# Investigating Vocabulary Learning in Second Language Classroom context: Recent Findings, Future Outlook

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Abstract – Second language (L2) vocabulary learning has triggered a growing body of second language acquisition (SLA) research in the last two decades. Learning new lexical items is one of the demanding tasks that L2 learners encounter in language classrooms. There are outstanding reasons for attaching this much importance to L2 vocabulary learning in SLA. It is rightly argued that L2 vocabulary learning is one of the fundamental steps in L2 learning. In this study we sought to investigate vocabulary learning in L2 language classroom setting and the effectiveness of various teaching and learning methods of it. More specifically, the incidental vocabulary learning, lexical inferencing, and glosses, are discussed in detail and the recent SLA research findings regarding these issues are explained. The findings might have significant implications for language teachers and in particular for L2 researchers and practitioners for further L2 vocabulary research.

**Keywords** – L2 vocabulary learning; incidental vocabulary learning; intentional vocabulary learning; glosses; lexical inferencing

### **1. Introduction**

Over the last two decades there has been growing interest with respect to second language (L2) vocabulary learning and the role of vocabulary in second language acquisition (SLA) skills (e.g., Brown, 2011; Bruton, 2007; de la Fuente, 2006; Folse, 2006; Huang, 2007; Hunt & Beglar, 2005; Laufer & Nation, 1995; Min, 2008; Nation, 2011; Shen, 2010; Vidal, 2011; Webb, 2007). It is argued that vocabulary is a necessary component for improving competency in all areas of L2 communication (Godwin-Jones, 2010). As Tight (2010) rightly underscores, lexical development is a fundamental task in SLA.

In the present study we probe into L2 vocabulary learning by examining the different issues in this field. We present the controversies regarding the different techniques of acquiring L2 vocabulary. Furthermore, the recent L2 research findings are discussed in detail.

# 2. Incidental/Intentional Vocabulary Learning

Based on cognitive psychology, L2 researchers draw a distinction between incidental and intentional learning. Incidental learning is characterized by an absence of intentionality to learn, but might still involve conscious attention to some features of the L2 (Loewen, Erlam, &

Ellis, 2009). In incidental vocabulary learning, learners acquire new words from the context without having the intention of doing so. The major purpose in incidental vocabulary learning is to understand the message of the text (De Ridder, 2002).

SLA researchers and practitioners (e.g., Huckin & Coady, 1999; Hulstijn, 2003; Laufer, 2001; Webb, 2008) are of the same opinion that vocabulary learning mainly occurs through incidental learning. Stated differently, Carlisle (2007) argues that incidental vocabulary learning is the main vehicle by which individuals acquire new lexical items. In incidental learning learners are given a task, but are not informed that they are to be tested (Laufer & Hulstijn, 2001). Incidental vocabulary learning facilitates contextualized learning and gives the learner a richer sense of a word's use and meaning (Huckin & Coady, 1999). In spite of its advantages, incidental vocabulary learning is argued not to be a reliable strategy for expanding L2 vocabulary repertoire. It is argued that the presence of unfamiliar lexical items escape the learners' notice or learners believe that they know them when, as a matter of fact, they do not.

In contrast to incidental vocabulary learning, intentional learning refers to a deliberate effort to commit lexical items to memory (Barcroft, 2009; Chodkiewicz, 2001). Intentional learning also has some problems; for instance, the syllabi of language classes cannot afford the time which is needed for intentional vocabulary learning due to inevitable restrictions in the number of times that teachers and materials writers can focus on intentional vocabulary learning (Schmitt, 2008).

### **3. Lexical Inferencing (LIF)**

Nowadays, SLA researchers argue that lexical inferencing (LIF), which is intimately associated with incidental learning, is one of the paramount strategies which L2 learners resort to when they encounter unknown lexical items during reading (Paribakht, 2004, 2005; Schmitt, 2008; Wesche & Paribakht, 2010). LIF is defined as making informed guesses about meaning of unknown lexical items during L2 reading comprehension based on available linguistic and non-linguistic cues and different aspects of the learner's knowledge (Qian, 2005).

It is argued that there are text-related and readerrelated variables which have an effect on making accurate LIF. Textual variables which might influence the ability to accomplish accurate LIF are word characteristics, text characteristics, the presence of contextual clues, and topic familiarity. Reader-related variables involve L2 vocabulary knowledge, knowledge of L2 grammar, language proficiency, attention to details, cognitive and mental effort, working memory, and reader characteristics (Kaivanpanah & Alavi, 2008). The presence or absence of any of these variables might exert an influence on LIF.

#### 4. L2 Empirical Research Findings

To date, L2 researchers have examined LIF from different perspectives. Kaivanpanah and Alavi (2008) examined the role of L2 grammar knowledge in LIF. They found that the syntactic complexity of texts and the level of L2 proficiency exert an effect on LIF. Their findings provided additional support for the contribution of L2 grammar knowledge in LIF.

Paribakht (2005) investigated the relationship between L1 (Persian) lexicalization of L2 (English) targeted lexical items and L2 learners' behavior during L2 reading tasks. She found that her 20 Persian-speaking English as a foreign (EFL) students knew fewer and derived meanings for more, nonlexicalized targeted lexical items than lexicalized ones. She argued that L1 lexicalization might be one of the factors affecting L2 learners' success in reading comprehension and LIF.

Kondo-Brown (2006) investigated advanced Japanese language learners' abilities to succeed in LIF during reading authentic Japanese texts. She observed that learners often make erroneous LIF. Furthermore, the study revealed that the more proficient learners are able to take advantage from the context more than the less proficient learners.

Nassaji (2003) investigated the use of strategies and knowledge sources in LIF and their relationship with success of LIF. He found that the rate of success was low even L2 learners applied the strategies and knowledge sources they had access. In another research, Nassaji (2004) studied the relationship between L2 learners' depth of vocabulary knowledge and LIF strategy use and success. He found that learners with stronger depth of L2 vocabulary knowledge employ certain LIF strategies more frequently and depth of L2 vocabulary knowledge is of primary importance in LIF success. Moreover, the study indicated that more proficient learners in terms of depth of vocabulary knowledge have recourse often on evaluative and context-based strategies, in particular verifying, self-inquiry, and section repeating.

Hamada and Koda (2010) inquired into the role of phonological decoding in L2 LIF. Two groups of collegelevel L2 learners with contrasting L1 orthographic backgrounds, an alphabetic L1 group and a logographic L1 group, read three passages which included pseudo words and attempted to make LIF. They found that the alphabetic L1 background group outperformed the L1 orthographic background group in decoding, but the participating groups were not different with respect to L2 LIF.

Pulido's (2009) findings provided support for significant roles of L2 reading proficiency and background knowledge in LIF. She concluded that the greater L2 reading skill results in more accurate LIF and LIF is likely to be facilitated when L2 learners are more familiar with the topic of text.

To conclude, it is argued that LIF is not considered to be always a dependable strategy in expanding L2 vocabulary repertoire due to the fact that L2 learners are not equipped with text- and reader-based variables (Fraser, 1999). Additionally, Schmitt (2008) claims that the pick-up rate is relatively low in incidental learning and through LIF. However, we, as L2 researchers and practitioners, should not turn a blind eye to incidental vocabulary learning and LIF.

Rott, Williams, and Cameron (2002) in reaction to the drawbacks concerned employing incidental vocabulary learning and LIF presented some instructional interventions, in particular enhancement of texts to include several types of glosses, repeated exposure to new lexical items, strategy training, access to a dictionary or other multimedia resources, and post-reading vocabulary activities. It is generally assumed that employing glosses might enhance L2 vocabulary learning.

#### **5.** Glosses

Glosses might be employed as textual definitions, pictorial glosses, or interactive multimedia elements. Lenders (2008) offers three kinds of glosses, namely dictionary-type glosses, ready-made glosses, and special types of glosses. Dictionary-type glosses provide information about the meaning/s of a targeted lexical item in the form of a definition, antonym, synonym, L1 equivalent, phonetic script, or example sentences. Readymade glosses might contain a spoken or written L2 definition, an L1 translation, or a still or moving image depicting the targeted word. And, special types of glosses which in addition to providing information about a targeted word include a task for the learner such as multiple-choice glosses.

Glosses are easier to use than dictionaries, they assist to connect words to meanings immediately, they draw L2 learners' attention to targeted lexical items; and finally, they encourage L2 learners to move back and forth between targeted lexical items and glosses, triggering them to accomplish lexical processing (Nagata, 1999). Enhanced comprehension, increased vocabulary learning, student preference, and greater use of authentic texts are among the reasons for the prevalence of employing glosses in L2 learning contexts (Jacobs, Dufon, & Fong, 1994).

### 6. L2 Empirical Research Findings

To date, the effectiveness of glosses on prompting L2 vocabulary learning has been the focus of substantial L2 research. A majority of L2 research examining the effect of glosses on L2 vocabulary learning (e.g., Abuseileek, 2008; Alessi & Dwyer, 2008; Cheng & Good, 2009; Chun & Plass, 1996a, 1996b; Kim & Gilman, 2008; Nagata, 1999; Rott, 2006; Rott & Williams, 2003; Xu, 2010; Yanguas, 2009; Yoshii, 2006) have endorsed the positive impact of glosses on L2 vocabulary learning.

Focusing on the language of glosses in L2 reading on computer and learners' preference, Bell and LeBlanc (2000) observed that the learners were in favor of L1 glosses. In similar studies, Chen and Good (2009) and Xu (2010) confirmed this finding.

Ko (2005) made a comparison between L1 and L2 glosses whose result was in favor of L2 glosses. Taylor (2006) conducted a meta-analytic research and found that learners provided with L1 glosses through computer comprehended substantially more text than learners who were given traditional, paper-based L1 glosses.

Another aspect of glosses is whether to use single glosses (meaning-given) or multiple-choice glosses (meaning-inferred). Hulstijn (1992) arguing that easy access to single glosses prevents in-depth processing, proposed multiple-choice glosses, in which the reader is required to choose the correct choice. The involvement load hypothesis (ILH) supports multiple-choice glosses. ILH argues that vocabulary learning and retention are dependent on the amount of mental effort or involvement that a task imposes (Hulstijn & Laufer, 2001). It argues that the higher amount of involvement load prompts the possibility for L2 vocabulary learning. The findings of L2 research regarding single glosses and multiple-choice glosses (e.g., Hulstijn, 1992; Nagata, 1999; Rott, 2005) are in favor of multiple-choice glosses.

Glosses might also be textual or textual with picture. The findings of L2 research show that learners learn better from words and pictures than from words alone (Clark & Mayer, 2008; Fletcher & Tobias, 2005).

Akbulut (2007) studied the effectiveness of three kinds of multimedia glosses, including definitions of words, definitions coupled with associated pictures, and definitions coupled with associated videos, on L2 vocabulary learning and reading comprehension. The results obtained from data analysis showed that the groups which had access to definitions along with both types of visuals, namely pictures and videos outperformed the other participating groups.

Chun and Plass (1996a) observed significantly better gain in terms of vocabulary learning for words which were glossed with text coupled with pictures than for those with text plus video or text only. In similar L2 studies, Kim and Gillman's (2008) and Shahrokni's (2009) findings provided additional support for the effectiveness of pictorial glosses. Finding of the study carried out by Al-Seghayer (2001) showed that combining text and video was more effective than text and picture.

Yanguas (2009) investigated the effect of textual, pictorial, and textual coupled with pictorial glosses on L2 vocabulary learning. The data analysis revealed that all multimedia glosses groups outscored the control group and the textual coupled with pictorial glossing group performed better than the other participating groups in terms of L2 vocabulary learning.

#### 7. Discussion and Conclusion

The current paper set out to continue the line of L2 research attempting to attain a better understanding of the ways for prompting L2 vocabulary learning. With regard to glosses, there is a need for further studies to examine the effect of multimedia glosses on learning of collocations and idioms and the effect of multiple-choice glosses in multimedia environments. It might also be desirable to explore the effect of repeated exposure on L2 vocabulary learning in multimedia context.

Additionally, future studies can examine the effectiveness of multimedia software, namely multimedia glosses on L2 vocabulary learning in mobile-assisted language learning context. Applying think-aloud protocols can clarify other aspects of multimedia glosses. Further L2 research is needed to examine different strategies deployed by L2 learners in different multimedia glosses conditions. Another area which needs further research is individual differences. Future L2 studies might investigate the effect of cognitive styles on taking advantage of multimedia glosses.

With respect to LIF, future L2 research might examine the effect of collaborative tasks on enhancing the effectiveness of LIF. As noted earlier, LIF is one of the min strategies which L2 learners fall back on during reading and L2 vocabulary learning, so it would be desirable to conduct more studies examining ways for alleviating the dilemma of mediating variables in LIF.

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