

A review of incidental and intentional L2 vocabulary learning

1. Introduction

After decades of neglect, recently the significant roles of teaching vocabulary have been recognized. Accordingly, in the past twenty years or so, L2 vocabulary learning has become a growing interest from researchers, educators and materials designers (Griffiths 2003, 2006). One of the major issues in vocabulary learning literature is ‘What is the main source of L2 vocabulary?’ The notion of vocabulary acquisition is generally associated with pedagogical approaches to teach vocabulary and strategies used by learners themselves (Hedge, 2000). Among these approaches of teaching vocabularies, intentional and incidental acquisition of new vocabulary items has attracted a number of attention leading to influential and practical pedagogical implications. This critical review will provide the definition, rationale and some studies on intentional and incidental L2 vocabulary learning; based on these insights, pedagogical implications are discussed.

2. Definition and Rationale of intentional and incidental vocabulary learning

2.1 Definition and Rationale of intentional vocabulary learning

In the context of vocabulary learning, intentional vocabulary learning referring to any activity targeting at committing lexical knowledge into learners’ memory (Laufer & Hulstijn, 2001; Laufer, 2003; Hulstijn, 2003). In other words, intentional vocabulary learning indicates the deliberate effort to acquire thousands of words along with grammatical words through direct teacher’s instruction and the application of customized vocabulary learning strategies. Similarly, Elgort & Nation (2010) [WU1] stated that deliberate techniques are useful approaches to accomplish L2 vocabulary acquisition successfully and efficiently. In addition, the intentional vocabulary learning always concentrates on the vocabulary item

itself, and integrates with all types of conscious lexis acquisition strategies and processes of memorizing words (Yali, 2010). Particularly, deliberate vocabulary acquisition techniques are learning new words from vocabulary notebooks, wordlists, flashcards (Elgort & Nation, 2010) or activities such as multiple-choice exercises, matching and fill-in the-blank activities (Hulstijn, 2005)[WU2] .

The basic rationale for intentional vocabulary acquisition is justified in Schmidt's noticing hypothesis (1990) that considers noticing as the crucial condition for L2 acquisition. When applying this hypothesis to lexical learning and development, learners are required to notice consciously to features in the L2 input and deliberately focus on form-meaning relations of vocabulary items to enhance L2 vocabulary learning. Because of this rationale, vocabulary items are normally taught directly and explicitly in language classrooms, especially in learning language as a foreign language context in order to make up for the limited exposure of native language.

2.2 Definition of Rationale of Incidental vocabulary learning

According to Richards & Schmidt (2002), incidental learning is the progression of learning one thing while intending to learn another and do not have the intention of learning this thing. Hulstijn et al. (1996) emphasize the notion of incidental learning is "learning in the absence of an intention to learn" (as cited in Gass, 1999). Laufer (2003) defined incidental vocabulary learning as "a by-product of any activity not explicitly geared to lexical acquisition" (p. 574).

In the L2 vocabulary acquisition context, incidental vocabulary learning refers to the practice of acquiring lexical knowledge when the particular vocabulary item being acquired is not the main concentration of both the teaching and learning activity (Ender, 2016). Similarly, Yali (2010) pointed out that while intentional vocabulary learning is related

directly to the vocabulary items themselves, incidental learning always means the approach of vocabulary acquisition through texts, engagement in tasks or carrying out other activities that are not directly associated with vocabulary. The learners' determination is participation in the activity or comprehension of a certain idea, but during this progression they will learn some vocabulary without making a conscious attempt (Ellis, 1994; Hulstijn, 2001).

In his review of 144 previous researches, Krashen (1989), contended that incidental acquisition of vocabulary transpires through the process of his Input Hypothesis in which the comprehensible input from reading results in the natural acquisition of vocabulary. Krashen's (2003) Comprehension Hypothesis asserted that comprehensible input is an essential and satisfactory circumstance for language development. As pointed out by Schmitt and Schmitt (1995), the Processing Hypothesis suggests that mental processes which are involved in more intricate thinking or manipulation of a new vocabulary will assist learners in the acquisition of that word.

3. Research on L2 vocabulary learning

3.1. Intentional L2 vocabulary learning

The research of Webb (2017) demonstrates that deliberate vocabulary teaching and learning can expand knowledge of vocabulary rapidly and efficiently.

Activities for intentional L2 vocabulary learning

There has been a relatively limited number of potential vocabulary acquisition activities and tasks and their comparative effectiveness remain unclear. However, almost all activities that create greater exposure, attract more attention and manipulation or increase the time spent on the lexical items seems to enhance the learning process (Schmitt, 2008).

Vocabulary evaluation and testing and some out-of-date activities can also be efficient. For instance, bilingual word lists have proved to be useful, both productively and receptively, in the learning of new words and retention of these newly known vocabularies (Yamamoto, 2014).

Arguments regarding intentional vocabulary learning

Regarding the use of intentional learning, L2 educationalists According to Nation (1980), learners have the ability to acquire from 30 to 100 new vocabularies that are taught by bilingual word pairs. In addition, Hulstijn (2001) analyzes that L2 educationalists normally value the roles of incidental L2 vocabulary learning while devaluing the roles of intentional one because they believe that incidental practices lead to higher quality of knowledge processing and thus, of better retention. Nevertheless, Hulstijn (2001) makes it clear that ‘this is not necessarily the case’ (p. 276). Particularly, incidental activities encourage learners to acquire new words elaborately by involving in the following activities: reading the passages, find the meaning of new words in the dictionary, summarize the content in a limited length of words and learn by heart these new words; later on, learning will be tested on the knowledge of these words extracted from the passages. Besides, Elgor (2011) points out that it is not possible to assume that the quality of acquired vocabularies through decontextualized conditions (intentional learning) is at the required level for real language usage. Elgor (2011) also concluded that due to the lack of existing empirical evidence, the question remains whether intentional learning is not only an *efficient* but also *effective* method of vocabulary acquisition (p. 369).

In most of the published teaching resources for students at beginning and intermediate levels (including textbooks and multimedia software), a selected source of core vocabularies

is explicitly imparted and rehearsed through a wide range of techniques and activities (Nation, 1990). Similarly, Hulstijn (2001) finds out that L2 teaching materials at beginning and intermediate levels introduce a focused core vocabulary of up to 2,000 high-frequency words that were designated based on their frequency and range and possibly also on some secondary criteria (i.e coverage, availability, and difficulty levels). Coady (1993) also supports the introduction and explicit teaching of core vocabularies at an early period of acquisition; after that, these base vocabularies should be learned in contextual learning in the later phases to the point of automaticity.

However, it should be worth noticing that most L2 learners have to learn a larger number of vocabularies beyond this core vocabulary source. In other words, there are some vocabularies that are not frequently exposed during usual reading or listening tasks (Hulstijn, 2001). In order to increase the retention of these words, it is required that language learners are equipped with the awareness of the characteristics and coverage of their challenging vocabulary acquisition tasks and are trained applicable strategies for coding and memorizing new vocabularies (Hulstijn, 1997; Schmitt & McCarthy, 1997). Furthermore, Brown (1993) identifies two crucial factors influencing the acquisition of vocabularies: ‘frequency of occurrence’ – the number of times learners encountering a word , and ‘saliency’ – the importance of this word (p. 265)

3.2. Incidental L2 vocabulary learning

The number of exposures necessary to learn vocabulary incidentally

Many different research results have been gained in the frequency of exposures needed to learn a word incidentally. Nation (1990) pointed out that 5 – 16 encounters from

reading are sufficient for learners to learn a word. Meanwhile, other researchers indicated that as few as three exposures are needed in order to acquire the meaning of a target vocabulary provided that the reading text is stimulating for the learners (Reynolds et al., 2015). In a study of Horst, Cobb, & Meara (1998), pre-intermediate EFL learners were requested to read a 109-page book in a 10-day period. This research concluded that a 20% pick-up ratio is achieved and vocabularies that are repeated more than eight times in the reading text were more likely to be acquired than words that were recurrent less.

Although research results seem to vary significantly, the researchers seem to agree that the number required to mastering a new word depending on different factors such as:

(1) the aspects of vocabulary being measured. For example, 8 – 10 exposures are required for learners to read new vocabularies as quickly and correctly as formerly acquired words (Pellicer-Sánchez, 2016). Similarly, in order to accurately answer multiple-choice questions related to form-meaning vocabulary items in tests, 8–10 exposures are adequate (Schmitt, 2008).

(2) the ‘productivity’ of contextual reading hints and the weightage of the vocabulary in this context (Brown, 1993)

(3) the learners’ attentiveness and the quantity and quality of their current range of vocabulary (Nation & Hwang, 1995).

Extensive Reading

In order to ensure these repeated exposures, teachers need to increase the likelihoods for their language learners to contact with L2 vocabularies either inside or outside the classroom, and one of the most common methods of doing this is using extensive reading.

Extensive reading is a pleasurable reading setting in which teachers motivate their students to select the reading materials they want to read following their interest and ability to understand (Harmer, 2003; Dupuy & Krashen, 1993[WU3] ; Nation, 2001). The common language acquisition development gained from extensive reading is incidental, with limited learning requirements from the teacher (Widdowson, 1979)[WU4] .

Krashen's (2003) comprehension hypothesis argued that extensive reading provides the necessary condition for language development. Particularly, by provide learners with engaging language literature, the aspirations of extensive reading are to enhance reading fluency and other reading skills and strengthen previously known grammatical structures and vocabulary simultaneously (Krashen, 2003). Additionally, the incidental language learners not only learn word meanings but also enhance the probabilities to sharpen the sense for collocations and colligations that seems to be difficult to learn for EFL students (Bahns & Eldaw, 1993).

Furthermore, Nation & Wang (1999) [WU5] suggested that rather than concentrate on acquiring totally new words, extensive reading could be adopted to reinforce incompletely acknowledged vocabularies so that these words may build up to known words. However, they do not eliminate the acquisition of completely new words. Also, the principal focus of extensive reading is read for pleasure that is expected to lead to the increase and improvement of learners' L2 vocabulary (Uden, Schmitt, & Schmitt, 2014); overall language enhancements (Cho & Krashen, 1994; Elley, 1991)[WU6] ; boost learners' motivation for reading (Krashen,

1994); increase motivation to learn new foreign language and renew language learners' confidence in reading (Brown, 2000) and enhance other productive skills including writing and speaking (Krashen, 1994).

Listening Activities and Media Exposure

3.3 Comparative research between intentional and incidental L2 vocabulary learning

Barcroft (2009) carried out an empirical research to compare intentional and incidental vocabulary acquisition in terms of L2 (English) synonym creation among 114 immediate-level learners. Compared to learners who were asked to read for meaning only, learners who learn the target word intentionally with instruction and request to create synonyms perform more positively in L2 form-meaning test. However, in the text comprehension activities, the incidental group outperforms the learners whose attention is trying to remember the target vocabularies. Overall, the researcher emphasized the positive indication of the direct and deliberate instruction.

Aiming to investigate how intentional and incidental activities have effects on the new words acquisition, Laufer and Rozovski-Roitblat (2011) [WU7] found that deliberately tasks – focusing on the form-meaning identification (such as matching words with their meaning, synonym of antonym; choosing the appropriate definition in multiple-choice questions or fill-in the target vocabulary in sentences) were more efficient and effectively than incidental ones. Additionally, intentional activities are more likely to increase long-term retention of vocabulary. Likewise, Hustijin (2003) stressed that intentional vocabulary learning attempts are worth to spend efforts because the retention rates of deliberate vocabulary acquisition are normally greater than incidental learning.

Similarly, after conducting a series of experimental studies, Elgort (2011) stressed that intentional vocabulary learning is more effective than incidental one. More particularly, intentional tasks concentrate on repetition and memorization tactics completed on a short-time basis that could accelerate learners' lexical development process. In contrast, the incidental vocabulary learning normally is associated with long-term and extensive contact to language input. This natural foreign language environment is not common in EFL contexts.

Meanwhile, there are some researches demonstrating that substantial vocabulary range can accumulate incidentally through reading-related tasks; however, in comparison with intentional learning, the take-up rate is commonly slower and more irregular (Gass, 1999; Hulstijn, 2013)[WU8] . Also, incidental L2 language learning is found to be efficient to acquire words within context (Day, Omura, & Hiramatsu, 1991).

The combination of intentional and incidental vocabulary learning

In their book, Webb and Nation (2017) [WU9] point out that Krashen's Input Hypothesis fails to consider the the relatively limited exposure to target language in most EFL context the volume of known vocabulary of EFL learners is normally too small, due to the deficient language input; therefore, incidental learning may be more effective for more advanced level learners. Based on these arguments and study of a number of well-studied strategies, they propose the combination of deliberate learning with a great deal of incidental learning as a remedy.

While intentional vocabulary acquisition that focused on words should be adopted to expand learners' vocabulary size and depth (Yamamoto, 2014); intentional tasks should be combined with incidental that focuses on context-oriented activities. This combination could consolidate the previous vocabularies acquired through deliberate learning with the depth of knowledge related to these words (Laufer & Nation, 2011). Nation (1990) makes a clear

classification that: the meaning of words and the inference between words are the main results of intentional learning; meanwhile, the vocabulary forms, parts of speech or collocations are acquired through incidental vocabulary learning. Therefore, Nation (2013)[WU10] concluded that the best-practice approach for vocabulary instruction is the combination of intentional and incidental vocabulary learning.

4. Pedagogical Implications

The above discussed concepts and issues lead to the pedagogical implications regarding the combination of intentional and incidental vocabulary, the development of autonomous vocabulary learning and the detailed suggestions for Vietnamese EFL context.

Firstly, regarding the combination of intentional and incidental vocabulary learning, L2 teachers should adopt and adapt the cognitive psychological suggestion that the retention of new words, both by committing the knowledge into their memory and with the intention to acquire the knowledge during reading or other activities, mainly depend on the type of information processed. The more a language learner focuses on a word's features (phonological, morphological, semantical and pragmatical features) and on the intra-word and inter-word connection, the higher possibility that this vocabulary will be retained (Hulstijn, 2001)

Secondly, because there are a large number of words that a learner needs to acquire and there is limited classroom time that can be arranged for vocabulary learning, it is essential that teachers encourage their language learners to develop their autonomous vocabulary learning efficiently and effectively. This learning strategy could contribute greatly to both inside and outside classroom learning, either current or future learning of the learners. Webb & Nation (2017) suggested the key strategies for developing autonomous learners

including by increasing the exposure with L2 outside the classroom and encouraging their use of L2 outside the classroom, learning the word parts from affixes and stems and learning how to guess from context. In addition, teachers should provide meaning-focused input, consider the use of flashcards and teach students how to use dictionaries effectively. The effectiveness of these vocabulary strategies requires the deliberate and repeated learning of the strategies during every class session, together with proper training, monitoring and evaluation.

Also, with the current EFL context for most of Vietnamese secondary school students in which they do not have the frequent encounter with new words both inside classroom and outside classroom, only having exposure with vocabularies is not adequate for effective vocabulary expansion. Therefore, teaching vocabulary remains intentionally and incidental strategies seem to be more effective for intermediate to advanced English learners who already have a foundation of language skills. When teaching vocabulary deliberately, rich and elaborate lexical knowledge processing is not sufficient because the retention of new words will be low in learners' memory if the vocabularies are not frequently re-activated (Hulstijn, 2001). Therefore, if the learners regularly engage in the productive and receptive skills, the exposure of high-frequency vocabularies will occur naturally. Also, when applying incidental vocabulary learning and for the low-frequency words, learners should apply decontextualized skills and note down the lexical items during reading. In addition, Nation & Meara (2002) suggested one of the promising vocabulary acquisition activities focus on meaning-focused output. Particularly, learners are stimulated to use vocabularies in new contexts.