

Enhancing English Academic Vocabulary Acquisition and Retention in Intensive English Programs with the Involvement Load Hypothesis

Varrick Douglas Jr.

Northern Virginia Community College, American Culture and Language Institute, Woodbridge, United States of America

Abstract—Through action research, two instructors explore the application of the Involvement Load Hypothesis in their respective low intermediate and intermediate college intensive English reading and writing classes to improve student vocabulary acquisition and retention. One study took place over the course of one week and compared the progress of student performance on task-induced activities, revealing that students did incrementally better on vocabulary acquisition when the involvement load was heavier. The following study took place over the course of a six week Intensive Program using the same material with different students. The research also found improved performance on task induced assignments with heavy involvement loads; however, long term retention of vocabulary acquired from those assignments proved to be relatively limited.

Index Terms—involvement load hypothesis, academic English, intensive English programs, vocabulary acquisition, vocabulary retention, action research

I. INTRODUCTION

Learning and using academic vocabulary is essential to college student success. It can be challenging for native speakers, but even more of a task for non-native English language learners. Being able to do this requires initial acquisition of the word as well as relative long term retention of its meaning. In an academic environment, acquisition and retention is achieved by two mutually reinforcing factors: effective pedagogical implementation and independent study by students.

Colleges and Universities with intensive English programs (IEP) are designed to facilitate this so that English language students can adequately transition into degree programs. Introduced gradually in lower levels and given more rigorous exposure at higher levels, ideally, Coxhead's (2000) academic word list of 570 word families would be woven into the curriculum of any IEP that prepares English language learners for college courses. Yet the question is a matter of the character and effectiveness of this exposure.

The communicative approach to general language instruction has been deemed the dominant method of pedagogy and, by default, this makes much of vocabulary acquisition incidental (Ramachandran & Rahim, 2004). Yet teaching English for special purposes—such as those of academic nature—would suggest a more direct role for vocabulary instruction. The purpose of this research is to explore ways of asserting the role the role of vocabulary instruction in the classroom and to overall experiment with effective means to promote academic vocabulary acquisition and retention.

II. LITERATURE REVIEW

Much has been done on second language vocabulary learning and its implications on effective ESL instruction. Zhang (2009), for example, looks at a concept termed 'semantic prosody'. Prosody is a term borrowed from phonology and refers to the properties of stress and intonation and the phonological environments in which they occur. When applied lexically, prosody refers to meaning that is imbued through a word's collocations and connotations beyond the lexical item by itself. These semantic prosodies can be positive in meaning such as the tendency for the adjective "impressive" to occur with lexical items like "dignity", "talent", "best", "gains" and "achievement". They can also be negative, such as the tendency for the word "rife" to occur with lexical items like "crime", "disease", "misery", "corruption" and "speculation". Semantic prosody is a reminder that teaching the denotation of vocabulary alone is grossly insufficient.

In addition to collocations and connotation, context also plays a role in vocabulary learning. Ajayi (2008), largely drawing of Paulo Freire's literacy for empowerment theoretical framework, stresses the importance of vocabulary development being taught in a "socio-contextual theoretical and pedagogical formwork that integrates English language learners and the broader contexts of learning" (p. 207). This largely involves implementing real world visuals (newspaper and magazine images, for example) and creative meaning making activities with vocabulary for students to experience the vocabulary in practice, as the words relate to a variety of social instances in their own lives. Ajayi (2008) gives examples of having students create advertisement bill boards and comic strips with the target vocabulary. The

author asserts that the multimodal application of visuals and text production promotes lexical apprehension, retention, and meaningful application, in particular, if the content is made relatable to student's everyday experience.

Semantic mapping is also a technique employed for effective vocabulary instruction. Semantic mapping is the process of graphically displaying vocabulary in a diagram, usually with one central concept that branches out into other related categories. Radwan and Rikala-Boyer (2011) explore the practical application of semantic mapping in vocabulary development. Drawing from a body of scholarship, they note that "teaching vocabulary should not be limited to teaching individual lexical items, rather it needs to include teaching of innovative techniques and strategies considered necessary to expand learners' vocabulary and enhance their receptive and productive retrieval processes." (p. 2) Their studies found that, while semantic mapping does very little for productive retrieval of new vocabulary—that is, attaching spoken or written lexical information to subsequent stored sound and orthographic patterns and their associated meanings—it does aid receptive recognition of new vocabulary.

Other research suggests that semantic mapping might actually impede vocabulary acquisition because of the possibility for students to conflate the meanings of words in a given category. Tinkham (1997) refers to it as semantic clustering, and questioned its viability in L2 acquisition. Semantic clustering typically groups words with semantic and syntactic relationships (i.e. office, desk, computer, phone) and the author argues that there is no direct empirical evidence that grouping words in this format actually facilitates L2 acquisition. Instead, he suggests that *thematic* clustering might be a more effective way of facilitating vocabulary acquisition. He posits that "words might be subconsciously organized in accordance with their participation within certain 'frames' or 'schemas'" (p. 141). He gives examples such as the following set: "frog, pond, hop, swim, green and slippery." These would be considered "cognitive based clustering", meaning words that are related by psychological association. One of the main distinctions to note here is that thematic clustering is unconstrained by syntactic uniformity. Rather, it flows similarly to what would be considered a stream of consciousness. Tinkham's (1997) research, while greatly limited in scope¹, appears to support thematic over semantic vocabulary acquisition.

While learning words in relation to each other and to its context certainly promotes a breadth of vocabulary acquisition, some research show that getting students to understand the depth of a word is the most effective way vocabulary acquisition and retention takes place. Paiman, Yap Ngee and Chan Mei (2015) study the effects of explicit instruction on Greek and Latin word parts on vocabulary development. This is premised on the idea that knowledge of morphology can help learners improve their word learning strategies and build their lexical repertoire. Seeing that much of the English language derived from Greek and Latin, their hypothesis was that making students familiar with the underlying meanings of common Greek and Latin morphemes would provide better instruction than simply teaching vocabulary alone. They look at the extent to which general morphemic awareness, as well Graeco-Latin word parts, play a part in vocabulary acquisition and whether instruction based on this morphemic analysis promotes more effective vocabulary acquisition among language learners. Their research found that students instructed on word morphology — whether General English or Graeco-Latin—outperformed those who did not. This implied that knowing morphological information may enhance context clues when encountering unfamiliar words².

Also focusing on understanding the lexical depth of words, Liu and Shaw (2001) emphasize "qualitative" knowledge of vocabulary. According to them, truly knowing a word involves knowing its possible collocations, its appropriate register, its grammatical properties, its morphological behavior, its associative meanings, and its extended or metaphorical meanings. Seeing that non-native speakers and native speakers have a different kind of lexical knowledge, the practical rationale of designing an effective language course means knowing what kinds of deficits are likely to exist, and what influences those deficits. The most likely drawbacks are among high frequency words such as: make, take, have, let, put, go, give, break, hit, get, and come. These are some of the most versatile—and thereby most difficult—words in the English language as they can take on a number of meanings depending on the linguistic environment in which they are used. Liu and Shaw's (2001) research indicated that while the breadth of the intermediate students' vocabulary was considerable, the depth of their knowledge of high frequency vocabulary was greatly limited. The implications for pedagogy suggest that learners perhaps need more explicit instruction of common verbs and should not be left on their own to find the multitude of meanings they may carry.

¹ Tinkham (1997) used native speakers and a fictional lexicon to simulate acquisition. Another subsequent limitation was that the test took place in one session where subjects were presented the fake word pairs and at the time and did not finish until they made the correct associations. This is completely different than an actual language course setting where students are presented with vocabulary and instruction over time and tested on their acquisition. Tinkham (1997) noted this limited "generalizability" and called for further context based long-term and instructional application of thematic vocabulary clustering to verify its effectiveness.

² Paiman et al. (2015) found that the groups that studied vocabulary with a focus on morphology—whether general English or Graeco-Latin—outperformed the group that studied with a focus on context clues, the Graeco-Latin scoring the highest. To be fair however, the test structure was in the form of multiple choice rather than a reading summary which could have made it difficult for the final group to use context clue strategy. The authors account for this by stating they wanted to test vocabulary, not reading comprehension. Altogether, the study shows that the students who learn Graeco-Latin roots of English incidentally also developed their general English morphological recognition skills. Seeing that their test subjects were health science ESL students, the authors conclude that this sort of vocabulary skill development has a more promising effect in facilitating the comprehension of technical and scientific text, while context-clues may be more effective in literary or general reading text instead of the latter. They suggest applying this research to other disciplines from both the arts and sciences as well as different treatment lengths and a delay post test to examine retention.

Other scholars also suggest a more explicit instruction of vocabulary. Guo (2010) looks at the relationship between incidental vocabulary learning and intentional vocabulary learning. The former refers to the kind of learning that is a byproduct of something else, while the latter is the kind of learning that takes place through deliberate lesson planning and instruction of a set of vocabulary. His study explored the role of reading in L2 acquisition and how different vocabulary instructional techniques—incidental and intentional—affected learning outcomes. The author examined which instructional techniques facilitated receptive and productive acquisition of vocabulary knowledge, and which ones resulted in better retention. Guo (2010) concluded that vocabulary instruction with a combination of both incidental and intentional acquisition promotes stronger receptive skills, higher production gains, and better retention rates.

Instruction, however, whether incidental or intentional is not the final or even primary determiner of vocabulary acquisition. Students bear responsibility to acquire and retain the new vocabulary as well. Kameli, Mostapha and Baki (2012) point out at the strategies that students must employ to learn new vocabulary. A central question of their research was how the ESL formal language learning environment (teachers, peers, school) influences students' vocabulary learning strategies. They invoke Rubin's (1975) assertion that these learning strategies are merely "techniques or devices which a learner may use to acquire knowledge." (p. 46) They point out that Rubin (1975) recognized two types: strategies that contribute to direct learning, and strategies that contribute to indirect learning. Clarification/verification, monitoring, memorization, guessing/inductive inferring, deductive reasoning and practice are all example of strategies that contribute to direct learning according to this author. Creating opportunities for practice and production tricks (like memory games or association exercises) are examples of indirect contribution. Their findings revealed that instructors were the highest influence in the strategies their students chose to use. These students essentially acquired their learning strategies from explicit guidance by their teachers. In addition, completing assignments and reading textbooks also shaped their learning strategies. Peers and classmates offered a small amount of aid in this as well. One significant item that stood out in their research was that often there was an over-reliance on the instructor, as students did not make efforts to learn new words on their own outside the classroom. Students' level of need to acquire new vocabulary was only dictated by the instructor's requirements.

Hulstijn and Laufer (2001) look at the level of need, as well as other factors, like search and evaluation, that determine new vocabulary retention in their Involvement Load Hypothesis. In building from Craik and Lockhart's (1972) depth of processing concept, they posit that the level of cognitive processing correlates with lexical retention. This means that if a language learner heavily scrutinizes all aspects a word's properties (meaning, pronunciation, part of speech, morphology, orthography,) as well as its semantic relationship to other words, the learner is more likely retain it. To formalize and operationalize this notion, they proposed a motivational-cognitive construct called the Involvement Load, which comprised the three aforementioned factors: need, search and evaluation. Need is the motivational dimension of involvement, that is, the level of necessity language learners have for knowing the meaning of the word. Search and evaluation are the cognitive aspects of involvement. Search has to do with whether the meaning is easily available through translation or if they have to look a word up in an L2 dictionary. Evaluation has to do with the availability of other words with which a learner has to compare the vocabulary in context, as well as possible homonyms. Hulstijn and Laufer (2001) place up to two degrees of value on each of these dimensions, zero being the absence of one, two being the highest. The higher the aggregate result of all three the stronger the Involvement Load, and thus better acquisition and retention. Below is an illustration of the motivational-cognitive dimensions and their values.

Need, search and evaluation

THE DEGREES OF THE COMPONENTS IN THE INVOLVEMENT LOAD HYPOTHESIS

Components Degrees of the Involvement Load Explanations

Need

Index 0 (None) The learner does not feel the need to learn the word.

Index 1 (Moderate) The learner is required to learn the word.

Index 2 (Strong) The learner decides to learn the word.

Search

Index 0 (None) They do not need to learn the meanings or forms of the word.

Index 1 (Moderate) The meaning of the word is found.

Index 2 (Strong) The form of the word is found.

Evaluation

Index 0 (None) The word is not compared with other words.

Index 1 (Moderate) The word is compared with other words in the provided context.

Index 2 (Strong) The word is compared with other words in self-provided context.

From The Involvement Load Hypothesis: An Inquiry into Vocabulary Learning, by Tsubaki (2006) as it appeared in

Higher Task-induced Involvement Load Enhance Students EFL Vocabulary Learning, by Ghorbani and Rahmandoost (2012)³.

From this model, one can posit that a language learner who decides to learn a word on their own (need 2), uses an L2 dictionary to find its definition (search 2) and chooses to write the word in a sentence (evaluation 2) is much more likely to retain that word than a learner who is required to learn a word by an instructor (need 1), provided with an explanation and translation by the teacher (search 0) and takes no further action with the word (0 evaluation). Hulstijn and Laufer's (2001) initial experiment to test this theory consisted of three tasks with different involvement loads for three respective groups of students. The same target vocabulary was included in each task. The first was a reading comprehension with marginal glosses with the lowest involvement load index of 1 because of the moderate need (1), but no search (0) or evaluation (0). The second was a reading comprehension task plus a cloze exercise with a slightly higher involvement index of 2 because need was moderate (1), evaluation was moderate (1) because context was provided and no search (0) because translations were provided. The third was a writing composition in which students were to incorporate target vocabulary. This was the highest involvement index total of 3 because of moderate need (1), strong evaluation (2) because the words had to be used in an original context and no search (0) because explanations and example usages of the words were provided. Then, students were given a post test for the vocabulary words. As predicted, students with the highest involvement load index, the composition exercise, consistently performed better on the post test.

Since the introduction of the Involvement Load hypothesis, there have been numerous replications in different forms to test its effectiveness as well as its applicability to different areas of language development. Kim (2008) used the methodology to test undergraduate EFL students and students in an intensive English program. The aim was to find out whether the level of task-induced involvement would affect initial vocabulary acquisition as well as retention of English language learners from different proficiency levels. They used three tasks resembling the format of Hulstijn and Laufer's (2001) experiment. The results showed that students given the second and third tasks performed consistently higher, with the composition group as the highest. Kim (2008) concluded that vocabulary tasks with high involvement load would benefit learners at various proficiency levels whether in an intensive English program or an undergraduate program.

Ghorbani and Rahmandoost (2012) tested the Involvement Load Hypothesis on college level students as well. Instead of three tasks, they used two on two separate groups. Subjects in the control group read an English text with marginal glosses irrelevant to the multiple choice comprehension questions they had to complete after the reading. Subjects in the experimental group read the same text with marginal glosses relevant to the questions. They also had to complete fill in the blank items from the vocabulary list as well as write sentences using the vocabulary. The findings suggested that the subjects in the experimental group performed significantly higher than subjects in the control group.

Marmol and Sanchez-Lafuente (2013) employed Involvement Load hypothesis research in a primary education setting of ten year old students. The objective of the research was to, first, confirm the Involvement Load Hypothesis's effectiveness on elementary students of English as a Foreign Language (EFL) and second, to include the cognitive dimension of search to the involvement load, which until then had not been sufficiently explored. To account for the latter objective, an additional task beyond the original 3 in Hulstijn and Laufer's (2001) was used on four groups of students. The first 3 exercises were (1) reading comprehension with a marginal gloss, (2) reading comprehension with a fill in the gaps and (3) writing sentences with the help of glosses. The fourth exercise consisted in writing sentences with the help of a bilingual dictionary, introducing the search component. The authors found that students with the lowest degree of involvement, group 1 and 2, score worst on the vocabulary posttests. However, against predictions, the group with the highest degree, group 4, scored lower than group 3. The authors attribute this to the fact that previous studies were conducted on intermediate or advanced learners and that possibly certain degrees of involvement are too complex for elementary students.

Cao (2013) used the Involvement Load to test the acquisition of lexical bundles, that is, "chunks, formulaic sequences, multiword units, prefabricated expressions, formulaic speech and routinized expressions"(page number needed) employed in everyday discussions. Like Kim (2008), Cao (2013) wanted to see the influence of the Involvement load on initial acquisition and retention of these items. The researcher used Hulstijn and Laufer's (2001)

³ Other scholars such as Marmol and Sanchez-Lafuente (2013) suggest only two degrees in the search index as in the chart below:

TABLE I.

Components	Degrees of Involvement	Definition
Need	Index 0 (none)	The learner does not feel the need to learn the word
	Index 1 Moderate	The learner is required to learn the word
	Index 2 (strong)	The learner decides to learn the word.
Search	Index 0 (absent)	The learner does not look for the meaning or form of the word with a lexical instrument.
	Index 1 (moderate)	The meaning and form of the word are found by the learner
Evaluation	Index 0 (none)	The word is not compared with any other word
	Index 1 (moderate)	The word is compared with other words in the provided context
	Index 2 (Strong)	The word is compared with other words in self-provided context (the learner's mental lexicon)

original tasks and posttest format on college level English language learners. The results, once again, showed that the group with the highest Involvement Load, the group that actually had to produce sentences, scored higher on the post tests.

Shabanpour and Marzban (2015) used the Involvement Load Hypothesis to explore the effect of “task complexity instruction on EFL pre-intermediate learner’s incidental learning of grammatical collocations through reading” (p. 1883). The students were, once again, college level and presented with three tasks and separated into three different groups. The first task was a fill in the blanks task in which students were supposed to read the text and find the proper preposition to insert. The second was a sentence writing task which required students to read a text and find the proper preposition to make a meaningful sentence using the right collocation. Students were instructed to use a dictionary to look up the meaning collocations. The third task was a translation exercise where students had to read the sentences, use a dictionary to look up the meaning of grammatical collocations, and then write the translation into their L1. Sentence writing had the highest level of involvement since need, search, and evaluation were high. Translation was the next highest as all three motivational-cognitive dimensions were needed and the fill in the blanks task was the lowest, as no search component was required. The researchers found that the sentence writing group scored the highest.

Finally, Soleimani and Rahmanian (2015) used the Involvement Load hypothesis to explore whether fill in the gap exercises and reading comprehension as an input type has an effect on enhancing vocabulary acquisition of college level high proficient EFL students. Students were divided into two groups. Both groups completed a fill in the blanks task and a reading comprehension task. They were given a vocabulary pretest, an immediate posttest two days later, and a delayed posttest two weeks later. The gap-fill had L2 glosses for vocabulary while the reading comprehension task had L1 glosses. They found that, for both the fill in the gaps and reading comprehension tasks, students did better in the immediate posttest comparison to their pretests. However, only the fill in the gap task produced sustained results in the delayed posttest. The reading comprehension task, which represented a kind of incidental vocabulary learning, produced lower scores in the delayed posttest. Retention was clearly better when the involvement load was higher.

III. METHODOLOGY

Two vocabulary acquisition experiments were conducted within the framework of the Involvement Load Hypothesis. The first experiment was conducted as a preliminary trial to precede the second. Its purpose was to test the validity of the Involvement Load Hypothesis. The second experiment was carried out to determine the retention rate of involvement load tasks.

A. Experiment 1

Participants

The sample was taken from the classroom of a private English school in the U.S.A. The total number students who took part were 9, but only 5 completed all three segments of the research, so only their numbers will be accounted for in these findings. The students came from an internationally mixed background that includes languages of Middle Eastern, East Asian and South American origins. Students were low intermediate and ranged from 18 to 22 years old. The instructor administered the tasks.

Materials

Following Hulstijn and Laufer’s (2001) original construct, three different tasks were used to invoke different levels of task-induced involvement: A reading with comprehension questions (total involvement index = 1), a reading with comprehension questions and a gap-filling activity (involvement index = 2), a reading with comprehension questions and a writing component (involvement index = 3). For the writing, students had to compose novel sentences with the vocabulary. The three readings with four comprehension questions apiece were selected from the low intermediate reading text book “Interactive English” by Amy Olsen (2009). Each reading had twelve target vocabulary words with a total of 15 nouns, 12 verbs, 8 adjectives and 1 adverb. Posttests for each set of vocabulary words were in the form of multiple choice questions that prompted students to choose the word that matched the given definition.

Procedure

The three tasks as well as the posttests were administered on three separate days over the course of one week. Students did not know they were taking part of a research study. For each task, the instructor gave students the readings and comprehension questions. On a separate sheet of paper were the English definitions of the respective vocabulary words⁴. Students were allowed to use the definitions only for the reading comprehension questions, the gap-fill and the sentence construction exercise. Once students completed those tasks, the instructor collected the reading comprehension activity and the definitions, then administered the posttest.

Hypothesis: Students will perform incrementally better on the posttests as the involvement load heightens.

⁴ Even though translations were not provided for the vocabulary, we kept the search index at zero because the meanings of the words were provided with minimal search effort on the part of the student. It is arguable that reading the L2 definition with or without a dictionary rather than an L1 translation could constitute as a moderate or even strong search index. However to as best as possible replicate Hulstijn and Laufer’s (2001) original construct, this research focused mainly on the effect of the incremental evaluation index on student performance outcome.

Results

	Average wrong answers	Students scored 1 or more wrong
Index 1	2.4	60%
Index 2	1.1	60%
Index 3	0.4	20%

For the reading exercise and the comprehension questions, the average student got 2.4 answers incorrect with 60% scoring 1 or more questions wrong. The reading comprehension with gap-fill activity revealed an average of 1.1 incorrect answers among the group with 60% of students scoring 1 or more wrong answers. And finally the reading comprehension with writing component showed an average of 0.4 wrong answers with a total of 20% of students who got one or more wrong answers.

B. Experiment 2

Participants:

The sample was taken from students in an Intensive English Program at a community college in the U.S.A. The total number students who took part were 7. The students came from an internationally mixed background that includes languages of East Asian, South American and African origins. Students were a combined low intermediate and intermediate class that ranged from 18 to 22 years old. The instructor administered the tasks.

Materials:

The same materials from Experiment 1 were used. The only addition was a pretest and a final exam with all 36 vocabulary words in the form of multiple choice questions. The pretest was a self-perception one loosely based on the Vocabulary Knowledge Scale. Students were given the 36 words and instructed to do the following:

Circle the number that best describes how well you know the following words.

- 1 – I do not know this word
- 2 – I have seen this word, but don't really know what it means
- 3 – I know what this word means
- 4 – I can use this word in a sentence

Procedure:

After confirming the palpable influence of involvement load on vocabulary in experiment 1, the next step was to test the extent of vocabulary retention with given levels of involvement. This took place over the course of the six week course of the community college's Intensive English Program. In week one, students were administered the pretest. Each week thereafter, the instructor would administer one of the tasks along with the posttest in one classroom session. The tasks were administered *starting with the highest level of involvement load to the lowest*. Thus, the reading comprehension with the writing component would start, followed by the gap-fill the next week, and then the reading comprehension by itself. In the fifth week, students were given the final posttest with all 36 vocabulary words.

Hypothesis:

Students will retain more words with unknown meanings from the task with the highest involvement.

Results

	Average wrong answers	Students scored 1 or more wrong	Unknown Words
Index 1	1	42%	71%
Index 2	1.75	42%	50%
Index 3	0.1	14%	0%
Final Test	1.8	85%	76%

For the first posttest with the highest involvement load of the reading comprehension and writing component, students got an average of 1 incorrect answer with 42% scoring one or more wrong. Of the wrong answers, 71% were words which students identified as not knowing what the word meant on the pretest. For the second gap-fill posttest, students got an average of 1.75 answers incorrect with 42% of students scoring one or more wrong. Of the wrong answers, 50% were words students identified as not knowing the word's meaning on the pretest. The final posttest with lowest involvement load showed students got an average of 0.1 answers wrong with 14% of students getting one or more wrong. None of these were words students identified as not knowing its meaning. On the final test students got an average of 1.8 answers wrong, with 85% of students scoring 1 or more wrong. Of the wrong answers, 76% were words students identified as not knowing what the word meaning on the pretest. Finally, all of the wrong answers were vocabulary items from the reading comprehension with writing component.

IV. DISCUSSION

Even if this research is obviously limited in its small sample size, the numbers are revealing. Both experiments confirmed that students performed better on the posttest with the highest involvement load. However the second experiment shows the extent of the students' retention for new vocabulary despite the involvement load. The hypothesis stated that students would retain more words with unknown meanings from the task with the highest involvement load, yet these were the only words students got wrong. This might suggest that the initial acquisitive element in the

Involvement Load Hypothesis is stronger than the sustained retentive element. The implications for instruction would be routine exposure to target vocabulary in addition to task-induced involvement over a period of time. Perhaps a prescribed ratio of vocabulary review with the introduction of new vocabulary through task-induced involvement would be in order. Further research might consider looking into the extent of task-induced involvement on the productive aspect of vocabulary acquisition and retention. This research only examined the receptive aspect in the posttest multiple choice exercises. Also further research could consider looking into the ‘need’ dimension of the motivational-cognitive framework. Thus far, because of the very nature of the research, the need component has remained at ‘moderate’ because subjects were students who were required to learn the target vocabulary. More insight into the conditions that prompt language learners to find the meaning of a word by themselves—thus making need ‘stronger’—might aid instructors on facilitating these conditions to enhance acquisition and retention of vocabulary.

V. CONCLUSION

Intensive English Programs that prepare language learners for higher education should always have a strong academic vocabulary acquisition and retention regimen. As iterated in the introduction, Coxhead’s (2000) 570 most common academic word families should be included in this rigorous course of language training. Textbook centered IEP’s should have their materials evaluated to see what levels of involvement are implemented in vocabulary exercises and supplement whenever necessary. Students in higher education face a substantial amount of pressure to broaden their vocabulary through the lectures they hear, the presentations they give, the essays they write, and the textbooks they read. For those to whom English is still a relatively unknown language, the pressure is intensified. The better IEP courses execute academic vocabulary training, the less these students will have to worry about.

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Varrick Douglas Jr. is a United States citizen. He received his M.A. in applied linguistics from the University of Illinois at Chicago in 2006.

He is currently serving as Program Coordinator of Northern Virginia Community College's American Language and Culture Institute (ACLI) in Woodbridge, VA. where his main responsibilities are developing, coordinating, and managing the Woodbridge ACLI courses for international ESOL students. His primary experience is in higher education as a faculty member in the United States and overseas, including teaching in South Korea and the Sultanate of Oman. He has written ESOL educational materials that include "First Year English" (Alexandria VA, Stickcape Publishing 2014) and "The TOEFL Pocket Vocabulary Guide" (Alexandria VA, Stickcape Publishing 2014). He is currently researching the effects of community service learning on international English language learners.