関西大学学術リポジトリ
Kansai University Institutional Repository

Considerations and strategies in L2 vocabulary acquisition among Japanese 1st year university students.

Considerations and strategies in L2 vocabulary acquisition among Japanese 1st year university students.

Oliver Dammacco

This article proposes a framework of strategies[1] for L2 vocabulary acquisition among low-to-mid level L2 learners in their first year at Kansai University. The framework relies upon considerations posited by Kudo (1999), as well as, Hunt and Beglar's (2005) model for developing EFL reading vocabulary, although the objective for our target learners is to facilitate vocabulary acquisition in a learner-centered communicative context, where possible. This paper firstly underlines the critical role of vocabulary in second language acquisition, while raising awareness of the surrounding pedagogic climate in Japanese secondary education.

Introduction

While it can be said that successful SLA rests upon the motivation of the learner, vocabulary represents the fulcrum of effective communication. In the everyday situations as foreigners in Japan, it is our pending knowledge of the L2 lexicon, which will enable us to communicate basic needs and even to solve problems or meet specific objectives, in the face of social ambiguity and affective responses, which result from intercultural anxiety and other sociolinguistic parameters. For the purposes of basic survival in the L2 community, useful words and expressions take precedence over the syntactical features that actuate them. Several prominent researchers have underlined the importance, if not critical nature of vocabulary in both the L1 & L2 acquisition context (see Ehren, 2002; Graves, 2006; Nunan, 1991; Read, 2000; and Zimmerman, 1997). To state it more holistically: "The heart of language comprehension and use is the lexicon". (Hunt & Beglar, 2005, p.2)

What then can be determined of the typical learning experience in Japanese secondary education with respect to L2 vocabulary acquisition? That is to say, what teaching and learning strategies have been favored among our current 1st year students?

It should firstly be noted that the Japanese Ministry of Education (hereafter Monbusho) has generally maintained stringent control over the English curriculum content of vocabulary, as

well as methods of instructions and most notably, testing, which itself underlines the overall pedagogic approach in English education (Hisano, 1976; Morrow, 1987). More specifically, the size and type of vocabulary (see Bowles, 2000: Appendix A) to be taught has been prescribed centrally serving as decontextualized data to be memorized and periodically tested upon.

Bowles (2000) notes several problems in the lower secondary education context: The Monbusho–prescribed vocabulary list does not clearly link in with the contents of its recommended textbooks. Additionally, reading sections tend to be omitted by Japanese English teachers for reasons given concerning time limitation and centrality. Also, lexical items with multiple meanings are not defined as such undermining the Monbusho's desire to expose learners to high-frequency words. An example given by Bowles is *fall*, which is defined only as a synonym for *autumn*, although the standard definition of *fall* is classed as a lexical item of high frequency.

Suggestively, learners in the secondary education context are primarily exposed to a strategy of rote learning, which to a greater extent, limits the use of alternative learning strategies, and which might otherwise require deeper cognitive processes, rather than concern for examination pressure.

While the introduction of native assistant English teachers (AETs) since 1987 under the Monbusho-sponsored Japan Exchange and Teaching (JET) progamme, has resulted in greater communicative exposure, the nature of such cognitive strategies has been limited to basic drill patterns such as repetition, shadowed by the constraints of testing criteria, aforementioned.

In more recent years, native English teachers working within their own classrooms (as opposed to AETs), is more commonplace in Japanese secondary education, particularly in the private sector. To what extent this has had an impact on the types of strategies employed in L2 vocabulary acquisition needs to be further investigated and documented. While the exposure to 'occidental' and possibly more varied styles of teaching and learning may have encouraged other social and cognitive types of strategies, it is questionable as to how much impact this will have had on the socio-culturally deep-rooted testing system rigidly found in all scholastic fields to which the learners and educators alike are accustomed and regard, or at the very least accept as pedagogically valid.

In the next two sections, we will cover a review of the literature. The first section summarizes two studies of Japanese high-school students' L2 vocabulary learning strategies by Kudo (1999), the results of which reflect the overall assessment described above.

Four types of strategies

Kudo (1999) conducted a pilot study by way of a questionnaire containing 56 vocabulary-learning strategies. The study included 325 respondents across 3 Japanese high schools. A second and modified study involved 504 high-school students from a cross-section of 6 high schools. In both cases, students' ages ranged from 15-18, and those with experience in studying in English-speaking countries were excluded.

Kudo's study provides useful insight into L2 vocabulary preferences among learners. He firstly identified 4 categories of strategies, the definitions of which have been adopted from Schmitt (1997) with the exception of number three: 1) Memory strategies; 2) Social strategies; 3) Cognitive strategies; 4) Metacognitive strategies. He explains each as follows:

1) *Memory strategies* - The linking of new words and phrases to prior knowledge or experience. However, in shallower memory strategies, simply rote learning.

2) *Social strategies* - The interaction with peers and/or teachers resulting from enquiry and/or confirmation regarding new words & phrases. This also includes the scheme of consolidation i.e. reviewing the meanings of previously studied lexicon through social confirmation. (See also O'Malley & Chamot, 1990).

3) *Cognitive strategies* - Manipulation (and therefore understanding) of the lexicon presented in order to produce new language, while on the less challenging end, reproducing the lexicon through simple oral repetition. (See Oxford, 1990).

4) *Metacognitive strategies* - The learner's general awareness of how best to learn/approach L2 vocabulary according to personal needs/preferences.

He found that students rarely employed *social* strategies in L2 vocabulary acquisition, suggesting little or no collaboration in their learning process, with the implication (we might infer) that learning is a receptive process as a result of a top-down classroom dynamic, characteristic of the Japanese school system. Although still yielding a low mean overall, the highest specific *social* strategy was asking AETs for an example sentence that would highlight the new lexical item.

In relation to the above, respondents indicated little or no application of *metacognitive* strategies since, for example, social inaction reflected lack of premeditation or consideration for how best to learn. In further support of this, respondents expressed shallow-end *cognitive* and *memory* strategies as the most frequently employed, which included the use of bilingual dictionaries, verbal repetition and rote learning. These findings also support the wider literature available.

In the final analysis, the lack of interactive exposure, as well as, the absence of deeper *cognitive* and *memory* strategies that in turn reflect low *metacognitive* awareness, offer insight into the challenges we as university instructors are likely to face in the quest to promote an autonomous learner-centered communicative climate.

Two approaches in context

Hunt and Beglar (2005) propose a framework for EFL vocabulary development, based on two approaches: 1) *explicit* instruction and learning strategies and 2) *implicit* instruction and learning strategies. By explicit, they intend: "direct learner attention" that is, deliberate awareness-raising of specific lexical items to be noted by the learner (p. 24). The second term *implicit,* however, describes the process of 'attracting' (see Doughty and Williams, 1998) or drawing the learner towards the surrounding lexis of a given topic or theme, while ensuring the least possible interference in the overall flow of meaning or in other words, message of the text. They furthermore state the *explicit-implicit* model can be seen as a continuum, whereby specific learning tasks may include both in variant proportions.

Within the framework of *explicit* instruction, Hunt and Beglar (2005) include the study of decontextualized lexis that is, independent word lists, the use of dictionaries, and inferring from context[2]. In contrast, *implicit* instruction refers to building vocabulary *size* (or breadth) mostly through meaning-focused reading with some fluency-based tasks.

Explicit instruction, they posit is beneficial for low-level learners in that it may create greater opportunity for *noticing* and *recycling* of lexical items, both of which, according to Prince (1996) are likely to result in the effective internalization of the lexicon, provide the learner pays attention to both form and meaning. Another justification is that low-learners do not have a sufficient database of vocabulary to effectively infer from (extensive) meaning-focused text (under the guise of *implicit* instruction). This has been referred to as Beginner's Paradox[3]. An explicit approach, particularly through the use of decontextualized lexis, addresses this problem and can help expand vocabulary *size*. Also *explicit* instruction taps into learners' *metacognitive* and *cognitive* processes, which are likely to result in the application of more sophisticated strategies in these respects, as learners advance their lexical knowledge.

Implicit instruction is characterized by tasks such as extensive reading and 'narrow' reading that is, a variety of texts surrounding the same topic or theme. This exposure may lead to consolidation of the lexicon, as well as, polysemic improvement, otherwise vocabulary *depth*. Furthermore, extensive reading places lexical items in context, exposing the learner to more

complex semantic associations or language chunking (see Ellis, 1995), which underpins the route to oral fluency. A stark difference between native and non-native speakers of English as noted by Zhao (2010) is the frequency and accuracy in using language chunks for communicative purposes. She states that psycholinguistic research reveals that: "polysemous senses are realized in context, and that chunks are units in the mental lexicon. Frequently used lexical chunks are represented as separate units in the native speaker's mental lexicon" (pp.9-10). This strongly suggests that native-like fluency necessitates the acquisition of language chunks. Hunt and Beglar (2005) underline the importance of approaching text-based tasks in a variety of ways in order to increase lexical input (and hopefully intake) in the route to developing fluency. We might also add that text-based activities can be collaborative and indeed, communicative which may result in an increase in the rate of communicative development. (This is further discussed in the next section).

Hunt and Beglar (2005) argue for combination of the two above-stated approaches, given their interdependence in achieving a greater database of vocabulary, consolidating this, and developing fluency from this platform. However, they also point out that such a combination must be carefully balanced, while hinting that *implicit* instruction is the primary route to building fluency based upon Kintsch's (1998) notion that: words become significant (and thus can be inferred: more likely to result in successful acquisition) when they are, for example, hypernymically linked.

The aim of the next section is to collimate the ideas presented in order to formulate a theoretical blueprint with the aim to enhance L2 vocabulary acquisition among our target learners that is, 1st year university students of Kansai University pursuing English for communicative development.

Moving towards a collaborative environment

It would be imprudent and empirically unjustifiable to assume one particular approach can override another and successfully result in optimal L2 vocabulary acquisition. For this reason, Hunt and Beglar's (2005) proposition in combining both *explicit* and *implicit* instruction is favorable for our purposes, with a desire to promote learner collaboration. On the one hand, they put forward that *explicit* vocabulary instruction is better suited for low-level learners, among other reasons, so as to minimize Beginner's Paradox, while also maintaining that *implicit* vocabulary instruction is better suited to the development of fluency. In view of the research, Nielsen (2003) suggests starting with greater emphasis on decontextualized lexis for

lower-level learners and gradually shifting towards more context-based lexis as the learner progresses. Therefore the proposed framework for L2 vocabulary instruction should reflect the following two criteria: 1) that greater weight should be given to *explicit* instruction at the outset; 2) that the early stages of the course should focus on decontextualized lexis. This is supported by new students' affective predispositions for example, *anxiety*, as well as, the likelihood of weak-to-moderate lexical knowledge and overall communicative skills. Furthermore, learners will need time and exposure in order to mature and become familiar with a system that is quite different to that previously encountered: a system that promotes and expects learner autonomy (learner ownership and independence from the teacher) and learner collaboration (interaction and interdependence of learners), in the aim to improve communicative competence.
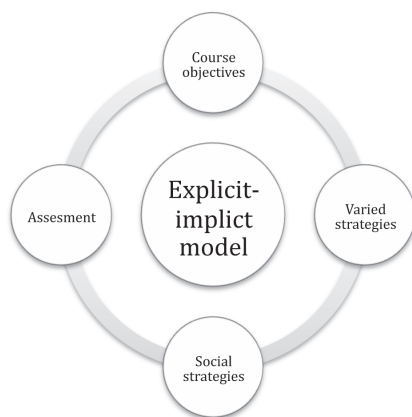
Figure 1　Framework integrating L2 vocabulary instruction and learning
strategies, designed to address 1st year university students.

This model (Figure 1) can be seen on two plains: 1) at the macro-level, a cycle representing an entire course (or semester); at the micro-level, a cycle for each module[4] introduced. Ellis (1995) suggests a notional-functional approach[5] is best suited for early fluency development among lower-level learners.

Early modules should be represented by fewer lessons where by the topic or theme is not drawn out, favouring activities such as 'narrow' reading for example and focussing on building vocabulary *size*. This is a prerequisite for the later development of vocabulary *depth,* as underlined by Richards (2011), in his study of university learners, in which those who performed well in vocabulary *size*-based tests also achieved better results in vocabulary *depth*-based tests. As the course advances, the duration of modules may increase, reflecting a shift towards

implicit instruction, with greater emphasis on learner autonomy and collaboration. This translates to fewer topics or themes being introduced in the second semester, permitting the introduction of various texts surrounding the same topic or theme, which offer, for example, richer lexical knowledge in context, exposure to polysemy and more complex language chunks (or formulaic language). Thus, learners will need exposure to a multifaceted approach in the overall course objectives, in which for example, associations between words can be noticed, and rule-based knowledge developed. Ellis (1995) refers to this association between words as semantic meaning and maintains that learners will later need to understand not only semantic but also pragmatic meaning, which he defines as: "highly-contextualized meanings that arise in the acts of communication" (p. 10). In summary then, it is proposed that early instruction should be characterized by an *explicit* type of instruction, shorter modules in which the focus is on decontextualized lexis, but with some context-based material, and by functional-notional based communicative activities. However, it is still important to encourage learners to notice and try out various L2 vocabulary strategies, at the outset.

Through the introduction of *varied strategies* (Figure 1), learners can be exposed to a greater number of L2 vocabulary strategies, raising their meta-cognitive threshold, and thus helping them to make informed choices about their learning. This stage in the cycle should be reintroduced at various intervals, particularly in the first semester. One reason for this stems from the observation by Schmitt (1997), whereby Japanese learners in the secondary education context may not be ready that is, mature enough[6], to engage in deeper *cognitive* and *memory* strategies. The passage into university represents a stepping-stone to maturity and independence; both teaching and learning styles should reflect this. The discovery of new and deeper L2 vocabulary strategies can: 1) enhance learner motivation and thus, autonomy; 2) lead to improved long-term retrieval of the lexicon, strengthening communicative competence. It is believed that as learners advance in L2, they will begin to see the value of deeper *cognitive* and *memory* strategies, and so gradually discard the shallower ones.

While it is important to review various L2 vocabulary strategies periodically, the overriding course objectives presented that is, to facilitate oral communication, require focus on *social* strategies, which promote learner autonomy and collaboration. The gaps in lexical knowledge and lack of social-dynamic exposure are a result of previous learning environments need to be addressed. The time constraint of 90 minutes per week in the classroom, underlines this need. At the outset, it is recommended that decontextualized lexis include some degree of basic formulaic language (or language chunks) such as useful expressions for basic communicative interaction in order to help fill speech voids. Both Ellis (1996) and Hunt and Beglar (2005)

offer that formulaic language can be presented in increments of progressive difficulty, which can highlight basic lexical phrases and collocations. It is this chunking that can: 1) result in the internalization or long-term knowledge (Ellis 1996), and 2) can fill the pauses and move learner closer to fluency (Wood, 2001; Zhao, 2010). As learners become more advanced, the exposure of language chunks should be greater, as (stated in the previous section) studies indicate that native-speakers use a great deal of 'chunking', while non-native speakers do not (Zhao, 2010). Furthermore, Wood (2001) points to the ample documented evidence concerning the key role formulaic language plays in speeding up the rate of speech. It is also recommended that the use of text should be task-based beyond the initial stages of the course. Text can serve as a platform for a variety of communicative activities[7], which are task-based. A study by de la Fuente (2006) indicated that task-based vocabulary activities resulted in better long-term recall of the lexicon. This underlines the need for the development of *social* strategies within the classroom in which learners gain a sense of autonomy and collaborate.

In addition, learners should be encouraged to collaborate outside of the classroom. As previously stated, 90 minutes per week is limiting for their communicative development. Additional tasks that is, homework should be designed as collaborative projects, which encourage, if not force learners to become interdependent, providing the set-up is attentive to all learners within the group that is, each member is given a clear goal, particularly in the early stages of the course. Materials can incorporate both decontextualized lexis and sections, for example, of text to be analyzed, with elements of practice and review, as well as discussion. Invariably this is likely to occur in L1 (with minimal L2 reference) early on, although it does create a setting for the negotiation of meaning, which Hunt and Beglar (2005) point out is highly beneficial in the learning process. We might expect a range of abilities within groups, and this is particularly useful and possibly encouraging for lower-level learners. Such out-of-class group tasks can serve as preparation for later activities within the classroom again depending on how efficiently and tangibly they are set-up by the teacher. With more advanced learners, and as we move towards an *implicit* style of instruction, learners are more likely to be engaged in extensive reading such as 'narrow' reading, through learner-selected texts. This suggests two outcomes: 1) greater motivation since the learner selects own material and, that 2) the material itself is likely to be authentic input, rich in polysemy and various forms of language chunks. Again, utilizing out-of-class time in this way, can save precious time in the classroom, in which preparation is less likely to be needed for imperative activities such as L2 discussion, debate or presentation.

The final consideration and component of the cycle in Figure 1, *assessment*, refers to

student evaluation, taking into account student lexical knowledge on several levels. While we have maintained throughout this section that a gradual shift in weight should occur between *explicit* and *implicit* instruction, the necessity for both in all stages of the course is evident.

In this respect, evaluation needs to be twofold:

1) Within the scope of features found in *explicit* instruction e.g. decontextualized lexis, periodic vocabulary quizzes should be administered that require some degree of orthographic[8] focus, as well as inferring from context[9].

2) In order to satisfy the course objectives, both in terms of content and construct validity fluency-based testing needs to be conducted periodically, where possible. Learners should be evaluated according to a meticulous and systemic rubric of assessment that aims to measure various aspects of fluency (for suggestions see Fillmore, 1979), as well as, taking into account both L2 vocabulary size and *depth.* Alternative and additional forms of testing L2 vocabulary *size* and *depth* are described in Richard (2011).

This completes the cycle in Figure 1.

Conclusion

According to the research on L2 vocabulary acquisition in Japanese secondary education (Schmitt, 1996; Kudo, 1999), a large number of learners entering the 1ˢᵗ year of university are likely to have been exposed to and employed limited vocabulary learning strategies. Characteristic examples include, lack of collaboration, preference to rote learning, and shallow cognitive strategies such as verbal repetition. As a result of this (and concerning vocabulary *size*), learners are often unable to retrieve a number of the prescribed lexical items in the long-term that is, post-testing. With respect to vocabulary *depth,* the Monbusho-prescribed textbooks reflect a monosemic bias (see Bowles, 2000), placing the learner at a further disadvantage. Further research (although at the university level), shows a strong correlation between *size* and *depth*, when students were tested on both of these aspects (Richard, 2011). Since learners in the secondary education setting experience limited meaningful input negatively affecting vocabulary *size*, it is likely in turn that they will demonstrate low vocabulary *depth*.

The purpose of this paper has been to address the above issues with a call for a framework of L2 vocabulary strategies in the context of 1ˢᵗ year university learners, and within the overall scope of developing communicative competence, through an *explicit-implicit* dual instructional

approach, based on Hunt and Beglar's (2005) model, and through a cycle of strategies as identified by Kudo (1999).

Notes

1) For the purposes of this paper, *lexicon* refers to the target body of vocabulary and the concept *strategy* may be understood as: the action a learner chooses to optimally arrive at a pre-determined goal.

2) Although challenging for low-level learners, Hunt and Beglar claim this can still be useful because: "they can acquire knowledge of such features as word form, affixation, part of speech, collocations, referents, associations, grammatical patterning, as well as global associations with the topic" (p.37). This is also supported by Nation (2001).

3) The Beginner's Paradox proposed by Coady (1997) refers to the problem low-level learners encounter in striving to undertake extensive reading, whereby the vocabulary needed at the outset is insufficient to successfully do so. The threshold is approximately 5,000 to 8,000 lexical items according to him.

4) The term *module* is intended to mean a series of lessons (the number of which will vary according to stage in the semester), surrounding the same topic or theme.

5) A Notional-functional approach to teaching is based on the combination of 'concept' (this can also translate to theme for example, time, space etc.), and purpose for which a given body of target language. In using adverbs of frequency, for example, the language function may be characterized as 'expressing routines'.

6) Schmitt (1997) concedes that his observations are interpretative and inconclusive, thus allowing for the possibility that lack of proficiency may be play and equal or greater part in the results of his study.

7) Some examples of how text can be used for communicative purposes, with task-based orientation are provided in Dammacco (2010).

8) There is virtually no research on orthographic decoding in SLA (Hunt & Beglar, 2005). It is believed that the advancement of telecommunications and wide use of electronic dictionaries may result in learners' orthographic degeneration, both in L1 (Kanji) & L2. In addition, the system of katakana plays a negative role in the study of L2, both orthographically and phonologically.

9) An example might be to test spelling of 10 lexical items (through phonological means), which then learners have to fit into a gap-fill of 10 sentences or body of text with equivalent spaces. The important point is not to make these quizzes long, but to administer them relatively frequently, in order to encourage at least, short-term retention and build *size* among low-level learners, as long as the lexicon is used in fluency-based activities, simultaneously.

References

Bowles, M. (2000). *A Review of the Lexical Content and Its Treatment in Ministry-Approved Level-One EFL Textbooks Used in Japanese Public Lower-Secondary Schools. (Master of Arts dissertation, University of Birmingham).* Retrieved from http://www.birmingham.ac.uk/Documents/collegeartslaw/cels/essays/matefltesldissertations/MBowlesDiss.pdf

Coady, J. (1997). L2 vocabulary acquisition through extensive reading. In J. Coady & T. Huckin (Eds.), *Second Language Vocabulary Acquisition, 225-237.* Cambridge: Cambridge University Press.

Dammacco, O. (2010). Using text to promote communicative language learning for all levels. *Internet TESL Journal*, *Vol. XVI, No.1, January 2010.* Retrieved from http://iteslj.org/Techniques/ Dammacco-Text.html

de la Fuente, M. J. (2006). Classroom L2 vocabulary acquisition: Investigating the role of pedagogical tasks and form-focused instruction. *Language Teaching Research, 10(3), 263-295.*

Doughty, C. & Williams, J. (1998). Pedagogical choices in focus on form. *In C. Doughty & J. Williams (Eds.), Focus on form in classroom second language acquisition, 197-261.* Cambridge: Cambridge University Press.

Ehren, B. (2002). Vocabulary Intervention to Improve Reading Comprehension for Students With Learning Disabilities. *In ASHA Perspectives on Language Learning and Education. Vol.9. No.3.*

Ellis, R. (1995). Principles of Instructed Language Learning. *The Asian EFL Journal Quarterly, 7(3), September 2005, 9-24.*

Ellis, N. C. (1996). Sequencing in SLA: Phonological memory, chunking, and points of order. *Studies in Second Language Acquisition, 18, 91-126.*

Fillmore, C. J. (1979). On fluency. In C. Fillmore, D. Kempler & W.S.Y. Wang (eds). *Individual differences in language ability and language behavior. New York: Academic, 85-101.*

Graves, M.F. (2006). *The Vocabulary Book: Learning & Instruction, 2-3.* New York: Teachers College Press.

Hisano, K. (1976). *A handbook for teaching English to Japanese.* (Unpublished Master's thesis.) Brattleburo, Vermont: School for International Training.

Hunt, A & Beglar, D. (2005). A framework for developing EFL reading vocabulary. *Reading in a Foreign Language, Volume 17(1), April 2005.* Retrieved from http://wenku.baidu.com/ view/70c2c70c52ea551810a687da.html

Kintsch, W. (1998). *Comprehension. A paradigm for cognition.* Cambridge: CUP.

Kudo, Y. (1999). *L2 vocabulary learning strategies* (NFLRC NetWork #14) [HTML document]. Honolulu: University of Hawaìi, Second Language Teaching & Curriculum Center. Retrieved from http://www.nflrc.hawaii.edu/NetWorks/NW14/

Morrow, P. R. (1987). The users and uses of English in Japan. *World Englishes (691), 49- 62.*

Nation, I.S.P., & Webb, S. (2011). *Researching and Analyzing Vocabulary.* Boston, MA: Heinle.

Nielsen, B. (2003). *A review of research into vocabulary learning and acquisition.* Retrieved from http://www.kushiro-ct.ac.jp/library/kiyo/kiyo36/Brian.pdf

Nunan, D. (1991). *Language teaching methodology: A textbook for teachers.* London: prentice Hall International.

O'Malley, J. M., & Chamot, A. U. (1990). *Learning strategies in second language acquisition.* Cambridge: CUP.

Oxford, R. (1990). *Language Learning Strategies: What every teacher should know.* MA: Heinle and Heinle.

Prince, P. (1996). Second language vocabulary learning: the role of context versus translations as a function of proficiency. *The Modern Language Journal, 80, 478-493.*

Read, J. (2000). *Assessing vocabulary (2).* Cambridge: CUP.

Richard, J. JP. (2011). Does size matter? The relationship between vocabulary breadth and depth. *Sophia International Review, Volume 33(2011), 107-120.* Retrieved from http://fla-sir.weebly.com/ volume-33.html

Schmitt, N. (1997). Vocabulary learning strategies. In N. Schmitt, & M. McCarthy (Eds.), *Vocabulary: description, acquisition, and pedagogy, 199-227.* Cambridge: Cambridge University Press.

Wood, D. (2001, June). In Search of Fluency: What Is It and How Can We Teach It? [Electronic

version]. *Canadian Modern Language Review, 57 (4), 573-589.*

Zhao, C. (2010). The Effectiveness of the Bilingualized Dictionary: A Psycholinguistic Point of View. *Chinese Journal of Applied Linguistics (bimonthly), 33(5), October 2010, 3-14.*

Zimmerman, C. (1997) Do Reading and Interactive Vocabulary Instruction Make a Difference? An Empirical Study. *TESOL Quarterly, 31,1,121- 140.*