

Incidental Vocabulary Learning in Second Language Acquisition: A Literature Review

Aprendizaje incidental de vocabulario en la adquisición de una segunda lengua: una revisión de literatura

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This literature review aims to analyze previous studies that address the incidental learning of vocabulary in second language acquisition. The articles included in this literature review look into the understanding of vocabulary learning through incidental means, the relationship of reading and incidental vocabulary learning, and the strategies and tasks that promote the incidental learning of vocabulary. The findings show that L2 learners develop much of their vocabulary by incidental means through exposure to words in informative contexts. Moreover, this exposure is promoted by reading, and enhanced through multimodal glosses. Further research may focus on listening for higher lexical retention rates, the circumstances that allow incidental learning of multi-word phrases and collocations, and the use of technology-based methods for incidental vocabulary acquisition.

Key words: Contextual cues, incidental vocabulary learning, multimodal glosses, second language acquisition, reading for meaning.

Esta revisión de literatura analiza estudios previos sobre el aprendizaje incidental de vocabulario en la adquisición de una segunda lengua. Estos artículos estudian la naturaleza del aprendizaje incidental de vocabulario, la lectura y la adquisición incidental de vocabulario y las estrategias que la promueven. Encontramos que los estudiantes de una segunda lengua desarrollan la mayoría de su vocabulario incidentalmente por medio de la ocurrencia léxica en contextos altamente informativos. Asimismo, la lectura y las anotaciones multimodales incentivan y complementan la ocurrencia de este vocabulario. Investigaciones futuras podrían enfocarse en la escucha como medio de mayor retención léxica, en las circunstancias que permiten el aprendizaje incidental de colocaciones, y en el uso de la tecnología para la adquisición incidental de vocabulario.

Palabras clave: adquisición de una segunda lengua, anotaciones multimodales, aprendizaje incidental de vocabulario, claves contextuales, lectura comprensiva.

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Introduction

Second language learning largely depends on vocabulary, as *the building blocks* from which learners start their second language (L2) acquisition. Hence, its significance lies inherently deep within the first stages of the acquisition of any language. During the past decades, L2 vocabulary learning has become of great research interest. A great deal of research has advocated that vocabulary is a key aspect in second language acquisition, especially when it comes to its incidental learning. These studies have pointed out the importance of vocabulary learning as a by-product of the instructional focus. The aim of this literature review is to analyze previous studies that address incidental vocabulary learning from the perspective of second language acquisition. Research has suggested that both L1 and L2 learners may incidentally gain knowledge of meaning through reading (Webb, 2008). Moreover, researchers seem to agree that after a learner acquires his/her first thousand words during the initial stages of classroom instruction through intentional learning, vocabulary acquisition happens mainly through extensive reading, and most of the time by guessing the meaning of unknown words (Huckin & Coady, 1999). In this sense, a learner would learn vocabulary as a by-product of reading, out of the boundaries of the pedagogical focus of the instructional setting. Furthermore, Gass (1999) considers incidental vocabulary learning to take place “as a by-product of other cognitive exercises (e.g. reading/listening) involving comprehension” (p. 319). However, incidental learning of vocabulary is not completely understood in terms of how it actually occurs, given the fact that there are a number of factors that determine the success of a learner when trying to infer a word, such as the amount of exposure, word-guessing strategies, and the quality of the context that facilitates learners’ lexical inference activities.

Many theories have tried to account for the specific way that this type of acquisition takes place.

It seems, however, that it depends on the type of cognitive process in which the learner is engaged. Schmitt and Schmitt (1995) in their depth of processing hypothesis state that “mental activities which require more elaborate thought, manipulation or processing of a new word will help in the learning of that word” (p. 135). Clearly the above hypothesis would include mainly reading as the means in which this acquisition is accomplished. Furthermore, the frequency of vocabulary exposure seems to have a great impact on incidental vocabulary learning (Huckin & Coady, 1999), since repeated exposure to words in meaningful collocations is the key to form-meaning associations. Krashen (1989) in his *input hypothesis* argues that incidental acquisition of vocabulary takes place naturally by providing the learner with comprehensible input. And though Krashen states that acquisition occurs only when the learners’ attention is focused only on the meaning rather than the form, some researchers argue that vocabulary acquisition requires attention to meaning but also to form to some degree (Ellis, 1994). Therefore, it seems that incidental vocabulary learning largely depends on the context surrounding each word and the amount of attention that the learner places on both meaning and form. However, the type of context seems to have an effect on the correct interpretation of lexical meaning, since it may lead learners to correctly or incorrectly infer the meaning of words (Webb, 2008).

In this literature review, I seek to analyze three main issues that stand out after reviewing the articles concerning incidental vocabulary learning. First, how incidental vocabulary learning occurs, that is, the specific circumstances that allow learners to acquire vocabulary through incidental means. Then, the effect of reading on incidental vocabulary learning is discussed as learners engage in vocabulary gains through mental comprehension. Next, the strategies and tasks that can be used to promote and enhance the retention of vocabulary through incidental

learning are discussed. After exploring and analyzing the findings of the studies included in this literature review, I will finally provide a discussion on the main results that concern the analysis of this paper.

Review of Literature

The criterion with which I chose to organize this paper is based on three main areas: (1) the occurrence of L2 vocabulary learning through incidental means, (2) the effect of reading on incidental vocabulary learning, and (3) the use of strategies and tasks conducive to improving the incidental learning of vocabulary. I have decided to place the literature found into this classification since it is important to discuss elemental issues that concern the understanding of incidental learning of vocabulary not only in its main way of occurrence—reading—but also by analyzing the strategies and tasks employed to promote the right lexical knowledge for inference in learners for vocabulary acquisition in a second language.

Understanding Incidental Vocabulary Learning

The way incidental vocabulary learning occurs has been widely discussed. In a review presented by Huckin and Coady (1999), several issues regarding this topic were surveyed through previous empirical researches. The researchers set out to investigate the mechanism of incidental acquisition, the type and size of vocabulary for correct guessing, the amount of exposure for successful retention, the effectiveness of word-guessing strategies, the influence of different reading texts, and the problems with incidental learning. Extensive reading for meaning and form was found as the primary way incidental learning occurs. However, several variables affect its success as suggested by the authors: mainly, the appropriate context surrounding each word, and the nature of the learners' attention and the task demands, largely enhanced by text-based tasks. In order to correctly guess the meaning of a word

in context, a learner must be able to recognize a great percentage of the surrounding words. According to the researchers, this value is nearby 95% of knowledge of the words in a text to attain general comprehension, and 98% if the goal is to achieve full comprehension. The former requires the level of comprehension of 3,000 word families, consisting of a base form and all its derived and inflected forms, and 5,000 word families for the latter. In contrast, there is no agreement on the amount of exposure to a word for incidental learning to occur. Some studies locate this number between 5 and 16 exposures, but much depends on other factors, such as word salience, its recognizability as a cognate, the learners' interests, and the availability of rich informative contexts. Effective word guessing was found to require the flexible application of different processing strategies ranging from grapheme identification to the use of wider contextual meanings. However, as some strategies arise others naturally required instruction. This is illustrated in a series of observational studies where the majority of learners studied relied heavily on cognate recognition, but failed to recognize false cognates, which implied that some strategies needed to be taught. Huckin and Coady also pointed out that the texts which are of personal interest to learners seem to facilitate incidental vocabulary acquisition. In contrast, the authors found the lack of precision of word guessing in context to be the main limitation of incidental learning. Furthermore, although they make a thorough review of the main issues concerning this topic, especially for the different amount of lexical knowledge for incidental learning to occur, they fall short of exploring more in-depth multi-word phrases and collocations learning as part of their survey. This would have been an interesting topic also, since this type of lexical conglomerate is broadly found in different types of text.

Gass (1999) also discusses, through a review of different papers, key issues concerning incidental vocabulary learning. The author provides an

overview of definitions for incidental vocabulary and acquisition, and presents a new approach to incidental learning that draws attention to the recognition of syntactical categorization of the lexicon through context. The researcher points out the extent to which incidental is a viable concept, referring to the basic limitation of not having a way to show when a word has been learned incidentally. However, the author suggests that vocabulary and acquisition involve a certain degree of syntactic and lexical knowledge that learners heavily rely on for comprehension, and it is this relationship that needs to be taken into account for vocabulary learning purposes, whether it is incidental or intentional. The main limitation that comes about in this paper is the lack of clarity in the conceptualization of *incidental* that the researcher relates in the introduction of her literature review as a by-product of a mental effort for comprehension, which leaves more questions than answers. Conversely, the main contribution stemming from this paper is the attention to the sentence-grammar structure for vocabulary acquisition which involves a more nuanced approach to vocabulary acquisition.

In an empirical study conducted by Barcroft (2009), incidental and intentional vocabulary learning were compared in terms of L2 synonym generation. One hundred and fourteen Spanish-speaking university students in Mexico City at the intermediate English level were selected for the study. After reading a passage containing 10 target words translated in the text, participants were assigned to read for meaning (incidental), or read for meaning while trying to learn the translated words and generate their Spanish synonyms (intentional). Results showed that learners that were instructed to learn the target words and requested to generate synonyms positively affected L2 word-forming as compared with the learners instructed to read for meaning only, which suggests that explicit instruction has an effect on target word recall. Nonetheless, when

learners know that a synonym-generation test is following after reading the passage, it is likely that they will only focus on recalling the target words, and thus outperforming the learners that only read for incidental meaning recognition. Evidently, text comprehension would be negatively affected in the intentional group, since the focus of their attention would be on trying to remember the target word, rather than global text comprehension. However, this study presents positive evidence of the inclusion of direct instruction for word recalling and other techniques to foster intentional vocabulary learning.

Alcón (2007) investigated the effectiveness of teachers' incidental focus on form in vocabulary learning. Data consisted of 17 recordings, 204 learners' diaries and 204 delayed post-test translations gathered during a whole academic year from 12 high school English as a foreign language (EFL) participants from Spain. The researcher found that teachers' involvement in lexically-oriented focus on form episodes is effective for learners' noticing and subsequent use and learning of vocabulary items. In regard to this study, it seems that a certain degree of attention must be raised towards the form of the lexical items in order for learners to notice the vocabulary they are being exposed to. This correlates to previous findings mentioned in the introduction of this literature review which state that a certain amount of attention to meaning, but also to form is required for vocabulary acquisition to happen (Ellis, 1994). In this sense, and to a certain degree, some form of intentional instruction is present, which relates to Barcroft's (2009) study on synonym generation. However, more research needs to be done to establish the degree in which an intentional and incidental approach can be combined for the enhancement of L2 vocabulary learning.

So far the discussion revolves around four articles that try to explain the occurrence of incidental vocabulary learning and the specific circumstances in

which this type of learning occurs, and to some degree, the relationship of incidental and intentional methods for L2 vocabulary learning, at least for lexical focus on form. These articles have shed light on the current basic assumptions revolving around the incidental learning of vocabulary. Perhaps a combination of intentional and incidental learning could definitely solve some issues that come from an only-incidental learning point of view and would enhance L2 learners' vocabulary learning experience.

The Effectiveness of Reading for Incidental Vocabulary Learning

Paribakht and Wesche (1999) studied the acquisition of vocabulary knowledge as a by-product of reading for comprehension. The researchers set out to investigate the strategies and the kinds of knowledge 10 intermediate English as a second language (ESL) Canadian university student volunteers used when dealing with new L2 words while reading. After the administration of two tasks, first a question task and a summary task later, learners were asked which words they remembered and how these were subsequently learned. Data analysis showed that while learners tended to ignore a vast proportion of unknown words (mostly content words as opposed to function words), for those words which they paid attention to, inference was the main strategy used. Learners employed previous knowledge and contextual cues together when trying to infer meaning of unfamiliar words. Grammatical knowledge at the sentence level was mostly used for lexical inference for both tasks. As noted by Huckin and Coady (1999) and Schmitt and Schmitt (1995), this study also gives evidence supporting reading as a useful tool for vocabulary development after taking into account the selection of appropriate texts and tasks, that is, theme-related texts and tasks requiring word-level and textual comprehension.

The impact of reading on vocabulary development was also examined by Ponniah (2011). The researcher

analyzed the performance of students engaged in reading, and the students who learned consciously the meaning of words for developing lexical knowledge. The participants included 49 ESL adult students from an Indian university who were subsequently divided into 23 individuals in the control group and 26 in the experimental group. The control group was asked to use the dictionary to find the meaning of 20 words appearing in an edited passage whereas the experimental group was asked to read for comprehension. A post-test followed consisting of writing down the definition of the vocabulary selected and using it in different sentences. Results confirmed that learners who used dictionaries were unable to use the consciously learned words in sentences. In contrast, the learners who acquired words subconsciously while reading were able to use them in sentences, proving that they not only absorbed the meaning of the words but also the grammar. Thanks to studies like this, there is heavy evidence of the effectiveness of reading for vocabulary gains not only for the meaning of words but also for correct sentence-level grammar. However, as the study reveals, the passage used in this study was manipulated in such a way as to make the difficult words appear at least twice in the story or were used in a context easy to understand for learners. Such advantages are hard to find in authentic, natural texts. Nonetheless, it gives positive evidence for texts rich in contextual cues that enhance comprehensibility and inference as stated in Paribakht and Wesche's (1999) study.

In another study, Vidal (2011) conducted a comparison of the effects of listening and reading for the incidental acquisition and retention of vocabulary. The participants in this study included 248 first-year undergraduate students studying mandatory ESL at a university in Madrid, Spain. During a period of four weeks they were tested on their knowledge of 36 target words (12 for each reading/lecture): 112 students were assigned to the listening condition, which consisted

of three authentic video-taped lectures about tourism; the reading condition involved 80 students and consisted of three authentic readings on the same topic; finally, 38 subjects, who neither listened nor read, were used as control subjects. Results showed that the reading subjects made greater vocabulary gains and retention than the listening subjects, which suggests that reading is a more effective source of vocabulary acquisition. However, results also suggest that for students with higher levels of proficiency (as corroborated on their TOEFL scores) listening might lead to slightly higher levels of retention than reading. Clearly, more research should enquire about the effectiveness of listening for incidental vocabulary acquisition for high-proficiency students. This study used academic readings and lectures to test learning conditions and was, in my opinion, a correct decision since university students are engaged more frequently in academic settings. This article is an attempt to provide greater insight into the relationship of reading and listening for incidental vocabulary learning.

The results of the studies cited above suggest positive evidence for incidental vocabulary learning through reading (Ponniah, 2011), and reconfirm the results of previous studies on the matter that correlates reading with incidental learning of vocabulary (Jenkins, Stein, & Wysocki, 1984). Likewise, listening was also found to improve vocabulary retention, especially for high L2 proficiency learners (Vidal, 2011). Moreover, several factors seem to be involved in assuring the success of incidental learning. Learners' lexical inference activity seems to benefit from texts that foster contextual cues not only in meaning but also at the grammar-sentence level (Paribakht & Wesche, 1999).

Strategies and Tasks Promoting Incidental Vocabulary Learning

McCafferty, Roebuck, and Wayland (2001) conducted a preliminary study about applying

Vygotsky's activity theory to investigate the retention of new L2 vocabulary. Emphasis is placed on the goal-directedness of the activity in relation to the intentionality of those involved and the sociocultural context. This study took place over several class days and involved five native speakers of English enrolled in a third-semester Spanish class at a large US university. The control condition consisted of a writing task about a visit to the zoo using a list of related vocabulary items given by the instructor. The experimental condition consisted of peer interviews as regards the students' early L2 learning experiences and was later reported to the class. Findings showed that increased mental effort and the productive use of new words in the experimental condition might positively affect learning and retention. Moreover, the researchers argue that task-essentialness—the relationship of a vocabulary item within an activity as the goal of the task—is also important for lexical learning and retention, along with exposure to words in meaningful contexts. One of the main limitations of this study consists in the small sample size used, which limits the possibility to generalize the findings. However, the authors showed good evidence for the support of learning/retention enhancement when a lexical item becomes the focus of goal-directed action.

Another study investigating the influence of marginal glosses, dictionary use, and the repeated occurrence of unknown words on incidental vocabulary learning was developed by Hulstijn, Hollander, and Greidanus (1996). This empirical study included 78 advanced university students of French enrolled in three different Dutch universities who were randomly assigned to read a short narrative story under three conditions: marginal glosses, dictionary use, or control (not receiving additional information). After testing previous knowledge of lexical items, the students were tested on recognition, recall, and provision of meaning of 16 target words, eight of which were included three times by modifying certain

phrases in the text, and the rest were unmodified to appear only once. Findings showed that frequency of occurrence and provision of word meaning through marginal glosses or dictionary use positively affected incidental vocabulary learning. Such strategies showed an improvement in the low incidence of incidental vocabulary learning. Furthermore, it seems that these strategies have both intentional and incidental learning and none of them seek to replace the other but to follow up or complement each other. As a result, these findings correlate well with previous studies that suggest the integration of intentional pedagogical methods to enhance the incidental learning experience (Alcón, 2007; Huckin & Coady, 1999).

Shahrokni (2009) conducted an empirical study investigating the effects of online, pictorial, and textual pictorial glosses on the incidental learning of vocabulary of 90 Iranian EFL learners. After being recruited by poster ads, the participants were selected based on their results of an English placement test and subsequently assigned to three groups of 30, in which they were exposed to research treatment during three sessions of instruction. The research treatment consisted of three different versions of the same text, each one displaying glosses of 25 target words by means of (a) texts, (b) pictures, and (c) a combination of texts and pictures. Finally, participants were tested on the immediate recall of the target words. The findings suggested that a combination of text and still images resulted in improved incidental vocabulary learning. Furthermore, these results confirmed that multimodal annotations support components of reading conducive to incidental vocabulary learning. Limitations from this paper stem from the fact that it included only male participants with a low English level, and the fact that delayed retention and further use on context of target words was not tested, which fail to fully test the incidental acquisition of lexical items or its use in grammar-level sentences. However, these results advocate for the positive use of multimodal strategies

in CALL (Computer-Assisted Language Learning) settings for vocabulary learning, which can boost the incidental acquisition of L2 learners.

Xu (2010) examined the effect of different reading tasks on immediate word gain and retention in L2 learners. More specifically, the researcher set out to operationalize the general labels of the *load involvement hypothesis*: “attention, elaboration, and depth of processing, into concrete task-specific constructs” (Laufer & Hulstijn as cited in Xu, 2010, p. 126). The participants involved 125 ESL freshmen students randomly selected from a Chinese university who were divided into four different groups according to their even scores on the university entrance English examination. Different tasks were given to each group consisting of four reading comprehension tasks of the same passage with 10 target words: reading comprehension with (a) glosses, (b) sentence marking with annotated target words, (c) glosses and dictionary use, and (d) no additional aid. Results suggested that tasks with higher involvement load, that is, tasks that involve search and evaluation, such as reading with glosses and dictionary use, are conducive to better word retention. Overall, the marginal glosses showed to be more efficient in fostering incidental learning of L2 vocabulary. This study gives positive evidence for the support of marginal glosses for incidental vocabulary as shown also in other studies (Hulstijn et al., 1996). It also showed the effectiveness of this type of tasks for low-intermediate learners. It would also be worthy of enquiring as to its effectiveness in learners with different levels of proficiency in order to generalize the findings for a broader audience.

The effects and quality of context for incidental vocabulary learning were also investigated in a study conducted by Webb (2008). Within class periods of 90 minutes, 50 intermediate Japanese ESL university students were randomly assigned to two groups (comparison and experimental) before completing a reading comprehension task. The task consisted of

reading three sets of sentences, each one containing 10 target words (six nouns and four verbs) whose forms were disguised to ensure learners had no prior knowledge of them. The set of sentences was rated by English native speakers as being more informative (the first two sets) to less informative (the last two sets). Results suggested that informative contexts produced higher retention of the meaning of words in learners. The findings showed as well that context has a significant effect on gaining knowledge of meaning rather than form. This can boost the effectiveness of the recurrence of target words if they are encountered in highly informative contexts that lead to comprehension of vocabulary meaning. The results of this study correlate with previous findings that suggest incidental vocabulary learning improvement by allowing learners to infer correctly the meaning of unknown words through incidental learning in texts that provide high quality contextual cues.

The abovementioned studies have drawn attention to the effectiveness of marginal glosses accompanied with pictures along with the repeated occurrence of unknown words in highly informative contexts for the incidental learning of vocabulary. The results from these studies support strategies that boost the possibilities learners have to infer correct meaning of a word and its immediate and delayed retention. Furthermore, tasks promoting lexical items as the goal of the activity seem to enhance vocabulary retention and learning, which can be integrated in activities relating to the sociocultural reality of learners.

Discussion

After reviewing the findings of this literature review, there is strong evidence that supports the occurrence of incidental vocabulary learning through reading for meaning comprehension. As pointed out by Ahmad (2011), an incidental vocabulary technique is enhanced by reading in highly informative contexts. Not only does extensive reading appear to be the main feature for incidental learning. This type of learning

is the result of a number of factors that correlate among each other to ensure its success. Research shows that learners must be able to recognize a great percentage of the surrounding words in order to correctly infer the meaning of a word in context. This amount of previous knowledge ranges from 95% to 98% for general and full textual comprehension. This knowledge could be fostered first through initial stages of intentional learning that allow following up on incidental acquisition of L2 vocabulary gains. As suggested by Zandieh (2012), both types of vocabulary learning could be bolstered if they are combined jointly in “a virtual learning environment in order to improve comprehension and vocabulary retention” (p. 60). Moreover, texts of personal interest to learners promote motivation resulting in more guided attention to lexical items at the word-sentence grammar level. Accordingly, exposure of unknown words should be included in meaningful contextual cues, which would allow high percentages of correct lexical inference activity.

The effectiveness of reading for incidental learning is also discussed. Reading boosts subconscious acquisition of lexical items. However, it also depends on the type of learner it is aimed at. Pilot research suggests that reading is more beneficial for low and intermediate learners, as it allows them to increase vocabulary gains and further retention of lexical items. In contrast, listening was found to be of improvement for vocabulary retention in advanced L2 learners (Vidal, 2011). Clearly, further research should focus on the relationship of reading and listening in high-proficiency learners.

Strategies and tasks for promoting incidental vocabulary learning have also been the focus of research. Several empirical studies suggest that incidental vocabulary learning can be improved through marginal glosses. At the same time, marginal glosses and still images as multimodal annotations appear to be even more effective for incidental

learning (Azizollah & Marzieh, 2012; Hulstijn, et al., 1996). Such results advocate for the positive use of multimodal strategies, such as multiple types of glosses (Yoshii, 2006) and even video captioning (Montero, Peters, Clarebout, & Desmet, 2014) in CALL settings for vocabulary learning. Moreover, other strategies that focus lexical items as the goals of different tasks showed positive impact in several studies (McCafferty et al., 2001; Xu, 2010). These researches showed that the repeated occurrence of words in highly informative contexts conducive for learners to infer meaning of unknown words provide greater incidental vocabulary gains. In turn, such strategies embedded in tasks that encourage lexical items to become the focus of goal-directed activities could enhance learning and retention of vocabulary.

Important pedagogical implications stem from the results of this literature review. For example, teachers should consider the role of the type of text that best suits the interest of learners, and the quality of contextual hints that allow subconscious acquisition of vocabulary. Therefore, I draw attention to the importance of selecting authentic texts with highly informative contextual cues manageable for the level of proficiency of learners, and the importance of selecting tasks that allow learners to focus attention at the word level (syntactical level) and global text comprehension. Such activities, would not only boost comprehension and syntactic lexical knowledge, but would also allow the learner to use the newly acquired vocabulary in real-world speech events. Material developers also need to consider how texts will affect vocabulary learning. If the context surrounding the vocabulary is not useful for learners to correctly infer the meaning of words, multimodal glosses are likely to be necessary for learners to gain knowledge of meaning and focus attention at the word level in meaningful and authentic texts.

In addition, the frequency of occurrence of the target vocabulary has a significant effect on the retention and recall of lexical items. As a consequence, such effect

is enhanced when complemented with additional aids, including learner's access to knowledge of words and awareness of vocabulary learning strategies. In other words, the perfect amount of intentional and incidental learning that improves L2 vocabulary learning. Likewise, the use of multimodal texts, including video captioning, enhances comprehension and gives the learner additional support to associate correctly a lexical item with its meaning. In this sense, the inclusion of new technologies in the L2 class enhances the incidental acquisition of vocabulary and it could help us to improve current reading strategies and tasks in our learning environment. Beginners and advance learners can benefit from reading and listening activities correspondingly that include multimodal e-learning technologies, even perhaps for the incidental acquisition of multi-word phrases and collocations. If further research focuses on how we can implement effectively Web 2.0 tools in tasks that improve retention and recall of basic and complex lexical items at the meaning and form level, we can build on our current literature and gain a deeper insight into the acquisition of L2 vocabulary in the 21st century.

References

- Ahmad, J. (2011). Intentional vs. incidental vocabulary learning. *Interdisciplinary Journal of Contemporary Research in Business*, 3(5), 67-75.
- Alcón, E. (2007). Incidental focus on form, noticing and vocabulary learning in the EFL classroom. *International Journal of English Studies*, 7(2), 41-60.
- Azizollah, D., & Marzieh, R. (2012). Incidental vocabulary learning and the development of receptive and productive vocabulary: How gloss types work. *Suvremena Lingvistika*, 38(74), 175-187.
- Barcroft, J. (2009). Effects of synonym generation on incidental and intentional L2 vocabulary learning during reading. *TESOL Quarterly*, 43(1), 79-103.

- Ellis, R. (1994). Factors in the incidental acquisition of second language vocabulary from oral input: A review essay. *Applied Language Learning*, 5(1), 1-32.
- Gass, S. (1999). Discussion: Incidental vocabulary learning. *Studies in Second Language Acquisition*, 21(2), 319-333. <http://dx.doi.org/10.1017/S0272263199002090>.
- Huckin, T., & Coady, J. (1999). Incidental vocabulary acquisition in a second language: A review. *Studies in Second Language Acquisition*, 21(2), 181-193. <http://dx.doi.org/10.1017/S0272263199002028>.
- Hulstijn, J. H., Hollander, M., & Greidanus, T. (1996). Incidental vocabulary learning by advanced foreign language students: The influence of marginal glosses, dictionary use, and recurrence of unknown words. *The Modern Language Journal*, 80(3), 327-339. <http://dx.doi.org/10.1111/j.1540-4781.1996.tb01614.x>.
- Jenkins, J. R., Stein, M. L., & Wycsocki, K. (1984). Learning vocabulary through reading. *American Educational Research Journal*, 21(4), 767-787. <http://dx.doi.org/10.3102/00028312021004767>.
- Krashen, S. D. (1989). We acquire vocabulary and spelling by reading: Additional evidence for the Input Hypothesis. *The Modern Language Journal*, 73(4), 440-464. <http://dx.doi.org/10.1111/j.1540-4781.1989.tb05325.x>.
- McCafferty, S. G., Roebuck, R. F., & Wayland, R. P. (2001). Activity theory and the incidental learning of second-language vocabulary. *Language Awareness*, 10(4), 289-294. <http://dx.doi.org/10.1080/09658410108667040>.
- Montero, M., Peters, E., Clarebout, G., & Desmet, P. (2014). Effects of captioning on video comprehension and incidental vocabulary. *Language, Learning & Technology*, 18(1), 118-141.
- Paribakht, T. S., & Wesche, M. (1999). Reading and "incidental" L2 vocabulary acquisition: An introspective study of lexical inferencing. *Studies in Second Language Acquisition*, 21(2), 195-224. <http://dx.doi.org/10.1017/S027226319900203X>.
- Ponniah, R. J. (2011). Incidental acquisition of vocabulary by reading. *The Reading Matrix*, 11(2), 135-139.
- Schmitt, N., & Schmitt, D. (1995). Vocabulary notebooks: Theoretical underpinnings and practical suggestions. *ELT Journal*, 49(2), 133-143. <http://dx.doi.org/10.1093/elt/49.2.133>.
- Shahrokni, S. A. (2009). Second language incidental vocabulary learning: The effect of online textual, pictorial, and textual pictorial glosses. *The Electronic Journal for English as a Second Language*, 13(3), 1-17.
- Vidal, K. (2011). A comparison of the effects of reading and listening on incidental vocabulary acquisition. *Language Learning*, 61(1), 219-258. <http://dx.doi.org/10.1111/j.1467-9922.2010.00593.x>.
- Webb, S. (2008). The effects of context on incidental vocabulary learning. *Reading in a Foreign Language*, 20(2), 232-245.
- Xu, X. (2010). An empirical study on the effect of task on L2 incidental vocabulary acquisition through reading. *Asian Social Science*, 6(7), 126-131.
- Yoshii, M. (2006). L1 and L2 glosses: Their effects on incidental vocabulary learning. *Language, Learning & Technology*, 10(3), 85-101.
- Zandieh, Z. (2012). The effects of hypertext gloss on comprehension and vocabulary retention under incidental and intentional learning conditions. *English Language Teaching*, 5(6), 60-71.

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