monitoring of understanding and recall. *Educational Gerontology*, 25(8), 691-710.
- Zwaan, R. A. (1994). Effect of genre expectations on text comprehension. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 20, 920-933.
- Zwaan, R., & Brown, C. M. (1996). The influence of language proficiency and comprehension skills on situation model construction. *Discourse Processes*, 21(3), 289-327.

APPENDIX A

Output Tasks for a Reading Session with Expository Group

Task 1. Answer the following questions. Circle A, B, C or D.

Question 1. What of the following statement is NOT TRUE about John Sutter according to the article?

- A. He was among the wealthiest men in the U.S during its 1840s.
- B. He had found gold when working for James Marshall.
- C. He had constructed a large farming establishment and kept expanding it for economic profits.
- D. He wanted to keep the gold miners away from his farming empire.

Question 2: Who was Sam Brannan?

- | | |
|------------------|------------------|
| A. A prospector | C. A farmer |
| B. A housekeeper | D. A salesperson |

Question 3. Which of the following is NOT mentioned in the article as the means by which the gold miners arrived in California?

- | | |
|-----------|-----------|
| A. horses | C. truck |
| B. ship | D. wagons |

Question 4: What can be inferred from the reading text?

- A. Many people suffered from malnutrition during their journey to the West.
- B. After one year since the first gold had been found, the population of California doubled.
- C. All gold miners became rich as they dig out gold in the hills.
- D. John Sutter benefitted a lot from the Gold Rush as he sold services to the miners.

Task 2. Complete the summary with NO MORE THAN TWO WORDS from the article.

CALIFORNIA GOLD RUSH

The California Gold Rush began at Sutter's large (1) where a small piece of shiny metal was found during the construction of a (2) on the American River. Later, a (3) spread the news about the discovery of gold there and thousands of people rushed to California in search of this precious metal. Most gold-seekers from the East and Midwest travelled to the West by (4) In the beginning, many of the first people could manage to find gold and make a fortune. However, as gold became harder to find, many people (5) California. After the Gold Rush ended, not many people stayed in small towns. The plan to build a large farming complex was (6) by gold-seekers, forcing its owner to sell the fort at a cheap price.