

Classroom Variables that Conditions the L2 Word Acquisition Process: The Case of the Environment, the Instructor and the Learning Strategy

Shanthi Nadarajan
(nadarajanshanthi@gmail.com)
Universiti Malaysia Sarawak

Abstract

The research report in this paper investigates the factors that affect L2 learners' word acquisition process in the language classroom. Using 82 subjects from a writing program, the study looks at learner ability awareness of word meanings and word polysemy following a series of intentional vocabulary instruction in two separate learning conditions. The findings revealed that while L2 learners brought their own L1 learning experiences into the classroom, teacher motivation and the L2 environment did influence learner vocabulary learning strategies and ability to acquire in depth word knowledge.

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1 Introduction

Second language (L2) learners' poor reading and writing skills continue to be a matter of major concern at higher learning institutions. As Chen (2005) points out underprepared college students in Taiwan are often categorized as underachievers with average level intelligence insufficient for highly demanding college courses and lacking in ability to comprehend academically demanding reading texts. Similarly,

college level students when pressed to read were seen as selecting ineffective and inefficient strategies with little strategic intent (Wood & Willoughby, 1998). Meanwhile, L2 vocabulary researchers (e.g. Alderson, 2000; Nation, 2001, Read, 2000; Laufer, 1997) see many of these problems as having more to do with lack of sight-word recognition and readability (Read, 2000). As Harrison noted in Read (2000), “readers opinion going back to the 1930s ... support the view that vocabulary plays a large part... (in reading) and research studies consistently find vocabulary to be the surest single predictor of text difficulty” (p.191). As for writing, the validity of writing measures generally depend on the nature of the given task and the kind of demands each task make on the learner’s vocabulary resources. Laufer (1997) therefore insists that with lexis being increasingly seen as the predictor of success in reading (...and writing), much better than syntax or general reading ability, learning effect gets short circuited when L2 learners vocabulary is below the threshold which might be the case for many new foreign/L2 students and L2 learners need help with their word learning process. This article is about getting L2 learners to increase their vocabulary knowledge in terms of word meaning and word collocation. An addition aim of the paper is also to assess how learners can be taught to take responsibility for their own word learning process.

2 The Complex Relationship of Factors conditioning Vocabulary Acquisition

The search for shared mechanisms underlying L2 word learning is important for several reasons. First, it provides an insight into the broad base of internal and external factors governing the L2/FL word learning process. Second, given the increase in number of students taking courses in another language besides their mother tongue, an exploration of the factors conditioning “lexical transfer” can help reinforce the positive nature of cross lexical interference as an efficient learning mechanism (Faerch and Kasper, 1986; Kellerman, 1983; Nation, 2001; Ringbom, 2001; Swain, 1997, Hall & Ecke, 2003) and promote greater tolerance of L2/FL transfer and errors as part of the learning process. Third, an examination of the various dimensions of word knowledge: form (oral, written), position (grammatical, collocations), function (frequency, appropriateness) and meaning (concepts and associations) and learner preference will provide practitioners a richer means of understanding what L2 learners know about words and how they can correct it over time. Fourth, judging from the extent L2 learners mix with native speakers and speakers of other races, their interaction should be seen as important opportunities for learners to use the words well and address fluency, An in-depth understanding of the factors affecting the L2 vocabulary learning process in terms of successful learner strategies and less successful learner strategies will therefore be useful for setting directions for understanding of the L2 learners word learning environment.

2.1 Factors that Condition L2 Vocabulary Acquisition

The subject of why some L2 learners learn words more successfully than others (Schmitt, 2000) and how the L2 word learning process can be supported by teachers and classroom variables (Noel, 2001, Al-Seghayer, 2001) is complex. Presently, what is known in language teaching is that the teacher factor in motivating learners in the second language classroom cannot be overlooked. As Cooper and McIntyre (1998) highlighted, the more successful the teacher is in focusing and facilitating effective pupil calibration, the more effective the teacher will be in facilitating effective student learning. However, within SLA it is also accepted that there are a number of internal and external factors that conditions learning ability which may be beyond the control of the average language teacher. Currently, what has been established in SLA is that poor readers are inefficient at retrieving information (Stanovich, 1993) and the absence of even one letter can impair reading speed considerably (McConkie & Zoal, 1981). Language instructors will therefore need to take into consideration the differences in learners, learning and languages before designing the event and word knowledge. Presently, a number of studies have investigated the various factors conditioning cross lexical transfer and Hall & Ecke’s (2003) classification of the five domains under which the L2 vocabulary acquisition process can be conditioned (e.g. learner, learning, language, event and word) remains a useful model for investigating the complex L2 vocabulary learning process (Refer Table 1) and helping less successful learners overcome their word learning deficiencies.

Table 1: Factors Conditioning Cross Lexical influence

Domain	Factors
Learner	<ul style="list-style-type: none"> • Psychotypology and metalinguistic Awareness • Motivation • Age • Attitude • Learning Style & Strategy Use • Degree of Anxiety
Learning	<ul style="list-style-type: none"> • Order and Time-course of learning • Proficiency in each language • Fluency in each language • Amount of exposure to each language • Amount of use of each language • Recency of exposure and use • "L2 status" • Learning context (instructional, natural, etc.) • Vocabulary size • Type of bi/multilingualism (additive and subtractive)
Language	<ul style="list-style-type: none"> • Typological distance (on formal feature parameters) • Historical distance (from common ancestors) • Degree of contact (borrowing) • Writing system
Events	<ul style="list-style-type: none"> • Language mode (Bilingual/monolingual) • Degree of control • Style (Formal) • Task • Instructor • Degree of Monitoring • Processing Direction (comprehension/production) • Modality (written/spoken)
Word	<ul style="list-style-type: none"> • Degree of form similarity with competitors (phonological /orthographic) • Number of form competitors (neighbourhood density) • Degree of frame (lemma) similarity with competitors • Number of frame (lemma) competitors • Number of concept competitors • Degree of combined similarity (indirect and true cognates) • Content vs. function word status • Abstractness vs. concreteness • Frequency • Frequency of competitors • Recency of exposure or use • Completeness of representation (Depth of knowledge)

Adapted from Hall & Ecke(2003)

In speaking about addressing word learning deficiencies, it is important to consider the varied interpretations about what constitutes word knowledge and understood as knowing a word. Central to this discussion is Folsie's (2004) description where word knowledge is believed to include seven things: a) polysemy (a word rarely has more than one meaning); b) denotation and connotation, c) spelling and

pronunciation, d) part of speech, 5) frequency; 6) usage; and 7) collocation (p.16). Added to this is Moras¹ (2001) descriptions which include: 8) boundaries between conceptual meanings (e.g. cup, mug, bowl), 9) homonymy; 10) homophony; 11) synonymy; 12) style and 13) translation (awareness of differences between L1 and L2 features e.g. false cognates). It is therefore important for L2 learners to be taught that a word may have more than one meaning and learners must know how to use words well in order to optimize their reading comprehension skills. Taking the various learner, instructor and word knowledge factors into consideration, a study was conducted with three purposes in mind. The first was to provide an insight into the impact of instructor motivation and L1 input into the word acquisition process of L2 learners. The second purpose of the study was to assess the effect of rich vocabulary instruction into the language classroom. The third was to assess the preferred vocabulary learning strategies between and within L1 and L2 learners. To arrive at the answers, the following research questions were proposed:

1. Is there a difference between the scores on the word meaning section and collocation section of L2 learners vocabulary knowledge due to differences in learning context?
2. Is there a relationship between the scores on the word meaning section and collocation section of L2 learners vocabulary knowledge due to the learning environment?
3. What are the differences between L2 subjects self-reported vocabulary strategies?

3 The Study

The present study investigated the impact of instructor motivation and L1 input on L2 learners vocabulary acquisition process in terms of word meaning and polysemy. An additional aim was to assess the difference between successful and less successful L2 learners preferred vocabulary strategies. Two questionnaires were used. They included : a) Schedl & Qian (2004) “ Depth of Vocabulary Knowledge Test” and b) Catalan (2003) L2 vocabulary learning strategies questionnaire. Both test were selected because they were valid, simple to administer and have been used successfully in a number of previous studies.

3.1 Method

A total of 82 subjects taking a first year English Composition course in an American university from three intact classes (50 x 3) volunteered for the study. The participants were of 18 – 23 years of age and 65 % of the L2 speakers had lived in the country for less than 1 year. Eighty nine percent of the students came from science programs. In terms of fluency, 30 % of the L2 speakers viewed themselves as fluent, 50 % categorized themselves as moderate and the remaining 20% categorized themselves as beginners. The instructors were consulted and were agreeable to the classification. Of the total 80% preferred to read materials in their mother tongue (the Asian subjects L1 languages used a different orthography) while 20% indicated English.

Population: There were 37 L1 students and 45 L2 students. The L2 group comprised of European (e.g. French, German, Dutch), Far Eastern (e.g. *China, Taiwan*) and Middle Eastern (*Iran, Tunisia, Saudi Arabia*) language communities (Refer Table 2 & 3). The L1 speakers' data was collected for the purpose of providing baseline data.

¹ Moras based his work on the early works of Gairns & Redman (1986)

Table 2: Distribution of Subject by First Language, Gender and Length of Residence in L1 country

Groups	L1	Numbers	Percentage
L1	English	37	100.0
	European	12	26.66
L2	Far Eastern	21	46.66
	Middle Eastern	12	26.66

(N=82)

Table 3: Distribution of Subjects by Language Status and Treatment Groups

Groups	Control (N=22)		Treatment (N=60)	
	A	B	C	
L1	7	30	0	
L2	15	11	19	

(N=82)

Procedure: The subjects were categorized into control and treatment groups (A, B & C). There was a control group A (L1 and L2 students) and 2 treatment groups B (immersion - L1 and L2 students) and C (ESL - L2 students only). The control group sat for the test like the treatment groups but they were excluded from the rich lexical interventions. The treatment groups B & C had at least 8-10 words from the reading text or classroom interaction highlighted in the beginning of each lesson where the students either took time to discuss word knowledge orally or in written forms for 8-10 minutes before moving on to the reading and writing components of each lesson. Two trained ESL L1 instructors were involved. Both instructors had taught the course for a minimum of two years. Instructor 1 taught Group A and B while Instructor 2 taught group C which comprised of only L2 subjects. Both instructors had agreed to use the same reading texts, administer the same writing tasks, assessments and agreeable to allocating the eight to ten minutes for the purpose of providing rich lexical elaboration for the treatment groups. A typical vocabulary instruction class would be as in (a- c).

(a) Lexical Elaboration

(Discussing a reading text)

Tr: All right class. What do you understand by “get the shaft?”

L1 ss : ... *get screwed over.*

L2 ss : *No. What does it mean here?*

Tr.: ... it refers to an unfair treatment. The main character is mistreated ...

L2 ss: *But... what's the shaft?*

L1 ss: *It's like the elevator shaft... to push someone down the shaft.*

L1 ss 2: *It is to demean someone... the character is being treated disrespectfully.*

Tr.: Actually, the word shaft originated from the body of a spear.

Here it means to treat someone or something in a harsh and unfair manner.

L1 ss2: *It has to do with the Ancient Europe ... when space was limited and some corpses were buried in vertical shafts due to limited space. .*

Tr.: Yes. That's true. Being disrespectful. Nowadays, it is being used to depict the uneven economic system.

L1 ss: Yes, I remember. The middle class will continue to get the shaft...

(b) Form Focused Instruction

S: Why wild organic...? I think that is wrong?

Tr: Well wild can be both an adjective and a verb as in growing wild. Here you have to notice the words next to it.

S; yay... but wild country...

Tr: Yes, but that is used with a noun – as in a natural and undomesticated place ...

You need to consider the next word ... words take on different meanings like wild, wildness

S: You mean wilderness...?

Tr: Now a word can have a number of meanings. Let's list them down (Goes to the board and lists them down)

(c) Error correction

Tr: ... you do not say cooker. It is cook like ... chef

S1: Yah, ... but I do not want to say male cooker... like teacher... you say it for a male and female.

Tr.: You want a neutral term. Well, cook is the term.

S2: What about Chef. That is a neutral term as well.

Students were also given task sheets to identify accurate words from time to time.

Instruments

Two questionnaires were used in this study. The questionnaires had been validated and standardized as test measures in a number of L2 vocabulary studies, were easy to administer and analyze. Both questionnaires are available online at <http://ltj.sagepub.com/content/21/1/28.full.pdf+html> and www.eric.ed.gov/ERICWebPortal/recordDetail?accno=EJ669789. and are seen as rich and sensitive to the various L2 learner levels.

Depth of Vocabulary Knowledge: The purpose of the in-depth test was to determine whether L2 learners who were taught through a lexically rich environment would be able to increase their awareness of word collocation like L1 subjects compared to L2 subjects who were not exposed to a rich lexical environment. It was assumed that word association skills are capable of indicating the variation that occur when learners are subjected to wide scale word use such as free writing. The measure (Qian and Schedl's (2003) Depth of Vocabulary knowledge (DVK) test) contained 40 items with four possible meanings and 4 possible nouns that could be used after the word. There were a total of 79 correct answers for the meaning section and 81 correct answers for the collocation section as in (1). Each item contained one stimulus word, which was an adjective and two boxes containing four words each as indicated in (1) below. The left box contained the meaning component and was called the "DVK meaning" (DVKM) and the right box contained the collocation component and was name "DVK polysemy"(DVKP).

(1)

Consecutive



The participants were given 35 minutes to complete the test as suggested by the authors (Qian & Schedl, 2004) and 20 minutes to complete the strategy based test. The test was administered by the respective instructors. One L2 student who did not feel comfortable with the test format and did not complete the test due to test anxiety.

Vocabulary Strategies: Jimenez Catalan's strategies were revised to fit the classroom need and to include *googling* as a discovery strategy after consulting the instructors. The questionnaire also took into consideration some of Schmitt's 58 strategies. The test assessed discovery strategies which were used to discover meanings (D), and Consolidation strategies which were often used to consolidate a new word once the subject has encountered it (C).

4 Results

1. Is there a difference between the scores on the word meaning section and collocation section of L2 learners vocabulary knowledge due to differences in learning context?

Table 4 presents the differences in average scores for the word meaning section and word collocation section of the DVK test for both control and treatment groups. The differences between L1 and L2 subjects are also included.

Table 4: DVK Scores for Control and Treatment Groups

	Groups	N	Status	Mean	%	SD	SEM
Meaning	A	7	L1	63	<i>(79)</i>	9.504	3.592
		13	L2	50.30	<i>(63)</i>	12.97	3.597
	B	26	L1	61.15	<i>(76)</i>	17.62	3.457
		10	L2	40.30	<i>(50)</i>	11.03	3.489
	C	18	L2	43.61	<i>(55)</i>	14.34	3.380
	Polysemy	A	7	L1	55.28	<i>(69)</i>	16.91
13			L2	36.15	<i>(45)</i>	15.51	4.303
B		26	L1	61.80	<i>(77)</i>	16.70	3.276
		10	L2	38.50	<i>(48)</i>	17.53	5.546
C		18	L2	41.16	<i>(51)</i>	16.500	3.889

(N=74) (A=Control B= L1 and L2 combined C= L2 only)

From the scores it was evident the L1 subjects knew more words and polysemy compared to the L2 subjects though all groups were heterogeneous. In terms of word meaning, the L2 subjects in the control group A knew 63% while treatment groups B and C knew 50% and 55% respectively. As for polysemy, the Control group knew 45% while the treatment groups knew 48% and 51% respectively. It was evident that though the control group knew more word meanings than the L2 subjects of the treatment groups, they did not know as many word senses as the treatment groups. Based on the scores for word meanings, it can be deduced that L2 subjects do acquire a large vocabulary from the L2 environment and through context but when considering the differences between knowledge of word meaning and word polysemy, it is obvious that the subjects did not have as much awareness of the varied senses of the word as the L2 subjects in the treatment group. From the scores, it is evident that the L2 learners did not know as many words as the control group but the differences between their knowledge of word meaning and polysemy was narrower suggesting that these students were more likely to have greater awareness of the depth of meaning for these words and capable of using the words in more varied ways when the opportunity arises.

It was also possible to deduce from the scores that the L2 learners were learning differently for all three conditions. A factorial analysis was conducted to determine if L2 learners are affected by the various learning conditions and it was evident that the difference between the various groups were statistically significant at $F(2,73)=3.430$, $p<0.05$ for the meaning section and $F(2,73)=348.614$, $p<0.05$ for the collocation section.

Table 5: Factorial Analysis for learning conditions

		Sum of Squares	df	Mean Square	F	Sig.
meaning	Between Groups	1816.221	2	908.110	3.430	.038
	Within Groups	18796.333	71	264.737		
	Total	20612.554	73			
polysemy	Between Groups	3440.854	2	1720.427	4.935	.010
	Within Groups	24751.700	71	348.615		
	Total	28192.554	73			

*The mean difference is significant at the 0.05 level and is indicated in bold.

A multivariate comparison using Fisher's LSD also suggested that at least one learning condition was different for both meaning and collocation, and statistically significant indicating that the classroom .

2. Is there a relationship between the scores on the word meaning section and collocation section of L2 learners vocabulary knowledge due to the learning environment?

To assess relationship between L2 subjects word meaning and polysemy a Pearson Moment correlation analysis was conducted and the results are as indicated in Table 6.

Table 6: Correlations for L1 and L2 Subjects

Group			meaning	Collocation
Control A	meaning	Pearson Correlation	1	-.092
		Sig. (2-tailed)		.766
		N	13	13
	Collocation	Pearson Correlation	-.092	1
		Sig. (2-tailed)	.766	
		N	13	13
Group B	meaning	Pearson Correlation	1	.896**
		Sig. (2-tailed)		.000
		N	10	10
	Collocation	Pearson Correlation	.896**	1
		Sig. (2-tailed)	.000	
		N	10	10
Group C	meaning	Pearson Correlation	1	.779**
		Sig. (2-tailed)		.000
		N	18	18
	Collocation	Pearson Correlation	.779**	1
		Sig. (2-tailed)	.000	
		N	18	18

** . Correlation is significant at the 0.01 level (2-tailed).

The analysis indicate that the scores between meaning and polysemy for the L2 subjects were significant for the treatment conditions and but it was not evident for control condition. In other words, the scores for the treatment groups was not due to chance but due to the effect of the teacher and classroom input. The results also suggest a high correlation between the word meaning and polysemy for L2 subjects in Group/Treatment B ($r = .896$) and ($r = .779$) for Group/ Treatment C. This data is close to the relationship between word meanings and polysemy for the L1 group which was found to be high ($r = .936$) as well.

3. Relationship between vocabulary learning strategies and the successful L2 learner

A total of 60 strategies were listed, and subjects had to indicate the strategies which they used to learn vocabulary for the whole semester. A comparison on L2 learners preferred vocabulary strategies based on learning condition revealed that More than 50 percent of the L2 learners in the treatment group B employed a variety of vocabulary learning strategies compared to the L2 learners in the control group and treatment group C as indicated in table 7 below.

Table 7: Ten Most Frequently Used Vocabulary learning Strategies

	Immersion (B)		ESL (C)		Control (A)	
	Rank	%	Rank	%	Rank	%
ask classmates (D)	1	81.8	5	57.9	3	53.3
guess - word meanings from text (D)	2	72.7	2	63.2	1	60
bilingual dictionary (D)	2	72.7	2	63.2	1	60
imagine the word form (C)	2	72.7	7	26.7	5	31.6
use in interactions with native speakers (C)	5	63.6	9	20	7	26.3
group words together spatially on a page (C)	6	54.5	9	20	7	26.3
study the sound of the word carefully (C)	6	54.5	3	26.7	3	31.6
say the new word aloud when studying (C)	6	54.5	10	13.3	9	21.1
analyze - part of speech(C)	10	54.5	2	63.2	4	33.3
teacher for a sentence including the new word (D)	10	54.5	9	21.1	10	13.3
skip or pass the new word (C)	11	54.17	1	80	6	26.3

(D)discovery (C) consolidation * Strategies used by 50% of the subjects are italicized in bold.

Only 4 strategies were used by more than 50% of the L2 learners in group C despite the rich lexical environment. In fact there was some similarity between Group C and A whereby approximately 50- 60 % of the subjects employed the top five strategies.

5 Findings and Discussion

From the results of the study a number of findings can be obtained. First, it was evident that L1 speakers irrespective of groupings, continue to know an equal amount of word meanings and word collocation. In fact they knew more than 75% if the word collocations unlike L2 learners who continue to know more word meanings compared to word collocations. Most L2 learners knew approximately 60 per cent of the word meanings and collocations or less. It was evident from the study that the L2 subjects in the immersion and ESL groups seem to know more word collocations by the end of the study suggesting that focusing on word meaning and elaborating word meaning can have a positive effect on the L2 learners vocabulary outcome. The results of the F tests was also indicative of the fact that the differences were significant for the treatment groups.

As for the relationship between L2 subjects meaning and collocation and treatment conditions, the scores of the correlation test revealed that the changes were significant suggesting that instruction regardless of ESL or immersion will have a positive impact on the L2 learners overall learning outcome. As for the vocabulary learning strategies, it was evident that the both L1 and L2 learners do not favor consolidation strategies when they are directly related to memory strategies. In fact, there appears to be a number of similarities between L1 and L2 learners in terms of vocabulary learning activities but upon closer inspection, it is also possible that there are certain differences which when overlooked may not augur well for L2 subjects since L2 learners need help with their vocabulary learning skills. The fact that many L2 learners come from different backgrounds as this study and have different perceptions in using strategies may make it necessary for instructors to pay attention to teaching vocabulary. In the study some students saw making sounds, practicing and writing sentences as important while L1 speakers did not see them as important enough. L1 instructors overlook this difference if they assume that all learners learn similarly. Similarly, the interviews revealed that L2 learners were clearly dependent on both internal and external factors such as the text, dictionary, L1 peers and language rules for meaning.

At this juncture, it can be said that this study attempted to provide an insight into factors that help L2 learners acquire in depth understanding of word knowledge through rich lexical instruction. The findings

from the word associates test reveal that while the L2 learners during the incidental process do acquire the largest number of word meanings from context, their awareness of the various senses can be in fact much lower than that ideal as seen from the findings where the control group's polysemy scores was much lower than the treatment groups. It is also possible to say that though they knew beyond the single word meaning for each of the tested items for the said level, their ability to use the words well in multiple senses was limited. The treatment groups however did not have a large meaning base to being with but their ability to apply the same word to multiple senses was slightly higher suggesting that appropriate forms of rich lexical environment do play a role in promoting better awareness of word knowledge in the writing classroom.

Similarly, the importance of the teacher factor in motivating learners to notice and use words well cannot be dismissed. Teachers who succeed in getting L2 learners to notice, attend and develop their vocabulary, are more likely to be effective in getting learners to read and write well in the language classroom. The very fact that the relationship between the meaning and polysemy scores for the treatment groups depicted a higher relationship comparable to that of the L1 subjects in the study while it did not reflect a similar relationship for the context based learning condition suggests that teachers and learner attitudes play a significant role in both vocabulary learning and language learning. Meaningful input, systematic instruction and rich vocabulary instruction therefore have a close relationship with motivation as they motivate learners to transcend a number of other conditioning factors and act as bridges to help limited language learners arrive at their learning goals. This is similar to Krashen's (1985) argument that learning will happen only if certain affective conditions are present for input to pass through the affective filter and can be used by the learner.

The most important finding of this study is probably in the asymmetry between the ESL and Immersion learning groups vocabulary learning strategies to the control groups preferred strategies. It was very clear that more than half the subjects in the immersion group had learned to use a number of vocabulary learning strategies by the end of the study. The very fact that they were working from an environment where there was a larger group of L1 peers and the rich lexical environment had probably raised the awareness of taking responsibility for learning words well. By contrast, the ESL group appears to rely on a larger number of discovery strategy. Then again, their readiness to ask classmates for the meaning of a word is rank in the middle unlike the immersion group where their first option is to ask classmates. Most L2 learners appear to analytical as guessing word meanings from the text, dictionary use and studying word sounds appear to be ranked highly in their list. Even though the study did not assess the L1 subjects preferred vocabulary strategies, it seems most reasonable to assume that their choice of vocabulary would have been closer to that of the control group. On the other hand, it is also evident that most L2 subjects tend to be more analytical and tend to rely on their own processing strategies suggesting that these learners do realize the importance of taking responsibility for their own word learning process.

6 Conclusion

To summarize, the results of the study help confirm and extend the previous works of a number of previous SLA studies in L2 vocabulary acquisition (Nation, 2001, Laufer, 1997; Nagy, 1997; Hall & Ecke, 2003, Nadarajan, 2009) that confirm L2 readers bring their L1 knowledge and processing mechanisms to bear on L2 word recognition process. These conditioning factors can consistently demonstrate qualitative differences in L2 learners' word knowledge which can work for and against learners in academic settings. However, of greater significance is that systematic vocabulary instruction, incidental and intentional vocabulary instruction and rich lexical classroom interaction, can help L2 learners recognize patterns and raise awareness of specific words meanings and apply them when the opportunity arises. Nevertheless, the study is also aware that expecting university instructors to provide intentional and incidental learning opportunities through a rich lexical environment is not necessarily possible nor likely and the study concurs with Hulstijn's (2001) argument that relevance does not reside in the terms but in the quality of mental processing taking place during the learning process. Accepted that the gains from incidental learning and intentional learning are slow, it must be acknowledge that incidental learning and the language classroom are

just one of the various opportunities for word learning and in the words of Nation (2001), as learners learn more words over time in the course, they will only stand to enrich existing words, improve their grammar and gain fluency. In other words, by encouraging learners to read extensively and write purposefully, the language classroom promotes wider reading and small gains can become large gains when learners continue reading (Nagy, 1997: 75).

Consequently, several recommendations can be made for the L2 vocabulary instruction process. First, given that adult L2 readers tend to prefer more print oriented text to face to face communication strategies, we can assume that beginning undergraduates would benefit from computer mediated preparatory courses as well as through a short reading program before the semester begin. Second, since different academic courses imposes different demands on the L2 learners word processing mechanism, getting learners to master a number of vocabulary learning strategies would be beneficial in helping learners enrich their sight word recognition skills. Finally, familiarizing students with the varied interpretation of the word knowledge would be extremely beneficial. Explicit instruction on certain level of work knowledge, getting learners to think in chunks and phrases will in turn help learners improve their language skills and indirectly direct them towards achieving the academic goals.

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