

**ADAPTING A VOCABULARY NOTEBOOK STRATEGY TO THE NEEDS OF
COMMUNITY COLLEGE ENGLISH LANGUAGE LEARNERS**

BY

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Submitted to the graduate degree program in Curriculum & Teaching at the Graduate
Faculty of the University of Kansas in partial fulfillment of the requirements for the
degree of Doctor of Philosophy.

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Abstract

Vocabulary, both the number of words and the knowledge about each word, are important in the comprehension of academic text in post-secondary education, and adult English language learners often have vocabularies of low quantity (number of words) and quality (knowledge about words). Research points to the effectiveness of teaching independent vocabulary learning strategies as a path to independent vocabulary learning for ELLs, but the specifics of what to teach and how to teach it are less clear. The present study investigated an independent vocabulary learning strategy, the vocabulary notebook, with ELLs studying in a community college academic English as a second language program.

The purpose of the study was to determine how to most effectively implement a vocabulary notebook intervention, and what modifications researcher, teacher, and students would need to make to the strategy to make it actually useful and feasible. A mixed methods, formative experiment was conducted. Five focal students and nine other participants used the vocabulary notebook, and then provided feedback, via surveys, interviews, focus groups, and a post-semester reflection. In addition, classroom observation data were collected, and the teacher was interviewed. Interviews were transcribed and surveys, focus groups, and classroom observations were summarized. All transcripts and summaries were then coded. Finally, a Vocabulary Levels Test was given as a pre- and post-test, and quantitatively analyzed.

Results suggest that, although very interested in learning vocabulary, students had very few comprehensive and coherent strategies in place. The vocabulary notebook

became a tool for *talking about* what matters in learning about words and word meanings, so as to effect a change in student strategy use in collecting information about words so as to be able to use new words correctly. In addition, learners expressed a strong need to develop their social language, and initially indicated no real understanding of the disconnect between social and academic language. Finally, no statistically significant difference was found between the pre- and post-Vocabulary Levels Test. Other findings and implications for practice are also discussed.

Acknowledgements

This has been a long trek, sometimes painful, but mostly a pleasure, and incredibly enriching! I can say—with something akin to awe—that my Ph.D. has changed me in ways that my Master's did not, and I cannot imagine having gotten through this without the encouragement and support that I have received from so many.

Thank you, Dr. Lizette Peter, for telling me in the last semester of my Master's program that, yes, I was most certainly Ph.D. material, and I should totally go for it. It was a great semester overall—loved the class I had with you—and marked the solidifying of my pipe dream into a plan.

Thank you Dr. Karen Jorgensen for helping me bridge the gap between teaching English as a second language and reading education, even though the two of us approach it from very different directions. You always allowed me free reign in classes to research the adult learners with whom I work in immersion settings, and you were always accommodating and supportive of my interests.

Thank you to Dr. Heidi Hallman for indulging me in an *entire semester* of reading and chat about sociocultural and critical theories. I still have much to learn, but that independent study very much informed the lens through which I approached my dissertation research. Plus, you studied under, and are FACEBOOK FRIENDS with, James Paul Gee! You will always have tons of credibility in my eyes!

Thanks to Dr. Jennifer Ng, for convincing me that, even though the previous multi-cultural education course that I had had was less than stellar, if I took your class, we would approach things differently. Such a great class, and the message was super

hopeful, because for the first time, I understood that change could be local and *still matter*.

Thank you to Dr. Donita Shaw for your kindness in jumping onto my committee at the last minute, as well as for your gentle support and encouragement throughout. Because adult learners are also a focus of your research, you have not seen the last of me!

Finally, thank you to my advisor, Dr. Bradley! Your emergent literacy class was such a delight, encouraging me to look with new eyes on non-literate adults learners and understand *why* it was so difficult for them to become literate in a language not their own. Your encouraging me to get a Ph.D. was a big factor in my going for it, and your support throughout has been phenomenal. I had no doubt that you would drag me through, sometimes kicking and screaming, and look! You did it! I still remember you telling me that this Ph.D. was one of the most selfish things that I would ever do. It was, and I shall be forever grateful that that I was selfish for four and a half years!

Thank you to Dr. Monica Mingucci, the director of the IEP at which I conducted research, for allowing me to come into the community college and work with the students there. Thanks to all of the support staff of the IEP, as well as the faculty, who put up with my showing up and disrupting a smooth operation every Wednesday, for a whole semester.

And, I am so grateful to have worked with Ashley Lynd, the level 4 Reading and Vocabulary instructor, and the students in your class. You all so graciously invited me into your classroom and accommodated my requests for your time and energy so generously. I was fortunate, indeed, to happen into that happy circumstance.

In addition, thanks to my colleagues at the Applied English Center, for always supporting and appreciating me, even when I was not the calmest person on the face of the planet. So many of you have reached out to keep me sane and focused. Susanne House, I shall never forget Mandatory Professional Reading (MPR) time. This is a practice I hope to begin again this summer, but it will be lonely without you. Thanks to Dr. Marcellino Berardo for reading my literature review and helping me to clarify my thoughts on second language acquisition, a subject on which you are so much better versed than I. Thanks to Jessica Thompson Loughran, now gone off to work in the Psychology and Research in Education program, for your help in understanding the validity issues within the Vocabulary Levels Test. I will never be an expert on validity, so I am thrilled to have you in my life, for this, among many other reasons! Thanks also to Dr. Ben Friedline, for checking my paired samples T-test and agreeing that, indeed, all was well with my take on it. The voice of a statistics expert was much appreciated, and the fact that your cubicle is so close to mine is very reassuring. I will be back! Thank you also to Dr. Elizabeth Gould, for telling me one day that the only *good* dissertation is a *done* dissertation. I was able to let go that day of my dreams (foolish dreams they were!) of perfection, and I really appreciate the tip to this day. Thanks to Michelle Bland-Bruce, for covering my classes so that I could have the luxury of an extra whole day off to work on my dissertation when I was getting down to the wire. And, finally, thanks to Dr. Tracy Hirata-Edds, for calmly holding my hand at the TESOL conference of 2013, coaching me through some final formatting woes. I was too tired to negotiate that myself, and you were so kind, even though you are a PC person and I work on a Mac!

Dr. Mary Jane Brotherson, thanks so much for the three and half hour foray into my research to put language to my process on a rainy Saturday afternoon. It was grueling and unbelievably helpful, and I would have been in serious trouble without the intervention! And thanks to Retta Hendricks Backus and Vickie Goetz for doing without you that day.

Renee Babin, you are a dear friend, and always kind, and I love you for it. So glad we met in a *reading* class! *Scrabble!*

And, to the future owner of Mr. P.C.'s PCs...when we first met, I blew you off and said that I was working on a Ph.D. and so it had to be all about me. Now I have my Ph.D., and it's always sort of been all about you, hasn't it! Hmmm...how did that happen?

And, to all the others—I have so many strong, amazing women that I so admire in my life! Tracy Abeln, Suzanne Gladney, Talyn Good, Barbie Hollowich, Karen Rogers, Michelle Vietor—thanks for always being lovely!

Finally, I wish to thank my sisters, Donna Hoermann, Debbie Godfrey, and Darlene Klammer. You always thought I was a little nutty, and now you are quite certain. We have gone through a great deal together, sistahs of the Taveggia clan. Herman, Dorothy, and Brother Mart would be tickled at the women we have come to be! All is well.

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Chapter I

Introduction

The language of written academic text is the most challenging form of the English language (Biber, 1986; Biber, Conrad, Reppen, Byrd, & Helt, 2002; Corson, 1997; Cummins, 2003), and adult English language learners (ELLs) who hope to be successful in academic contexts undertake an enormous task. While most native speaking high school graduates typically know more than 20,000 word families (base word plus inflected and transparently derived forms; e.g., *consider* is the base form, *considers* and *considered* are inflected, and *considerate*, *considerable*, and *consideration* are the derived forms; Nation & Waring, 1997), ELLs are likely to know far fewer than 10,000 word families (Grabe & Stoller, 2002), yet a great deal of research (August & Shanahan, 2006; Blachowicz, Fisher, Ogle & Watts-Taffe, 2006; Folse, 2004; Nation, 2001, Nation, 2006; Qian, 1999; Schmitt, Jiang, & Grabe, 2011) suggests that vocabulary size and knowledge are closely related to reading comprehension.

Rationale

While second language acquisition (SLA) in adulthood can be somewhat problematic in terms of native-like pronunciation (Larson-Freeman & Long, 1991; Oyama, 1976) and syntax (Johnson & Newport, 1989; Patkoski, 1980), vocabulary development is likely *not* hindered by age (Marinova-Todd, Marshall, & Snow, 2000; Snow, 2007). Still, a problem with the quantity of words known, as well as the depth of information known about those words, persists for adult ELLs, particularly if they elect to study in an academic context. While native speaking children learn up to 3,000 words

per year from grades 3 to 12, merely through incidental exposure (Nagy, Anderson, & Herman, 1987), adult ELLs studying at college are expected to develop academic vocabulary simultaneous with reading and learning from academic text (Grabe & Stoller, 2002). Because vocabulary is an area where adult ELLs can show significant progress, the numbers might not be, in reality, as daunting as they first appear, but it is not likely that learning vocabulary will happen incidentally, as it does with children.

An explicit focus on vocabulary instruction is necessary to adequately address the disconnect between what vocabulary skills ELLs have, or more precisely, do not have, and what they are supposed to do with vocabulary to learn more effectively. Researchers have identified a number of instructional techniques that work well, in both first and second language classrooms: (a) development of word consciousness in learners (Graves, 2006); (b) active learner engagement with words (Blachowicz et al., 2006); (c) use of the first language to scaffold the new language (Blachowicz et al., 2006); and, (d) use of first (L1) and second language (L2) cognates when languages are related, (Hancin-Bhatt & Nagy, 1994), such as the those found between Spanish and English. These techniques fall short, however, considering the relatively small number of words that can be explicitly taught in the classroom in comparison to the number learners need to effectively comprehend texts. In one 15-week study conducted in a middle school classroom with both ELLs and native English speaker students (Carlo, August, McLaughlin, Snow, Dressler, Lippman, Lively, & White, 2004), 12 words per week were studied and every sixth week was devoted to review. The emphasis in this research was on teaching words in context, while also focusing on word-learning strategies, such as attention to morphology and inferring meaning from context. All learners demonstrated

statistically significant gains in word knowledge, as well as measurable gains in overall comprehension, but the ELLs both pre- and post-tested lower than native speakers. In addition, the researchers acknowledged that the pace of word learning was too slow to keep up with learners' vocabulary needs, so they incorporated strategy instruction to develop learners' independent word-learning strategies.

ELLs must have the opportunity to develop independent word learning strategies. Research suggests that these strategies are primarily the use of dictionary (both bilingual and monolingual, Zimmerman, 2009), context clues (Folse, 2004), morphemic analysis (Baumann, Font, Edwards, & Boland, 2005), and the maintenance of a vocabulary notebook (Folse, 2004; Fowle, 2004; McCrostie, 2007; Schmitt & Schmitt, 1995; Walters & Bozkurt, 2009).

Purpose and Significance of this Study

The purpose of the present study was to introduce an independent vocabulary learning strategy, the vocabulary notebook strategy, to adult ELLs who need to develop vocabulary sufficient to interact with academic text. Students learned and practiced the strategy over the course of a semester, and stakeholders, including students, classroom teacher, and researcher, then modified the strategy with the goal of making the vocabulary notebook a useful tool that students would continue to use independently, as they continue into their academic studies.

This study is significant because it identifies modifications of a language learning strategy that is considered best practice (Folse, 2004; Fowle, 2004; McCrostie, 2007; Schmitt & Schmitt, 1995; Walters & Bozkurt, 2009) but which is, admittedly, time consuming and somewhat difficult for ELLs to do without a great deal of instructor

support, at least initially. Learners need to increase vocabulary significantly while simultaneously using their vocabulary to make meaning of academic text; therefore the strategy's usefulness and effectiveness was evaluated as a potential independent vocabulary learning strategy for learners when they matriculate into academic study.

This study was conducted as a formative experiment (Bradley & Reinking, 2011; Reinking & Bradley, 2008), where the dynamics of real classroom context were taken into account as the intervention was put into place and then modified to better support student learning within and outside of the classroom.

The research questions investigated are as follows:

1. What beliefs do teachers and students have about the importance of vocabulary in academic study?
2. What activities and strategies do learners and teachers have in place for learning and teaching vocabulary?
3. How can a vocabulary notebook be implemented effectively and efficiently to increase vocabulary knowledge?
4. How do learners and teachers describe the contribution of vocabulary notebooks to the development of learners as active and engaged word learners?
5. How does the use of a vocabulary notebook affect vocabulary gains in learners?

Overview of Subsequent Chapters

In Chapter II, I review the literature on a variety of issues germane to second language acquisition in adults who are attempting to use English to navigate a college context. Chapter III outlines the methodology employed in investigating the vocabulary notebook intervention, as well as the procedures that were used in data collection and

analysis. In this chapter, I also attempted to isolate and analyze my biases so that I was aware of the effect they might have on the research. Chapter IV presents the findings, particularly the issues that arose in keeping a vocabulary notebook and the modifications that were put in place as a result. Chapter V presents my conclusions, as well as the implications for classrooms in other community colleges.

Chapter II

Literature Review

This chapter reviews literature on topics related to vocabulary learning in community college ELLs. First, second language acquisition is discussed in general, as well as a number of social and learner factors which, as they provide the context of the language learning environment, are related to language learning success. Next, because the language learners in the present study are *adult* learners of a second language, I review the literature on adult learning and discuss the unique characteristics specific to these learners. Third, I present the critical role that vocabulary plays in reading comprehension. Next, I examine the characteristics of effective vocabulary instruction, both in first and second language contexts, including independent vocabulary learning strategies. Finally, the vocabulary notebook, the learning tool under consideration in the present study, is discussed at length.

Language Acquisition

Although L2 acquisition differs significantly from L1, or native language acquisition, a number of theories of language acquisition, including behaviorism, universal grammar, Krashen's Monitor Theory, and cognitive information processing attempt to account for both.

Behaviorism contends that, through imitation and repetition of the language input to which they are exposed, children acquire their L1 primarily via habituation (Lightbown & Spada, 2006). L2 acquisition, accordingly, is either enhanced by habits supported by the L1, or hindered by those that interfere with habits already established in the L1. The difficulty with this rather simple explanation lies in the fact that errors do not

always conform to those that might be predicted. Children learning their L1 frequently make errors (e.g., overgeneralizing the past tense *-ed* morpheme to irregular past tense verbs like **buyed*, rather than the correct form, *bought*) to which they have not been exposed, thus they cannot be acquiring their L1 merely through imitation and repetition of input. Similarly, those learning a second language often make errors that are not predicted by differences between the L1 and L2 (i.e., L2 errors made are not simply attempts by the learner to map L1 rules onto the L2), while errors predicted by L1/L2 differences are not necessarily made. In addition, errors made in a given L2 typically follow a remarkably stereotypical series of stages toward correctness, independent of the L1 from which the learner is transferring, though within each stage some variation by L1 background may occur. For example, learners whose L1 contains a possessive marker will likely acquire the English possessive 's before the third person singular s, while the reverse may be true for those whose L1 does not mark the possessive (Lightbown & Spada, 2006).

Universal grammar (UG, Chomsky, 1986) suggests that acquiring the grammar of a learner's L1 is possible only if a built in structure guides and limits the input to which the learner is exposed (White, 1989). An innate grammar is necessary because of a disconnect between the input received and the competence achieved by the learner, what Chomsky (1980) calls the *poverty of the stimulus*. The input alone is not enough to inform the learner of what is and is not acceptable grammar for a number of reasons. First, input underdetermines the complexity of the grammar a learner can eventually use; thus, learners can both comprehend and generate novel utterances that they have never before heard, using grammar that they have never explicitly learned, yet they do not make

errors that might be expected if they were to overgeneralize their tacit rule base. In addition, the input to which a learner is exposed is often degenerate, or less than grammatically perfect and full of the hesitations and dysfluency of natural speech. Learners are able, nonetheless, to delineate what are allowable grammatical errors (e.g., *She don't like meat.*) and those that are not allowable (e.g., **Tracy believes that herself is a good writer.*). Finally, while the input received by learners provides plenty of positive evidence of what *is* allowable, learners are rarely exposed to negative evidence, which makes it clear to the learner what is *not* possible or grammatical.

Chomsky's innate structure is essentially a system of principles, which limit grammatical structures that are possible or not in all languages, and parameters, which delineate which of potential options available (as determined by language principles) a given language adheres to (Cook, 2001). Principles, therefore, define how varying languages are the same, while parameters define how they differ from one another. Thus, children learning their L1 know, without explicit attention, what can never happen grammatically (principles), and the input that they receive helps them understand which of the available options their specific language uses. For example, languages can be either pro-drop, like Spanish, where a sentence need not contain a subject pronoun, or non pro-drop, like English, where sentences cannot drop the subject pronoun. The innate structure proposed by Chomsky knows that these are the only two allowable options, and even limited input will allow an L1 learner to discover if the language being learned is a pro-drop or non pro-drop language.

While Chomsky made no claims about UG in L2 acquisition, second language researchers (Cook, 2001; White, 1989) believe that it has application in this context as

well. Lightbown and Spada (2006) note that the logical problem inherent in the poverty of the stimulus is as true in L2 acquisition as in the first, namely that learners eventually become far more competent in their L2 than the input to which they are exposed would warrant. At the same time, they note that L2 acquisition, particularly in an instructional setting, allows learners to compare L1 and L2 parameters, as well as to access plentiful negative input (in the form of corrective feedback) and grammatical explanations to supplement the input received. Given these additional sources of language data not available to children acquiring their first language, it is unlikely that UG plays the same part in L2 acquisition, but the variant contexts and access to input do not preclude a role for UG in the acquiring of a second language.

A third theory, Krashen's Monitor Theory (Krashen, 1982) does not address L1 acquisition except to argue that L2 acquisition should mimic L1 acquisition as much as possible. Language is learned by exposure to comprehensible input, or $i + 1$, where i represents language input and $+1$ represents language that is just slightly beyond the learner's language competence. With exposure to appropriate $i + 1$, learners both comprehend the language input and acquire it for their personal use. Krashen draws a distinction between language acquisition (picking up the language via exposure to comprehensible input) and learning (paying conscious attention to language form), and he claims that acquisition leads to language that can be used naturally, while learned language merely acts as a monitor, or check, on the fluent speech (or writing) that has been acquired. Language learners resort to using their monitor when they are trying to be correct, and as such, the monitor has the potential to significantly disrupt fluency.

Krashen also suggests the existence of an affective filter, which can either enhance or block the acquisition of comprehensible input; when the affective filter is high (e.g., learners are afraid of making mistakes, or frustrated by inability to communicate effectively), the input, though comprehensible, cannot get past the filter, so the input is not acquired. When the affective filter is low, however, the learner can acquire comprehensible input. While it is not possible to positively identify the affective filter specific to L2 acquisition, affective factors, such as motivation and self-efficacy, do appear to be important in learning a second language, as will be discussed below.

Finally, information processing, a model from cognitive psychology, views L1 and L2 acquisition as similar processes, both dependent on the processing capacity of the learner (Cook, 2001; Lightbown & Spada, 2006). Because learners have limited processing capacity, they attend to whatever language input that they *can* process, until the processing of that becomes automatic; initially, learners focus on the most salient aspects of the input (e.g., content words like nouns and verbs) so as to understand the gist of the message, and ignore much of the rest. As processing of this “big picture” language becomes progressively more automatic, processing capacity is then freed up to process the smaller, less meaning-bearing aspects of language (e.g., function words and grammatical morphemes).

In addition, as language processing goes from an effortful, conscious process to an automatic one, learners engage in restructuring their understanding of the language, and appear, in fact, to unlearn what they have already learned (Gass & Selinker, 2001). Restructuring occurs when learners are exposed to language data contradictory to what they believe they know about the language; these beliefs force learners to examine what

they know in light of the new, discordant data and force a process of sorting out new and old information. Typically this results in temporarily less accurate language use, as what was once learned to automaticity is now restructured to fit with new understanding of the language.

Though none of these theories likely account for all aspects of language acquisition, they hint at the complexity inherent in learning a second language in terms of linguistics, cognition, and environment. With the exception of Krashen's (1982) affective filter, though, social factors likely to influence language learning are left unexamined. Given that language is so heavily embedded in the social, it is probable that any theory of language acquisition, no matter how complete, would be vulnerable to mediation by the social factors in play during the process of acquisition. In the following section, social factors likely to influence SLA are discussed.

Factors Affecting L2 Acquisition

Social Factors

Second language learners are inevitably second culture learners (Brown, 2000; Stuart-Robinson & Nocon, 1996), and learners' sense of self with respect to the culture in question is likely to have a bearing on language learning. Schumann's notion of social distance (1976) delineates a number of factors that define the relationship of language learners to the target language (TL) culture. Issues such as the power dynamic between the TL group and the language learning group, as well as the either negative or positive view members of the two groups hold of each other; the amount of integration between the two groups, as well as the degree to which group characteristics are either similar or different relative to each other; the self-sufficiency and cohesiveness of the language

learning group; and finally, learner's intended length of stay, all play a role in determining either a positive or a negative language learning situation, which in turn influences learner attitude toward both the TL and culture. Language learners who feel on socially equal footing with the target culture, and have a need to invest in it, are typically more successful language learners, while those who feel denigrated by the target culture, and feel little or no need to invest in it, are generally less successful.

Learner Factors

While social distance is a group phenomenon, individual, affective factors play a role in learner success in SLA as well. Motivation is a likely contributor to success in language learning, but there is some question as to the relationship between SLA success and motivation: does success in language learning increase motivation to learn more, or does high motivation increase success in learning a second language (Larsen-Freeman & Long, 1991; Lightbown & Spada, 2006)? Gardner (1988) characterizes motivation according to purposes for learning the language; motivation is either instrumental (language learning for a particular, specified purpose, like a job) or integrative (language learning for the purpose of integrating into the target culture). Though Gardner considers the desire to integrate a stronger motivating force than instrumental, Dornyei (1990) looked at Hungarian learners studying English in Hungary (English as a *foreign* language, or EFL), and he found instrumental as related to career to be very motivating for those learners. In addition, the Hungarian learners' integrative motivation stemmed from overall positive attitudes about English speaking cultures and their peoples, rather than a desire to actually integrate. Finally, integrative motivation seems likely to be affected by Schumann's (1976) social distance: living within a culture where one feels

powerless may just as easily generate hostility as the desire to learn the language of the culture.

Though motivation and its relationship to success in SLA are not entirely clear, highly motivated learners generally have high self-efficacy (Ehrman, Leaver, & Oxford, 2003). Self-efficacy (Bandura, 1993) refers to a learner's perception of his or her own ability to organize and carry out tasks in order to reach personal goals, and is influenced in at least two ways (Bandura, 1993; Zimmerman, 2000). If learners experience success over time, as well as view their own successes favorably when compared with the successes of others, they are likely to develop high self-efficacy. Those with high self-efficacy are likely to put forth more effort initially, and demonstrate considerable persistence even when not successful on first try. Instead of automatically assuming a lack of personal ability, learners with high self-efficacy look for external obstacles that may be hindering their success, and strategize ways to get around the barriers holding them back. Because they see themselves as powerful learners, they are motivated to persist in tasks not immediately beneficial to their learning.

Because self-efficacy is related to success over time, under good circumstances as well as bad, learner self-efficacy may shift as self-perception of success shifts. Thus, factors such as fatigue, hunger, anxiety, or other stressors that influence success, may vary through time, and will contribute to variable self-efficacy as the personal conditions of the learner changes.

These contextual factors, whether they are social or individual, demonstrate the complexity inherent in theorizing SLA. SLA is likely too complicated to explain without taking into account all of the factors that may influence it. I turn now to a final factor,

age, which affects all learners, irrespective of the content they are trying to learn, but plays an important role in SLA.

Adult Learners and Adult Second Language Acquisition

Adult Learners

Because of age and experience, adult learners pose challenges in the classroom somewhat different from those of children, particularly if they are non-traditional students returning after an extended time away from school. Bernat (2004) emphasizes the need for attending to adult learners' affective as well as cognitive needs, and notes that they are likely to develop resistance to L2 teaching if these needs are not adequately addressed. First, adults are independent and well functioning in ways that children cannot be, and proud to be so; treating them as less than fully capable just because their language skills are not yet developed risks alienating learners. In addition, they have well established patterns of learning, and strong feeling about both what language they need to learn and how language learning should take place. While some of their ideas about language learning may, in fact, be counterproductive, dismissing them out of hand without discussion is also likely to frustrate learners. Adult learners are also likely to be preoccupied with non-school responsibilities, such as home, family, and work, and, as such, they will selectively filter out what does not seem at least somewhat immediately applicable for them; it is therefore incumbent on instructors to be very clear about how material covered and classroom techniques used are valid and meaningful for students. Perhaps most notably, adult learners are acutely aware of the potential for loss of social identity and heritage language, which their residence in the second culture and language study put at risk.

Adult Second Language Acquisition

SLA in adults, including post-pubescent individuals, (Brown, 2001), differs from children with respect to rate of acquisition, prospects for ultimate attainment, or end stage performance (Liu, 2009), in the L2, as well as the skills, strategies, and literacies that learners employ as they acquire their L2.

One aspect of SLA that varies depending on age is the rate at which the L2 is acquired. Krashen, Long, and Scarella (1979) found that, while adults learn a second language faster, at least at the initial stages, than children do, and children aged 12 to 15 years old learn faster than those aged 3 to 11 years old, younger learners catch up and surpass both older children and adults in a matter of months (Snow & Hoefnagle-Hohle, 1978). This initial faster rate at which adults learn applies to acquisition of morphology, our understanding of *morphemes*, the smallest units of words which carry meaning which can be lexical (e.g., *hydrophobic* means fear of —phobic—water—hydro), derivational (e.g. *impression*, where the suffix *-sion* denotes noun-ness) or inflectional (e.g. where the *s* on *dogs* represents the plural of dog, but the *s* on *eats* represents third person singular subject). The initial faster rate of learning is also due to syntax, how words combine to make phrases, clauses, and sentences, but not to pronunciation, and it is likely a result of adults' advanced cognitive development (Larsen-Freeman & Long, 1991).

The notion of ultimate attainment points to the potential of a critical (Lenneberg, 1967), or sensitive (Lamendella, 1977), period, during which language acquisition, whether first, second, or subsequent, is unlikely to result in native-like performance unless it begins in childhood. Children acquiring English before the age of six can expect to speak unaccented English (Larsen-Freeman & Long, 1991; Oyama, 1976), while those

beginning later will have more variable outcomes. Learners acquiring English before age 15 years but especially before age 10 years, are likely to be indistinguishable from their native speaking counterparts in terms of intuitive morphosyntactic knowledge and use of the language (Johnson & Newport, 1989; Patkowski, 1980); again, those who begin later are less assured of a native-like outcome.

While the existence of a critical period for language acquisition would appear to be an obstacle to adult L2 learners, research suggests that adult L2 vocabulary acquisition is less vulnerable to its effects than are pronunciation and morphosyntactic knowledge (Marinova-Todd, Marshall & Snow, 2000; Snow, 2007; Snow & Hoefnagel-Hohle, 1977, 1978). Marinova-Todd (2003) found that L2 learners were more likely to demonstrate near-native competence in receptive vocabulary comprehension and, in some cases, productive vocabulary use, even while pronunciation, morphology, and syntax clearly marked them as non-native speakers. Snow and Hoefnagel-Hohle (1977, 1978) worked with native English speakers learning Dutch as a second language and found that vocabulary learning in the L2 could proceed more quickly than in the L1, particularly in adults, and speculated that this rapid development is supported by both L2 reading and learners' explicit attention to vocabulary.

In addition, Liu (2009) distinguishes between ultimate attainment of L2 vocabulary—the lexicon—in terms of both lexical *processing* (e.g., the ability to attend to tones in such a way that they could be used to assist in accessing word meaning) and lexical *performance* (e.g., the ability to decide if a target word was semantically related to a word used in a sentence). In his work with adult advanced L2 learners of Chinese, Liu found that lexical processing related to semantic activation (accessing all or most of the

potential semantic meanings represented by the lexical item) differed from that of native speakers, while processes involved in semantic integration (limiting the potential semantic meanings to those allowed by context) were virtually identical. At the same time, these learners' scores on a Chinese language proficiency test indicated that they comprehended Chinese characters with relative ease, scoring only slightly lower than their native speaking counterparts. Liu contends that the notion of ultimate attainment, with its focus on performance, is unhelpful, since native-like performance can mask processing differences that are, indeed, very real, and in linguistic domains other than vocabulary, may contribute to less than optimal attainment.

Finally, older adolescents and adults bring with them a number of advantages when learning a second language in an instructional setting. Their cognitive abilities are far better developed in comparison to those of children, so they are more capable in their use of abstract thought and deductive reasoning. They often have extensive classroom experience, including knowledge of task types (e.g., fill in the blank or matching activities) and expectations. In addition, the concept of metalanguage, language that we use to *talk about* language, while challenging to negotiate in a second language where one lacks the appropriate vocabulary, is firmly in place with adults and older adolescents. (Brown, 2001). In addition, these more experienced, older learners often have well-developed conceptual knowledge that can then be transferred, with appropriate scaffolding, to the new language (Graves & Fitzgerald, 2003) in addition to possessing academic skills and strategies that can be applied equally as effectively in the new language (Cummins, 2003).

Thus, while the critical period may hinder adult language learners in their ultimate attainment of language, their life and learning experiences may well suit these learners to an academic context, where the study of language, and its subsequent application to the heuristic purpose of mastering academic content, is so closely intertwined with previous academic experience and skills.

Adult Language Learners at the Community College

Adult immigrants are more likely to choose community colleges than any other post-secondary education (PSE) opportunity (Teranishi, Suarez-Orozco, & Suarez-Orozco, 2011). The choice of community college over a 4-year institution is somewhat natural for immigrants for a variety of reasons (Szelenyi & Chang, 2011). First, their open access policies are a good fit for those students who are not academically well prepared, as is true for many immigrants (Bailey & Weininger, 2002; Blumenthal, 2002; Conway, 2009; Curry, 2001; DeCapua & Marshall, 2011; Rumbaut, 1998; Thonus, 2003). Second, community colleges are significantly more affordable than 4-year institutions, and tend to be closer to home. Lastly, many community colleges offer English as a second language (ESL) courses, which many immigrant students will need if they are to continue into academic study.

Community colleges are a good fit for other reasons as well. Bailey and Weininger (2002) note that students who attend the community college are often nontraditional students, including those who are older, working, and parenting. These students typically do not spend time on campus other than the time they are in class (Orozco, Alvarez & Gutkin, 2010; Teranishi et al., 2011) and need services available when they are. They also offer a range of opportunities to suit a range of student learning

goals (Teranishi et al., 2011), including certificate programs, associate's degrees, and a variety of continuing education courses designed to prepare students for the workforce.

Finally, Townsend (2007) found that first generation immigrants (those born outside of the US and who actually experienced emigration from the native country and resettlement in the US) consider the community college environment to be warmer and more nurturing than that of their 4-year counterparts, with generally small classes and teachers focused on teaching rather than research.

Immigrants who are high school graduates are more likely than native-born students of the same racial or ethnic group to seek out PSE, but they are also more likely to drop out (Teranishi et al., 2011). This is likely related to the unique needs that immigrants bring to the college environment. These needs will be discussed below.

Linguistic Needs. Kilbride and D'Arcangelo (2002) surveyed 146 immigrant students to assess students' perceived needs in the community college; not surprisingly, language was the greatest expressed need.

College study requires that students be facile with the language of written academic text, which is the most challenging form of the English language (Biber, 1986; Biber, Conrad, Reppen, Byrd, & Helt, 2002; Corson, 1997; Cummins, 2003; Gee, 2005). The language of schooling is marked by vocabulary (Corson, 1997), grammar (Gee, 2005), and overall discourse structures (Shanahan & Shanahan, 2008) that differ significantly from the language of social discourse (Cummins, 2003).

Cummins (1979, 2003) neatly delineates the two different types of language. Social discourse, which he calls Basic Interpersonal Communication Skills (BICS), takes about two years to develop. Academic language, which Cummins calls Cognitive

Academic Language Proficiency (CALP), requires five to seven years, on average, before learners are proficient. In fact, Cummins' threshold hypothesis posits that at least a minimum BICS be in place for the learner before the acquisition of CALP can begin.

Depending on generation status and length of time in the US, immigrants display varying linguistic strengths and weaknesses (Conway, 2009, 2010). First generation learners who have recently arrived will need work with oral social language, as well as both oral and written academic language. Second generation learners have learned English naturally, though it was not the language of the home, and it may be a nonstandard form of the language, so they are likely to need work with both oral and written academic language.

A third category of learner, dubbed Generation 1.5 (Blumenthal, 2002; Curry, 2004; Forest, 2006), came to the US early enough to spend some or all of their time in US high schools, and some arrived young enough to attend middle school here. These learners frequently have not learned either their first (L1) or second (L2) language well, at least with respect to academic language (Forrest, 2006). Also, they speak fluent but inaccurate English (Blumenthal, 2002), characterized by errors that proficient speakers of the language are unlikely to make (e.g. **Tracy believes that herself is a good writer.*). Typical ESL courses, based as they frequently are in formal analysis of grammatical patterns, tend to frustrate these Generation 1.5 students, who have a deeply ingrained understanding of English but cannot use rule-based strategies to examine it (Thonus, 2003).

Academic Needs. Not surprisingly, academic preparation is closely tied to linguistic concerns for English language learners. As mentioned earlier, the language of

schooling is considerably more complex than that of casual conversation, but the *language of academics* must be attached to academic *concepts*.

Cummins (1979) developed the Common Underlying Proficiency Model to describe the relationship between academic language (CALP) in the L1 and its transfer to the L2. According to Cummins, language attached to concepts learned in the L1 is readily transferred to the L2. Thus, children with a strong academic background in the L1 are more likely to achieve CALP similar to their grade level peers faster than those who have to develop both the academic concepts *and* the language. Jiang and Kuehn (2001), in a mixed methods study conducted at a California community college, were able to extend Cummins' work as it relates to adult SLA. Those immigrants with more than 10 years of study in their native countries made more progress, as measured by a pre- and post-test of academic language, than those who had nine or fewer years of L1 education, indicating that a solid academic base in the L1 facilitates learning the L2.

Jiang and Kuehn's (2001) work is significant because, in many cases, immigrants come to community college with less than optimal educational backgrounds. Native born students who attend community college are also less than adequately prepared for college study, but Conway (2010) found that, while 55% of native born freshman need remedial courses, 85% of immigrant freshmen need remediation, inclusive of but not limited to ESL. A number of factors are likely to contribute to this issue.

First, DeCapua and Marshall (2011; see also Bigelow, 2007; Brown, Miller & Mitchell, 2006) note that many immigrants have had little or interrupted formal education in their own country. These learners are learning to function in an instructional environment that challenges the only ways of learning they have in place. Thonus (2003)

points out that many of them are not just the first in their families to go to college, but the first to become literate in any language.

Generation 1.5 students also frequently come to the community college classroom poorly prepared. Many of them came to the US before having developed their L1 fully, either BICS or CALP, and immediately began the struggle to learn English. Blumenthal (2002; see also Conway, 2009; Curry, 2004; Forrest, 2006) notes that Generation 1.5 students are poorly prepared for college with respect to writing, study skills, critical thinking and general knowledge, which seems to somewhat mirror some of the difficulties that native born students might present with. Indeed, Blumenthal suggests that Generation 1.5 learners may benefit from traditional remedial work as opposed to ESL coursework, with the caveat that they have distinct linguistic issues that will not be adequately addressed in those classes.

Another issue for ELLs who have attended high school in the US is simply their designation as ELL. Placement into ESL classes precludes their participation in other, more rigorous, college preparatory courses and generally pushes them into non-college bound courses (Conway, 2009, 2010; Kanno & Cromley, 2010). Kanno and Cromley (2010) found the number of math courses in high school to be a significant predictor of both PSE access and attainment, but overall, the number of math classes the ELLs take in high school is low (Conway, 2009, 2010).

Another factor that Kanno and Cromley (2010; see also Conway, 2009; 2010) found significantly predictive of college access is high school GPA. Yet high school GPA for ELLs, if based on the less rigorous courses that recent immigrants take in “newcomer” programs, can be misleading. Bigelow (2007) profiled one participant in an

ethnographic study she conducted. Fadumo, a student from Somalia, attended all four years of high school in the US. Her time spent in high school was, in fact, her only experience of formal education. Because she graduated with a GPA of 3.85, she had every expectation that she was ready for the nursing program at the local community college, so when she enrolled, she was frustrated to be placed in all ESL and remedial reading classes, placement which is a significant negative predictor of persistence and attainment (Conway, 2009, 2010; Teranishi et al., 2011). Thus, a strong high school GPA might well encourage ELLs into college, but if the GPA is not reflective of ability in academic classes, it may contribute to learner attrition in college (Conway, 2009).

Needs of the Outsider. Critical to school success is cultural capital, which Bourdieu (1987) defines as “those properties capable of conferring strength, power and consequently profit on their holder” (p.4). In the context of school, cultural capital plays out linguistically, academically, and merely in “the knowledge of how to navigate the educational system...and the sense of entitlement with which to demand accommodation,” (Kanno & Cromley, 2010, p. 7).

Brammer (2002) notes that ELLs frequently lack the linguistic cultural capital necessary for academic success. She looked at writing samples that ELLs produced in basic writing courses. In addition to the grammatical errors they made, ELLs marked themselves as outsiders in a variety of ways: they wrote about topics inappropriate in an academic setting, they addressed the reader directly in their writing, and they used non-standard discourse patterns. If ELLs are to write academically, they will have to unlearn a great deal of what is essentially *self* in order to relearn how to do it in a way that is valued in an academic environment in the US.

Another aspect of capital, academic cultural capital, includes the habits and behaviors that “work” in school, or the “knowledge and habits of the socially valued practices of high education,” (Curry, 2004, p. 54). Curry (2000, 2001) observed a 15-week community college writing course for immigrants with a wide variety of skill levels and background education. Those students who were better prepared for academic study (mostly by virtue of college educations in their native countries) received a great deal of attention from the teacher, including extensive feedback on writing assignments and opportunities to participate in class discussions. In contrast, the lesser-educated students received less corrective feedback on their writing and were called on less frequently in class. By the end of the semester, 75% of the students had dropped out of the course. In a follow up interview, the instructor acknowledged that well-prepared students were easy to reach and fit nicely with his expectations of what students do and how students behave. Curry (2000) uses Gee’s (1996) concept of cultural models to explain the instructor’s behavior in the class. Cultural models represent the cultural and social, as well as the resulting personal, delimitation of what those in power decide it means to *be* in a particular role. Students ask questions, they do their homework, they buy the textbook, they keep their papers neatly organized in a binder, and they always come to class with a pencil. The instructor Curry observed knew how to deal with the students who were acting in accordance with his personal/cultural model student, and with them he was comfortable and easy. With the others he was less so, and they likely felt it. Dealing with their own academic struggles as well as the negative sense of worth they were receiving from the teacher, they dropped the class.

Finally, cultural capital defines how we walk into the building, how we ask for help at the financial aid office, and whether we will go to visit a professor during office hours. Curry (2001) found that advanced college experience (defined by a graduate degree), whether it occurred in the US or elsewhere, provided a “sense” of the system that is “college” for students, allowing them to navigate much more easily in the community college writing class in which she observed. These conventions were unclear to, perhaps even unnoticed by, the students who were new to college, but the behaviors exhibited by these more experienced students clearly marked them as insiders. This insider knowledge allows students to navigate institutional systems successfully and instills in them the wherewithal to self-advocate at the community college.

On the more positive side, immigrants do tend to have strong family capital (Kanno & Cromley, 2010; Keller & Tillman, 2008). Kanno and Cromley (2010) measured family capital in terms of parental education level, family composition, the educational expectations of parents, and parental discussions with adolescents about PSE. While the frequently low educational level of immigrant parents has a negative influence on PSE access and attainment, parental expectations with regard to PSE are a strong predictor of access and attainment. Immigrant parents, particularly as regards first generation children (those born outside of the US, Keller & Tillman, 2008), have very high expectations that their children will continue schooling after high school. In addition to parental expectations, immigrant families tend to be somewhat close knit and generally involved in family concerns (Keller & Tillman, 2008), which also tend to encourage college attendance.

Financial Needs. Community college, while less expensive than 4-year institutions, is still expensive, and immigrant families are often low income. Teranishi et al. (2011) notes that, in 2005, immigrants' weekly wages were 25% below native workers; Latino immigrants were the least paid, earning just 61% of the wages of their native born counterparts. Financing college, thus, is a serious concern, but immigrants consistently underuse financial aid (Teranishi et al., 2011). Kilbride and D'Arcangelo (2002), in surveying 146 community college students, found that more students asked for help from family and friends ($N=37$) than from the college ($N=30$) they attended. Teranishi et al. (2011, see also Szelenyi & Chang, 2002) contend that immigrant students are likely unaware of the federal Pell grants available from the US Department of Education, and that those who are familiar with the program are frequently unclear about their eligibility. Many assume that it is only available for citizens, not legal permanent residents or the children of immigrants, when indeed it is available for all legal residents, naturalized citizens or not. In addition, the FAFSA form is difficult to complete and many first-time applicants need support in doing so (Szelenyi & Chang, 2002; Teranishi et al., 2011), but may not know where to go for that help. When trying to complete the FAFSA form out on their own, many immigrants give up and finance their college education personally (Teranishi et al., 2011). Finally, Pell grants are limited to credit courses beyond thirty hours of ESL and/or other remedial classes (Teranishi, 2011), and many beginner students will require more than thirty hours of ESL/remedial course work. Without access to financial aid, immigrants are more likely to attend college part-time while working to pay for college, and part-time status is a clear negative predictor of attainment (Kanno & Cromley, 2010).

Non-Traditional student needs. Finally, immigrant students are frequently non-traditional students, and with that status comes particular needs. According to Teranishi et al. (2011), more than 50% of immigrants are over the age of 24, more than 30% have dependents, and 75% work full or part-time while attending college part-time. In addition, immigrants typically spend up to 15 hours a week more than native born peers tending to family responsibilities (Tseng, 2004). As noted above, part-time status negatively predicts college attainment, and the competing demands on their time and energy that these students contend with make it much more difficult to make school the priority that it is.

Despite the issues considered above, immigrant students do well in community college. Keller and Tillman (2008) found that first and second generation immigrants are more likely to attend community college than their native born peers, and first generation immigrants are more likely than native born students to subsequently transfer to a 4-year institution. In addition, Conway (2009) notes that, once immigrants undertake their college career, they do better than their native born peers in such PSE indicators as the number of credits earned and GPA. Nonetheless, there are some services that community colleges could provide which might better support their immigrant student population.

In summary, immigrant adults are mostly a good fit with the community college, but these students have a range of needs that can challenge their ability to persist and reach their goals in college. Two of these challenges, linguistic and academic, are directly related to both vocabulary and its connection to reading comprehension, which is presented in the following section.

The Importance of Vocabulary in Reading Comprehension

The language of written text, particularly that found in academic text, differs considerably from that of spoken text. The vocabulary of written text tends to contain words with Latin and Greek roots in much higher proportion than in spoken text (Corson, 1997); in fact, Corson notes that even in children's books, readers are exposed to fifty percent more low-frequency words (those of Latin and Greek roots) than "either adult prime-time television or the conversation of university graduates" (p. 677). The low-frequency words to which Corson refers are general academic words typical of written academic language, but do not necessarily include the specialized technical vocabulary that characterizes text specific to the various content areas (Corson, 1997; Schleppergrell, 2001).

In contrast, Corson (1997) notes that the language used in everyday social contexts is characterized by mostly high-frequency words of Anglo-Saxon origin. He looked at two corpora, one social and one academic, comparing the origin of the words in each. His analysis of the most common 150 words from the Birmingham corpus, collected to identify the most critical words to teach beginning ELL adults and children (Sinclair & Renouf, 1998), found that all but two of the words are of Anglo-Saxon roots. By contrast, the first 150 words of Nation's University Word List (1990) are almost exclusively Greek and Latin in origin, with only two coming into English from Germanic/Scandinavian roots and six from French.

The infrequent occurrence of academic vocabulary makes incidental learning via exposure less likely (Corson, 1997). In addition, it contributes to a certain semantic opacity, because, Corson argues that "language creates the brain" (p. 693), making us more or less likely to be able to decipher a given text, depending on the nature of the

language to which we have been exposed. Greek and Latin words are morphologically complex, and because meaning is deciphered more quickly if we can access complex words by lexical morpheme rather than whole word (Corson, 1997), a reader who is lacking sufficient exposure to the words themselves, as well as their morphemic constituents, is unlikely to be able to make meaning out of the words upon encounter and will not likely develop sufficient familiarity with the morphemes in order to increase the processing speed on future encounters.

Given the relative difficulty of vocabulary typical of written academic text, vocabulary seems critical to reading comprehension, and indeed, research finds that target language vocabulary size and knowledge is closely tied to reading comprehension (August & Shanahan, 2006; Blachowicz et al., 2006; Folse, 2004; Nation, 2001; Nation, 2006; Nation & Coady, 1988; Qian, 1999; RAND Reading Study Group, 2002; Schmitt, Jiang & Grabe, 2011; Stahl, 1983; Stahl & Fairbanks, 1986) for both second language readers and their native-speaking counterparts.

With respect to vocabulary size, Nation and Hwang (1995) found that while a familiarity with the 2,000 most frequent word families allows for reader coverage of almost 84 out of 100 words of unspecialized running text, those hoping to pursue study at the university level are likely to need 8,000 – 9,000 word families (Schmitt, Jiang & Grabe, 2011), and Hazenberg and Hulstijn (1996) find that a first year L2 university student must recognize with ease, and know the meanings of, at least 10,000 word families in order to read university level text with comprehension; rather curiously, though, a 10,000 word vocabulary is considered large for an ELL, while a native speaker with 40,000 words has only a “sufficiently large” vocabulary (Grabe & Stoller, 2002, p.

66). This discrepancy in what constitutes a large vocabulary would seem to indicate that the task of gaining native-like vocabulary is not a realistic goal for a second language learner. Nonetheless, given the clear connection between vocabulary knowledge and reading comprehension, ELLs hoping to succeed academically will need to develop an extensive English vocabulary with which they are sufficiently familiar that they can use these words generatively.

In addition, Schmitt, Jiang, and Grabe (2011) find an almost linear relationship between vocabulary size and reading comprehension, at least in instances where readers have enough vocabulary to effect more than minimal comprehension; readers who understand 90% of the words in a given text demonstrate 50% overall comprehension of that text; those who have 100% vocabulary coverage in the same text increase in overall comprehension by 25%. Readers did not demonstrate dramatic improvement at any point between 90% and 100% coverage; instead, overall comprehension increased *as vocabulary coverage increased*. This research suggests that vocabulary size, though not sufficient in and of itself, is a critical precursor to text comprehension.

The notion of vocabulary knowledge is more complex than that of size, since even the term itself, *vocabulary knowledge*, is complicated—what does it actually mean to *know* a word? How deep one's knowledge of a word must be in order to support comprehension likely varies (Beck, Perfetti & McKeown, 1982), depending on factors like the word itself, the reader, and the text in which it appears, but more extensive knowledge likely increases a reader's ability to deal effectively with a given word in written text. A discussion of what it means to *know* a word will be treated in a later section.

Two interrelated factors play into the consideration of vocabulary size and knowledge and their connection to reading comprehension. The first regards the nature of the vocabulary-to-reading comprehension connection and includes issues of the mechanism of support (How does vocabulary appear to promote reading comprehension?). The second factor speaks to reciprocity (At what point can vocabulary learning be left largely to incidental exposure?) as well as to the necessary word knowledge (How many and how well?) one must have if reading comprehension is to be enhanced to the point that reading itself becomes a factor in increasing vocabulary size and knowledge.

The Vocabulary-to-Reading Comprehension Connection

While we know that vocabulary size and knowledge significantly predict reading comprehension (Blachowicz et al., 2006), the mechanism whereby that contribution is made is not clear. At least three hypotheses address the question of just how vocabulary supports reading comprehension: the Instrumental, Knowledge, and Access Hypotheses.

In their explanation of the vocabulary-to-reading comprehension connection, Anderson and Freebody (1981) considered the Instrumental and Knowledge Hypotheses. The Instrumental Hypothesis suggests that vocabulary is causally related to reading comprehension. Thus, the more word meanings readers know, the more successful they will be at comprehending text, and a given text will be comprehended or not depending on the ratio of known to unknown words (Stoller & Grabe, 1995). The Knowledge Hypothesis does not depend on a causal relationship between the two factors but assumes that vocabulary knowledge matters in reading comprehension as it reflects the reader's world knowledge; extensive world knowledge provides the reader the conceptual

understanding necessary to comprehend the text. Mezynski (1983; also Stoller & Grabe, 1995) notes the necessity for automaticity in accessing word meaning if a reader is to have the sufficient processing capacity remaining to successfully comprehend text, and postulates the Access Hypothesis as the connection between vocabulary and reading comprehension.

While none of these hypotheses likely accounts fully for the relationship between vocabulary and reading comprehension, all three contribute something to the connection.

The Instrumental Hypothesis is evident in second language classrooms in the form of simplified readers, texts with highly controlled vocabulary commonly used with beginning level language learners (Hague, 1987; Nation, 2001). The words encountered in the simplest of such texts are typically from the 2,000 most frequent word families in English, allowing for sight word recognition of 84% of general text that has *not* been simplified (Huckin & Coady, 1999; Nation & Hwang, 1995), or up to 80% of text at a 9th grade reading level (Coady, Magoto, Hubbard, Graney, Mokhtari, 1995). The initial glancing familiarity that a learner might get from a word list with surface-level definitional support (a hallmark of the instrumental approach) is most likely enough to start with; deeper word knowledge is assumed to develop through the multiple exposures that the limited pool of words in use ensures. Coady (1995; also Koda, 2004) advocates a sort of front-loading approach with the 2,000 core words—teach them heavily to the point of automaticity so readers can get reading and move beyond the basics. Stahl (1983) notes that the instrumental connection between vocabulary and reading comprehension is easy to translate to classroom practice, since an essential element of this orientation is the pre-teaching of a list of words that will be encountered in text.

Mezynski (1983) finds the instrumental explanation for enhanced reading comprehension useful in that it suggests an important question: Just how many words does a reader need to comprehend text?

Absent from the Instrumental Hypothesis, though, is any discussion of what it means to *know* the words on the list or how knowing the list actually affects comprehension. It suggests something of a magic formula—learn words and comprehend text—with no real substance to back it; thus, it seems unlikely that this word list approach has much utility beyond the beginning levels of language learning.

The Knowledge Hypothesis credits the world experience that we have, and the linguistic tags that we put on those experiences, as closely interrelated; both our concept knowledge and the vocabulary that we use to talk about it are of a “chunk,” and it is this chunk that is necessary for making meaning of text (Mezynski, 1983). For language learners, this hypothesis presents something of a dilemma: since most of the world experience occurred in the L1, most of the rich vocabulary is also in the L1. The task, then, becomes one of attaching new words to concepts that are already in place. Koda (2004) notes that when the vocabulary load in a given text is too high, we take the bit that we can get from the text and fill in the blanks by reverting to prior knowledge; this results in miscomprehension, of course, but it also makes clear the mediating effect that vocabulary has on the interaction between prior knowledge and text. Language learners need vocabularies adequate to this mediating task if they are to read with comprehension.

The notion that text comprehension depends at least partly on vocabulary as a function of world knowledge has a great deal more texture than the learn-more-words-and-understand-more-text notion embodied in the instrumental view. The Knowledge

Hypothesis speaks clearly to the question of *knowing* words—the richness of our experience informs our knowledge of the words that we use to talk about it. It speaks as well to the *how* of the vocabulary-to-comprehension connection—without personal meanings, reflected in our vocabulary, we have little to bring to the task of constructing meaning out of text. As such, the Knowledge Hypothesis has more utility than the Instrumental as a construct from which to derive classroom practice. Text can be supplemented with pictures, graphs, discussion, all of which will allow learners to connect the text to what they know, and attach the necessary new vocabulary to it.

The Access Hypothesis stems from the idea that reading comprehension is a complex processing task; the more processing capacity that is devoted to retrieving word meanings, the less capacity is available for overall passage comprehension (Hague, 1987; Mezynski, 1983). Beck, Perfetti and McKeown (1982) propose a continuum of semantic accessibility (SA) for a given reader. High SA are words whose meanings the reader can access automatically, thus freeing up all processing capacity for comprehension; intermediate SA words require the reader to direct conscious attention toward access, so processing capacity available for passage comprehension is lessened; low SA words are simply not available for access. If a reader encounters too many low SA words in the passage, comprehension fails. Similarly, Coady et al. (1995) note that, for ELLs, words fall into one of three categories, where form and meaning are recognized automatically (sight words); familiar, but only in context; or unknown. Unknown words are looked up in a dictionary, considered in context, or skipped entirely—while the first two of these options interrupt the processing flow, skipping words potentially leaves a hole in comprehension.

Like the Knowledge Hypothesis, the Access Hypothesis is inherently satisfying from an instructor's perspective. It suggests automaticity as a mechanism for the vocabulary-to-reading comprehension connection. Automaticity frees up processing capacity that can then be applied to passage comprehension; this transfers easily to classroom practice, where a wide variety of activities can be used to work with the same words enough times that automatic access is assured upon future encounters.

The Reading Comprehension-to-Vocabulary Connection

Stanovich (1986) designates vocabulary as both a cause and effect of reading comprehension, and asserts that the amount of reading is the “critical mediating variable” (p. 380) in this reciprocal relationship. It is likely that, when reading in a second language, the relationship of vocabulary size and reading comprehension is somewhat one-sided, at least initially. If a reader's vocabulary size is small, extensive reading is not likely possible, so the exposure frequency necessary to learn new words—Nation (1990) cites a range of five to sixteen encounters before full acquisition is likely to occur—is not likely. Coady's (1995; see also Koda, 2004) front-loading approach, in which the core 2,000 word families are quickly taught to automaticity, may be of use in preparing ELLs to begin extensive reading of simplified readers.

While we cannot pinpoint with any certainty *how* vocabulary contributes to reading comprehension, it is clear that its contribution is highly significant (August & Shanahan, 2006; Blachowicz et al., 2006; Nation, 2006; Nation & Coady, 1988; Qian, 1999; Schmitt, Jiang & Grabe, 2011; Stahl, 1983; Stahl & Fairbanks, 1986). At the same time, the reciprocal relationship between vocabulary growth and reading requires identification of materials within the readers' comprehension so that they can make

meaning of the text to the extent that vocabulary learning can occur. This rather delicate balance between the two necessitates judicious choice of text as well as extensive vocabulary instruction. In the following section, quality vocabulary instruction in both first and second language contexts will be discussed.

What Constitutes Good Vocabulary Instruction?

Vocabulary Instruction in First Language Contexts.

Blachowicz et al. (2006) suggest a number of elements that should be present if vocabulary instruction is to be effective. The first of these is an environment that actively develops word consciousness (Graves, 2006), an awareness of and interest in words, their meanings, and the ways they can and cannot be used. Another critical piece identified by Blachowicz et al. (2006; see also Mezynsky, 1983) is active learner engagement with words, including activation and integration of learner prior knowledge; the chance to identify and articulate the semantic connections between words; and the provision of a variety of information about words, including both definitional and contextual information, as well as opportunities for learners to experiment with that information in their writing and other tasks. A final element integral to strong vocabulary instruction (Blachowicz et al., 2006) is the teaching of independent word-learning strategies, including inferring meaning from context, morphological analysis, and the use of dictionaries and thesauri.

Vocabulary Instruction in Second Language Contexts. Only recently has vocabulary in SLA been recognized as at least as important as grammar (Folse, 2004). Focus on the teaching of vocabulary in SLA began to take hold in the 1970's (Carter & McCarthy, 1988), but as Folse (2004) notes, while most university and college Intensive English

Programs offer a grammar course, it is rare to find a vocabulary course. Second language learners are very aware of the difficulties of communicating despite limited vocabularies (Folse, 2004), so this shift toward more explicit vocabulary instruction is welcome.

In their work with the vocabulary needs specific to ELLs, Blachowicz et al. (2006) note that what works for native speakers works equally well with ELLs, but they recommend additional elements. First, ELLs are likely to need instruction in Tier 1 words (Beck, McKeown, & Kucan, 2002), those common English words that native speakers are already likely to know in the L1 (e.g., *table, book, soap, quickly, fancy*). Additionally, ELLs whose L1 is a Romance language should be encouraged to use cognates, (Dressler & Kamil, 2006; Blachowicz et al., 2006); words of Latin origin are common in everyday language in Romance languages (e.g., the Spanish *abstemio*), so knowledge of cognates is useful in accessing low frequency words that are more typical of academic text in English (*abstemious*; Hancin-Bhatt & Nagy, 1994). Finally, Blachowicz et al. (2006) recommend that ELLs develop their oral English in support of English literacy and use their L1 freely to scaffold developing oral and literate language in English. Grabe and Stoller (2002) note that a native English speaking child is likely to have already developed a vocabulary of approximately 6,000 words upon first encounter with reading instruction, as well as tacit morphosyntactic knowledge, while language learners are expected to begin reading concurrent with developing this oral base of language.

In addition, Qian (2000) finds that while vocabulary size (breadth) is highly correlated with reading comprehension, depth of knowledge about the words themselves makes a unique contribution to reading comprehension that cannot be attributed to

vocabulary size alone. This leads us back to the question of what constitutes word knowledge.

What does it mean to know a word? Though what exactly constitutes word knowledge is a somewhat nebulous concept, researchers have advanced several schemes in an effort to capture what it means to *know* a word, as well as the types of instruction likely to foster this knowing.

Stahl and Fairbanks (1986) note three levels of word processing that essentially correspond to levels of knowing. The first is association, whereby the learner associates the word with a definition or synonym but may not be comfortable using it except in the most obvious circumstances. The next is comprehension, in which the learner knows the word well enough to, for example, explain its meaning given its occurrence in a sentence, or produce an antonym that was not explicitly taught. The final level is generative, where the learner is able to use the word in a novel way, producing a sentence or generating a definition in the learner's own words. Stoller and Grabe (1995) point to the Access Hypothesis in their discussion of the *range* of knowledge a learner might possess (*no knowledge to some recognition to partial knowledge to full knowledge*), while Mezynski (1983) references the Knowledge Hypothesis when she asserts that knowing a word well means having a wealth of words and ideas associated with it.

Similar to Stahl and Fairbanks (1986), Nation (2001) and Zimmerman (2009) consider the depth of knowledge that one might have regarding a single vocabulary item. Words have denotative and connotative values (*thin* versus *skinny*), vary in strength (*murder* versus *butchery*), co-locate in a variety of ways (*put up* versus *put up with; back and forth*, but not *forth and back*), are constrained grammatically (*many tables* but not

much tables), have potentially misleading morphological structure (*unbutton* but not *unravel*), exist in variant forms (*consider, consideration, considerable*), and are appropriate or not to particular contexts (*shut up* versus *be quiet*).

Coming to *know words* involves recognizing that words are layered and complex, understanding the nature of word complexity, and gaining the skills to be able to unpack the meaning within the layers.

Classroom instruction that focuses on development of both depth and breadth. Given Qian's (2000) findings on the unique contribution that depth of knowledge contributes to reading comprehension, over and above breadth, instruction focused on developing both breadth and depth of vocabulary is likely to result in greater reading comprehension than that focused purely on learning words at a surface level.

The research points to several elements necessary to comprehensive vocabulary instruction taking both depth and breadth into account. If ELLs are to increase their vocabularies to the point where they can deal with academic text, then they need explicit instruction in target words so that they can develop the knowledge necessary to use words with ease. This instruction will need to include a large number of exposures to target words so as to ensure retention; opportunities for wide reading so as to enhance exposure to low-frequency words; and, finally, the opportunity to develop strategies for independent word learning.

In line with their levels of processing, Stahl and Fairbanks (1986; see also Mezynski, 1983) recommend that learners encounter and work with words on multiple knowledge levels in order to develop the necessary depth of knowledge about words. Definitional knowledge includes knowing the definition and synonyms. Contextual

knowledge consists of understanding a core concept, as well as some ability to recognize it in variant contexts. Generative knowledge provides the learner with the most flexibility, allowing for understanding a word when used in an original way as well as using it in novel but appropriate ways. Classroom instruction designed to foster these levels of knowledge assures the depth of knowledge that learners will need if their vocabularies are, indeed, to grow

Nation (2001) advocates in-class vocabulary-building activities that promote *noticing*, *retrieval* and *generative use* of new words. *Noticing* requires that the word be taken briefly out of context so it can be examined as a potentially useful lexical item. Noting the word form, the number of syllables, the word's function in the sentence (part of speech), as well as considering prior knowledge of the word can all be used for the purpose of noticing. *Retrieval* refers to learner opportunities to interact with the word repeatedly, with a greater number of retrievals expected to enhance retention and ease of access. *Generative use* activities require learners to think about the new word in variant contexts, considering its fit, or lack thereof, within that context, prompting deep analysis of word meanings that contribute to ease of use.

Encouraging the practice of wide reading is another important piece of vocabulary development (Fukkink & de Glopper, 1998; Stanovich, 1986). Upon encountering an unknown word in text, readers attempt to make sense of it by using the words around it to derive meaning; through multiple exposures to the word in this way, learners develop a rich enough understanding of the word's meaning so that they will eventually be able to deal with it easily when encountered in text. It is critical, though, that the text be appropriate to the learner's vocabulary knowledge. Nation (2001, 2006) suggests that

learners should know at least 95% of the words in order to achieve the general text comprehension necessary to make accurate contextual guesses in nonspecialized text.

Finally, explicit, in-class vocabulary instruction, while helpful and necessary, is slow and inefficient in building the vocabulary learners need if they are to successfully navigate academic text. In-class vocabulary learning often focuses on content-specific words, but a significant amount of general academic vocabulary will also create difficulties for ELLs. While teachers cannot teach all the words learners need to know, they can teach strategies that will help learners uncover word meanings independently.

Learners skilled in the efficient use of electronic translators and English-only dictionaries (Schmitt & Schmitt, 1995; Zimmerman, 2009), derivation of word meaning from meaningful context (Folse, 2004), application of morphemic analysis (Baumann, et. al, 2005; Zimmerman, 2009), and maintenance of a vocabulary notebook (Folse, 2004; Fowle, 2002; McCrostie, 2007; Schmitt & Schmitt, 1995; Walters & Bozkurt, 2009) are able to pursue word meanings in a more personal, purposeful way, thus allowing for the vocabulary development necessary for success in academic contexts. Thus, vocabulary instruction should focus on teaching these vocabulary learning strategies (VLS) explicitly.

The first of these VLS is the judicious use of electronic translators and English-only dictionaries. While many instructors are uncertain about the efficacy of translators, they are quite useful in determining an initial association between the native and target language, and Schmitt and Schmitt (1995) found that this initial, associational glossing, results in real, though surface, learning as measured by pre- and post- tests given at

varying intervals (Thorndike, 1907). A deeper understanding of the word requires more intensive, English-only dictionary work.

Zimmerman (2009) notes that dictionary use is a complicated skill, requiring the use of an alphabetic list, the discovery of root words within polymorphemic words, and the use of context to determine part of speech as well as choice of an appropriate definition. In addition, dictionaries provide what can be an overwhelming amount of information for those unaccustomed to their use. Thus, for new dictionary users, active instruction in the features included in the dictionary (e.g., abbreviations used, collocations, information on register and usage) is critical. Beginning ELLs, even those experienced in dictionary use in their native language, will likely find dictionary entries almost inscrutable for gaining word meaning, so they are more useful after learners have gained an initial sense of a word. More advanced ELLs with dictionary experience can turn to their dictionaries to find meanings when they encounter a word with sufficient context to support finding the appropriate definition.

A second VLS is the use of morphemic analysis to unpack word meaning. This strategy is somewhat problematic since morphemic analysis can be misleading (e.g., *button* is the opposite of *unbutton*, but *ravel* and *unravel* mean the same thing) so Baumann, Font, Edwards, and Boland (2005) suggest using activities that focus on both useful and misleading morphemic analysis to impress upon learners the potential for faulty morphemic information embedded in words.

The use of context clues to derive meaning is another valuable VLS, though, like morphemic analysis, it has its pitfalls. First, ELLs are rather poor at inferring word meaning from context, guessing correctly only about 26% of the time (Nassaji 2003).

Nation (2001) notes that readers must know 95 out of every 100 words in nonspecialized text, and 98 out of every 100 words in university level expository text, in order to derive word meaning from context with accuracy.

In addition to learner vocabulary creating barriers to accurate guessing from context, useful contextual information itself is often missing from text, except that which is enhanced specifically for the purpose of guessing from context clues; in natural text, context clues are generally absent or, in fact, mis-directive, and lead to inaccurate guessing (Beck, McKeown & McCaslin, 1983). Folse (2004), though, argues that students do improve in their ability to guess word meaning from context if given adequate practice, so in class instruction is indeed useful to students.

A final VLS, the use of a vocabulary notebook both for collecting information about new words (depth of knowledge) and learning word meanings over time (retention) (Folse, 2004; Nation, 2001), allows learners to choose personally meaningful words to investigate and encourages the development of word consciousness, which Graves (2006) defines as *awareness* of and *interest* in words and their meanings (p. 119, emphasis in the original) in learners. Once learners decide to enter a word in their notebooks, that word gains salience, increasing the likelihood that it will be noticed on future encounters. Because learners return to the vocabulary notebook repeatedly, adding newly acquired information about their words over time, they get the multiple (Nation, 1990) exposures to each word necessary in order for full acquisition to occur.

The Use of Vocabulary Notebooks for Vocabulary Development

Vocabulary knowledge is important for first and additional language readers alike; because adult language learners do not have the benefit of acquiring large amounts

of vocabulary incidentally as native speaking children do (Nagy et al. 1987), they need assistance in developing strategies that foster independent vocabulary learning. One independent vocabulary learning strategy that receives a great deal of practical attention in the literature is student use of a personal vocabulary notebook (Folse, 2004; Fowle, 2002; McCrostie, 2007; Schmitt & Schmitt, 1995; Walters & Boskurt, 2009). The vocabulary notebook is a flexible method for collecting information about words that allows for the deep processing of those words (Stahl & Fairbanks, 1986); encourages noticing, retrieval, and generative use (Nation, 2001); engages learners actively with words and word learning, as Blachowicz et al. (2006) suggest; and forces the multiple exposures to each word necessary for retention.

Folse (2004) recommends that four initial pieces of information be added to the notebook about each word: (a) the word itself, (b) its translation into the native language, (c) some definitional information (not necessarily a dictionary definition, which may or may not carry meaning for the learner, but a definition constructed from the various word meaning knowledge the learner has constructed about the word), and (d) some meaningful context that will spur a connection. In collecting even that minimal word data, learners will have already engaged in thinking about and processing the word. While translating into the native language is quite simple given the ubiquity of electronic translators, Schmitt and Schmitt (1995) note that it is a good first step, since native and target language word pairs can be learned quickly, and the connection between the two is likely to be retained. Acquiring definitional information is a more difficult step, likely to require serious consideration of the word in at least a couple of contexts, and perhaps even a conversation about the word with another learner or native speaker. This part is

key, in that it allows the learner both to connect the new with the known (vocabulary for concepts already in place in the native language) and to begin to think about the new word as it is framed in the new language (Schmitt & Schmitt, 1995). Finally, contextual data that will spark the connection between the word and what is known about the word is necessary. This may come either from the context in which the word was initially noticed, if indeed it supplies any data about the word, or learner-produced context—for example, a sentence with useful clues about the word’s meaning.

Even at this early stage, the learner will have thought hard about the new word, so the deep processing necessary to really know the word has begun. In addition, the word now has salience for the learner (Nation, 2001) and thus is likely to draw the learner’s attention upon future encounters. As learners continue to notice the word, they collect further additional data about it and add that information to their notebook. This is a difficult step, because it assumes that learners have developed an awareness of the multiple layers of meaning and form inherent in words (Nation, 2001; Zimmerman, 2009) and certainly requires attention from the instructor, at least in the early stages of notebook implementation. Walters and Bozkurt (2009) note, however, that native speaker input may be necessary throughout the process if misapprehensions about words are to be discovered and corrected. The diverse data collected about each word contributes to the depth of knowledge learners have about their words, and the repeated, rich exposures, both via noticing the word and new data about it and then recording new data in the notebook are likely to be enough, over time, to ensure retention.

The vocabulary notebook strategy requires active engagement with words, forces a number of exposures, and requires the deep processing of words necessary to really

come to know a word; several researchers have found the strategy to be beneficial to learners, at least within limits. Although McCrostie (2007) considers the vocabulary notebook a step toward independent vocabulary learning, he finds that learners are poor at choosing words to pursue; each unknown word was considered by learners to be of equal importance, irrespective of frequency and potential for use. Teacher input, at least in the initial stages, was necessary for helping learners develop criteria for choosing the words that would most benefit them.

Schmitt and Schmitt (1995) also called for a high level of teacher involvement in the vocabulary notebooks. First, they suggest that teachers take an active role in selecting words that students might want to include in their notebooks, taking into account both frequency data and potential for use. Next, they recommend that teachers review the notebooks periodically, to ensure that students are not collecting erroneous data about words, an unfortunately likely possibility. This step allows instructors to gain insight into the types of errors that their students are making at the same time that it encourages learners to be wary of jumping to conclusions about words too quickly. Finally, they encourage instructors to privilege the notebooks by incorporating them into classroom activities.

Fowle (2002) notes that, via the vocabulary notebook, learners develop word consciousness and become active in their pursuit of words and knowledge about words; in addition, he found that learners developed more awareness about themselves as learners, as well as a sense of what strategies work best, by comparing their notebooks with those of their classmates. Learner autonomy, thus, was a peripheral but positive effect of the vocabulary notebooks.

Finally, use of a vocabulary notebook in the classroom and as an independent assignment engages learners actively in word study, and Walters and Bozkurt (2009) found that learners who used them showed gains in both receptive and controlled productive use when compared to learners in the control group. In addition, learners in the vocabulary notebook group used words that they had researched for the notebooks in their writing more frequently than their control counterparts. Students interviewed after the intervention period enthusiastically acknowledged the usefulness of the notebook in gaining vocabulary and reported enjoying the in class activities that were centered on the notebook. Unfortunately, they did not think themselves likely to continue using a notebook on their own; they tended to frame the notebook as something only the *really* good students, who were *really* interested in learning a language, would do, and apparently they did not count themselves as part of this group. The vocabulary notebook was time consuming and very hard work, and those factors seemed to outweigh its usefulness for students. The participating teacher in this study, who found the vocabulary notebook to be useful in developing student vocabulary, was worried about the amount of class time it took, though her students clearly enjoyed the class activities incorporating the notebooks; because of the intensity of the work, she did not think many of her students would continue the notebook once it was no longer an assignment for a grade.

Conclusion

Vocabulary is critical to successful reading comprehension, and as such, it cannot be left primarily to happenstance. Learners must develop word consciousness, as well as learn effective ways to navigate unknown words encountered in text. The vocabulary notebook strategy encourages the development of both breadth and depth of knowledge

about words; if learners find ways to make the strategy, admittedly somewhat time-consuming and arduous, work for them, it is possible that this strategy will allow them to become independent learners of the vocabulary they will need to be successful in their academic subjects.

Chapter III

METHODOLOGY

Purpose of the Study

The purpose of this study was to investigate the efficacy of an intervention utilizing vocabulary notebooks with community college ELLs who hope to continue into academic study after completion of the Intensive English Program. The study addressed the following research questions:

1. What beliefs do teachers and students have about the importance of vocabulary in academic study?
2. What activities and strategies do learners and teachers have in place for learning and teaching vocabulary?
3. How can a vocabulary notebook be implemented effectively and efficiently to increase vocabulary knowledge?
4. How do learners and teachers describe the contribution of vocabulary notebooks to the development of learners as active and engaged word learners?
5. How does the use of a vocabulary notebook affect vocabulary gains in learners?

Research Design

The study was conducted using a relatively new methodological approach to education research, a formative experiment. Formative experiments have roots in education, engineering, and design research (Bradley & Reinking, 2011; Reinking & Bradley, 2008; Schoenfeld, 2006). As an applied approach, it is fundamentally

concerned with connecting research to practice (Reinking & Bradley, 2008). Reinking and Bradley (2008) note that an instructional intervention is designed and implemented; formative data are then collected about the intervention and modifications are made in accordance with the data collected.

Formative experiments are likely to be mixed methods, employing both quantitative and qualitative research methods (Johnson & Onwuegbuzie, 2004). This is in keeping with the pragmatic nature of formative experiments; eclectic methods may be used if they lead to the practical connection of research to practice. However, Reinking and Bradley (2008) point out that formative experiments result in more than mere data collection using both quantitative and qualitative research methods. While quantitative methods may demonstrate causal relationships among variables, the connection may not hold in the messiness of a real classroom. And while typical qualitative research gives rise to a thick, rich description of the classroom, that description is only accountable to providing the description itself, not to shaping an intervention to work within the environment. A formative experiment translates the data collected via quantitative and qualitative means so as shape the intervention to fit the unique context in which it is being carried out.

Research questions were investigated consistent with the methodological framework proposed by Reinking and Bradley (2008) in conducting formative experiments. The framework consists of a series of questions that guide the research from its initial stages through completion, when a retrospective look at the instructional environment and what occurred there allows the researcher to determine if an intervention did, indeed, achieve

the pedagogical goal that drove the research. The questions that define Reinking and Bradley's (2008) framework are summarized below:

1. What is the pedagogical goal under investigation?
2. What intervention might assist in meeting the pedagogical goal?
3. What factors either enhance or hinder the intervention?
4. How should the intervention be adjusted in order to better meet the pedagogical goal?
5. What positive or negative consequences result from the intervention?
6. Has the intervention changed the instructional environment?

With respect to the first and second questions, the pedagogical goal in this study was for ELLs to improve academic vocabulary knowledge by learning and applying a strategy independently; the intervention involved specifically teaching the use of vocabulary notebooks for vocabulary improvement. The vocabulary notebook is considered an effective practice for a variety of reasons (Folse, 2004; Fowle, 2002; McCrostie, 2007; Schmitt & Schmitt, 1995; Walters & Buzkurt, 2009). First, it allows learners to collect a wide variety of information (e.g., variant word forms, collocations, connotation, grammatical constraints; Nation, 2001; Zimmerman, 2009) about words over a number of successive exposures, thus contributing to depth of knowledge about the words. Revisiting the notebook for the purpose of recording new words, new data collected about a word already in the notebook, or for studying the words collected there, allows learners to get the number of exposures to the words (five to 16; Nation, 2001) necessary to achieve retention. Finally, the vocabulary notebook encourages word consciousness (Graves, 2006), an interest in words, their meanings, and the contexts that

either promote or constrain their use. Word consciousness promotes the use of deep processing about words that is considered necessary if learners are to be able to use the words with ease in a variety of contexts (Nation, 2001; Stahl & Fairbanks, 1986; Zimmerman, 2009).

Setting and Participants

The Community College. This research was conducted within an academic English as a second language (ESL) program situated in an urban area of a Midwestern city. The community college district of which it is a part comprises a total of five campuses, the urban campus at which this research was conducted, three others located in outlying suburbs, and the fifth, a technical college.

The urban campus is unique within the district for several reasons (MCC Factbook, 2013). First, this campus has the highest diversity of the five. Only 50% of students are identified as White, Non-Hispanic, in contrast to all of the other campuses, where it is much higher. The urban campus also has the lowest percentage of traditional-aged students as well as the highest percentage of stop-outs, or returning students who were not enrolled in the immediate previous semester. These factors are among those related to college retention and attainment (Bailey & Weininger, 2002).

The ESL program at the campus where the study was conducted has been in place since the early 1990's, and all students in the district in need of ESL are sent to this campus. The program is a six-level program: Basic, 1, 2, 3, 4, and Multi-Skills, and serves primarily immigrant (i.e., a group, inclusive of refugees, who have since gained permanent residency, as well as documented and undocumented immigrants who have

come to the US for economic or other reasons, Teranishi, Suarez-Orozco & Suarez-Orozco, 2011) as opposed to international students (i.e., students who travel to the US to study on a student visa and then return to their home country, Teranishi, Suarez-Orozco & Suarez-Orozco, 2011). Students come from a variety of countries: international students come chiefly from Japan, Korea, and Central and South America, while refugees and immigrants come from Somalia, the Sudan, Haiti, Pakistan, Iran, Iraq, Vietnam, Cuba, Mexico, and others. As a result of the variety of languages spoken, classes are conducted in English only.

Student background, and the impact that it has on academic study, is readily apparent within the program. Immigrants, particularly those who arrived in this country as refugees (i.e., those who have left their countries because of “a well-founded fear of persecution, UNHCR, 1951) have frequently received interrupted, sporadic, or no formal schooling (Bigelow, 2007; Brown, Miller, & Mitchell, 2006), thus native language literacy, and the resultant ability to transfer literacy skills to English, is highly variable (Curry, 2004). In addition, *school literacy*, an understanding of how to function behaviorally and academically in school (Collins, 2010) is often lacking, so immigrants have to learn how to function in a classroom setting while simultaneously learning English. International students, on the other hand, tend to be better prepared academically, in terms of both native language literacy and formal English study (Benesch, 2007; Curry, 2004; Thonus, 2003) and they typically represent the financially and socially privileged in their own countries (Harklau, 2000).

Finally, interrupted formal education results in a lack of prior knowledge regarding typical academic subjects (Brown, Miller, & Mitchell, 2006). For example,

when I taught a Level 4 composition class at the community college where the present study was conducted, a Mexican student who had attended school only until sixth grade in Mexico had never heard about World War II. Another man from South Sudan, with very sporadic formal education, knew nothing about the concept of climate change. In that same class, an international student from Japan who had completed high school in his country was comfortable with both of these subjects and was thus able to research and write much more easily on the topics.

The ESL program uses a combination of the Compass ESL test and additional measures, including a writing sample and an informal interview, for placement. Some Level 4 students may be enrolled in academic courses other than ESL at the community college, with the exception of those who tested in to only Level 4 classes. Students in this study were placed in the Level 4 Reading and Vocabulary class. Level 4 students were chosen for convenience; since they are likely to have the most advanced oral L2 language, they were the easiest for me to have an in-depth conversation about the vocabulary notebook and its usefulness in learning vocabulary.

The Participants. Throughout the intervention, I worked with classroom instructor, Anna (all participants were given pseudonyms). Anna has a bachelor's degree in international studies and Italian; she taught English in Korea for one and a half years, and was in her fourth semester teaching with the program, although for the three previous semesters, she had taught at a university that partnered with the college program, working with Basic Level students.

Anna's Level 4 Reading and Vocabulary class had 17 students enrolled, and 14 of them agreed to participate in the research. I chose five students as a focal group, with the

intent of meeting with them in a small group for both pre- and post-semester focus groups (see Appendices K and M for focus group interview protocols), as well as meeting with each individually at both mid- and post- semester. A brief description of each of the focal students follows along with an explanation as to how the students were chosen.

Jack, from Vietnam, was the youngest of the five focal students and he had been in the US for three years. Jack graduated from a local high school in the US and was in his second semester at the community college. He was a full-time student and worked about 18 hours a week. He financed college through a Pell grant and intended to complete his Associate's degree at the college. Jack was initially an eager participant in the research, but his interest dropped off, perhaps because of his US high school experience. He attended both the baseline and post-semester focus groups, as well as the mid-semester interview. At the post-semester focus group, though, Jack had little to say, mostly agreeing with what his classmates said. He did not attend our scheduled post-semester interview.

Daniela is from Cuba, and had been in the country eight years before the intervention began. She is the mother of a four-year old daughter, and lives with her daughter, boyfriend, and mother. She was unemployed at the time of the intervention, and though she had always attended adult education ESL classes at a local community service center, this was the first time she had enrolled in an academic English program. She had completed high school in Cuba, but had not gone to college, and her boyfriend thought she would have a better chance of getting a good job if she completed college. Daniela's boyfriend is from Kenya, and though he is not a native speaker of English, he had attended university in the US, and she respected his English. She financed her

college study via a Pell grant, and hoped to get vocational certification in order to get a job, at which point she intended to continue studying part-time for an Associate's degree. She then hoped to shift to the local university and work on her Bachelor's degree.

Veronica is from Haiti, and a native speaker of Haitian Creole. She had been in the US for four years at the time of the intervention, and like Daniela, she had started by studying English in area adult education programs. Spring 2012 was her fourth semester at the community college; she had begun in Level 2 in all four of her classes, but because she only came to class part-time, it was taking her longer to make it through the program. She had not completed high school in Haiti. Veronica lives in the US with younger sisters, both of who were born here, and are thus native speakers of English. She worked full-time at the time of the intervention and paid for college with a Pell grant. Veronica did not list any academic goals on her demographic form.

Mai is from China, and had been in the US for three years at the time of the intervention. She had attended but not completed college in China, and was in her third semester of English studies at the college. She is the mother of a teenage son who had come to the US a year after she had, and at the time of the intervention, she worked full-time at a Chinese restaurant. Her college goals included vocational education, and she was using a Pell grant to finance it.

Hayder, with only eight months in the US, had the least amount of cultural and linguistic experience here, but academically he was the best prepared of all of the five focal students, having graduated from a community college in Iran with a technical degree. He speaks Farsi and lives with his mother and father, who had been in the country for quite a bit longer and had brought him on a family reunification visa. He

worked in the kitchen of a local fast food restaurant, and though at the beginning of the intervention, he only worked 25 hours weekly, by the end, he was up to 38 hours a week. He was in his second semester at the college, and as with the others, Hayder financed his schooling with a Pell grant. He hoped to transfer to a university and get a Bachelor's degree.

Table 1 summarizes student demographics.

Procedures

The present study was conducted in four phases, which are described below and summarized in Table 2, found at the end of this section.

Baseline Phase: Before the research began, I obtained approval from the Human Subjects Committee Lawrence, the Institutional Review Board at the University of Kansas (see Appendix A and B for study approval and student consent). In addition, I met with the site instructor to discuss the study in which she was asked to participate, and obtained her consent to participate. I conducted a short interview with the instructor to ascertain her ideas on vocabulary, its connection to and importance in reading comprehension, and instructional practices that she uses with respect to vocabulary. I oriented her to the rationale for, as well as the procedures involved in, the intervention we would be implementing, and at this time, I trained the instructor in the actual use of a vocabulary notebook as a classroom tool. We devised a framework for lesson planning and developing vocabulary activities that would supplement and reinforce the vocabulary notebook, as well as a plan for me to access student work when I was onsite.

The first week of the intervention, I talked to the students about the intervention and obtained consent from those who were willing to participate at a variety of levels: a

Table 1

Demographic Data for All Participants

Name	Native Origin	L1	Time in US	Level of Education	Pell Eligible	Work/Hours	Goals
Jack	Vietnam	Viet.	3 years	US HS	√	PT/18	AA
Daniela	Cuba	Spanish	8 years	HS	√		BA
Mai	China	Chinese	3 years	some college	√	FT	AA
Veronica	Haiti	Creole &French	4 years	HS	√	PT/25	
Hayder	Iran	Farsi	8 months	AA	√	PT/25- 38	BA
Abdul	Palestine	Arabic	7 months	college	√	PT/20	BA
Adel	Iraq	Arabic	1years	HS	√		BA
Yvonne	Honduras	Spanish	5 months	some college		PT/25	AA
Patty	Mexico	Spanish	5 months	college			MA
Ben	Vietnam	Viet.	3 years	some college	√	PT/20	AA
Ruth	Haiti	Creole & French	1 year	HS	√	PT/25	AA
Gita	Pakistan	Urdu	7 years	some college	√		BA
Ahmed	Palestine	Arabic	2 years	HS	√	FT	AA
Dae	Iraq	Arabic	2 years	some college	√		DDS

group of focal students who would take a pre- and post-test, complete a baseline and post-survey, complete a demographic form, and participate in a baseline and post-semester focus group, as well as a mid-and post-semester interview; other participants would complete the pre-and post-test, surveys, and demographic, but would not participate in the focus groups or interviews. That first week, all 14 present students agreed to be part of the research. After agreeing to consent, students completed the form and baseline survey. Later that week, Anna administered a vocabulary pre-test to determine Level 4 learners' knowledge of vocabulary.

Using data collected from the demographic form (see Appendix C for the demographic information collected), I chose five focal participants, by taking into account two factors. The first factor was diversity, in terms of native language, age, and educational background, because it was more likely to provide a richer data. A second, more practical, consideration was students' communicative ability. Even where students are grouped into somewhat homogeneous groups, a wide range of abilities typically exists, and the language demands necessary to participate in an interview in a second language made this factor critical to the data collection process.

I met with the five focal participants for the first of two focus groups the following week, in the hour immediately preceding the class period in which they would begin work with the vocabulary notebook.

Introduction of Intervention: Anna, with my guidance, implemented the vocabulary notebook strategy in the second week of the intervention. First, students completed an introductory activity designed to get them thinking about a variety of factors germane to vocabulary, including sources of words and choosing wisely what

words to investigate, two issues students are likely to struggle with (Walters & Bozkurt, 2009). Then, after brainstorming as a class words that had been encountered over the first two weeks of the semester, students chose 10 words that they wanted to learn and study independently. Anna guided the activity, demonstrating the pieces of known information that they should write down (e.g. part of speech, translation, known word information), as well as how to use the dictionary to find more information about each word. The following week, students chose words independently to study and Anna and I circulated among the students, providing assistance as students gathered information about their words. Thereafter, students were required to work independently on up to ten words a week.

Intervention: After working with the notebook for six weeks, I began interviewing the five focal students individually to assess personal perception of the strategy's efficacy, as well as ideas on how they might adapt the strategy to make it more meaningful for themselves. Anna and I had regular weekly conversations about our observations in an effort to identify aspects of the intervention requiring modification on an ongoing basis and, at mid-semester, I formally interviewed Anna to discover her perceptions of how the strategy was working from an instructional perspective, as well as her insights into student learning. At this point, Anna and I discussed additional modifications that we hoped would improve the teaching and use of the strategy, to be implemented in the second half of the semester, taking into account our observations of the vocabulary notebook in use as well as student input obtained from interviews.

Post Intervention: At the end of the semester, or 13 weeks of instruction, I interviewed the focal students again, this time to ascertain both their fit with the

strategy—as a useful strategy that they can and will use independently—as well as their perception of vocabulary growth that it afforded them. At this time, I also asked all participants to write a reflection paper on the vocabulary notebook. Students wrote about their use of the notebook, which ways of learning were most effective for them, their strategies for deciding which words they most wanted to learn, and how the notebook challenged their perspectives on learning vocabulary.

In addition, I administered a post-test to all participants, the same version of the Vocabulary Levels Test that they had taken during the first week of the intervention. In addition, all students completed a post semester survey designed to determine how their perceptions of themselves as active word learners had changed after focusing so intently on vocabulary for a semester.

Table 2

Summary of Procedures

Phase	Steps	Data Collection
Baseline	<ul style="list-style-type: none"> • IRB approval • Staff Development of instructor <ul style="list-style-type: none"> ○ Obtain instructor consent • Orientation of students to VNS and present study <ul style="list-style-type: none"> ○ Obtain student consent 	<ul style="list-style-type: none"> • Instructor interview • Vocabulary Levels Pre-test • Demographic • Focus group • Open-ended survey
Introduction of Intervention	<ul style="list-style-type: none"> • VNS implementation 	<ul style="list-style-type: none"> • Classroom observation • Documentation <ul style="list-style-type: none"> ○ Lesson plans ○ Vocabulary activities

Intervention	<ul style="list-style-type: none"> • Modifications <ul style="list-style-type: none"> ○ Identified ○ Implemented 	<ul style="list-style-type: none"> • Classroom observation • Informal instructor conversations • Individual interviews (8 weeks) <ul style="list-style-type: none"> ○ Students ○ Instructor • Documentation <ul style="list-style-type: none"> ○ Vocabulary notebooks ○ Lesson plans ○ Vocabulary activities
Post Intervention	<ul style="list-style-type: none"> • Final Data Collection 	<ul style="list-style-type: none"> • Vocabulary Levels Post-test • Open ended survey • Focus group • Reflection Paper (focal students) • Individual Interviews <ul style="list-style-type: none"> ○ Students ○ Instructors • Documentation <ul style="list-style-type: none"> ○ Vocabulary notebooks ○ Lesson Plans ○ Vocabulary activities

Data Collection

Quantitative data. I administered a vocabulary pretest; specifically, the Vocabulary Levels Test (VLT) (Nation, 1990; Schmitt, Schmitt & Clapham, 2001). A

vocabulary levels test indicates a “broad measure of word knowledge” (Read, 2000, p. 120), and is thus useful in determining learners’ approximate vocabulary size.

Vocabulary size is tested at five levels: 2,000, 3,000, and 5,000 word families, academic word families, and 10,000 word families. These levels, with the exception of the academic word families, represent frequency counts based on a variety of established corpora (Read, 2000). The academic word families are taken from the Academic Word List (Coxhead, 1998), and comprise the 570 most frequent words found across academic disciplines.

This pre-test captured baseline data against which growth could be compared; the same version was given at the end of the semester in order to measure learning gains. Both pre- and post-tests were compared for evidence of level improvement using a paired-samples T-test (Howell, 2008).

Meara (1996) called Nation’s VLT “the closest thing that we have to a standard test in vocabulary” (p. 38) and Read (2000) examined its validity from two perspectives. First, he looked at the purpose of the test itself. Designed to test “the estimated size of the learner’s vocabulary, based on the proportion of the words known at different frequency levels” (Read & Chapelle, 2001, p. 26), the VLT thus assumes that learners will know more high than low frequency words. Read (2000) found this to be the case in a test of 81 students who were pre- and post-tested with the VLT; scores at each frequency level increased on the post test, but they remained highest at the lower frequencies and lowest at the higher frequencies. In addition, Read (2000) looked at the implicational scalability of the test scores; for example, if students perform well on the 3,000-word level, is it always the case that they will have performed well at the 2,000-word level? Indeed,

Read found that, while the scalability was not perfect, it was quite high, at 0.84 and .90, in two respective examinations, where 0.60 is considered the minimum.

Schmitt, Schmitt, and Clapham (2001) worked with two newer versions of the VLT to explore validity within and between the tests. Results of an item analysis indicated that guessing was infrequent, suggesting that “correct answers do reflect some underlying knowledge of the target word” (p.67). The researchers also looked at frequency profiles for the 2,000, 3,000, 5,000, and 10,000 word family levels, and found, as Reed (2000) suggested, the sections were high in implicational scalability, with versions 1 and 2 at .971 and .978 respectively.

When comparing validity between the two versions of the tests, however, they found that results were similar for linguistic groups, but not equivalent among individuals. For this reason, Schmitt (personal communication, February 8, 2012) advised using the same version of the test for both pre- and post- measures, “as long as there is sufficient time gap between them (a couple of months?).” Students were tested in the first week of February and again in the first week of May, allowing a full three months between tests.

Considering these measures of validity, it appears that the VLT is a valid test for testing general vocabulary size.

Qualitative data. The majority of the data collected was qualitative. Qualitative research views reality as local, multiple, and socially constructed (Creswell, 2009; Firestone, 1987; Merriam, 2009). Qualitative researchers examine context, as well as how individual participants create their own meanings within that context (Marshall & Rossman, 2006; Merriam, 2009). Because the data collected and analyzed are filtered

through the researcher's subjectivities, qualitative research does not aspire to objectivity; instead, qualitative researchers examine their own biases, and the effect they may have, on the data collected and interpreted vis-à-vis the research (Creswell, 2009; Marshall & Rossman, 2006; Merriam, 2009).

Because qualitative research seeks to understand context as well as the meaning individuals make therein, it takes place outside of the laboratory, in the naturalistic setting of classrooms. As such, it gives rise to a rich description (Creswell, 2009; Merriam, 2009) of the context and participants, and it is this thick, rich description that allows for decisions to be made throughout the formative experiment that will allow for the identification of factors that might enhance the intervention under study.

I approached data collection in the present study as a case study, an "in-depth descriptive study of a phenomenon" (Merriam, 2009, p. 39). Case study research requires the identification of a bounded system as the unit of analysis; this bounded system is worthy of research in that it is either typical or unique (Merriam, 2009), and itself becomes the focus of the research. Vocabulary notebooks, considered effective practice (Folse, 2004; Fowle, Schmitt & Schmitt, 1995; Walters & Bozkurt, 2009) were found to suit this particular group of learners in many ways, but the difficulties they experienced, as well as modifications made to the strategy, are important for "what it reveals about the phenomenon and for what it might represent" (Merriam, 2009, p.43). The unique needs of these students stood to become better understood through the process of investigating their use of the vocabulary notebook.

The qualitative data for this case study included (a) a focus group conducted at the start and end of the semester; (b) weekly classroom observations of the implementation

of vocabulary notebook, including ongoing interactions with the instructor and students to ascertain what was working and what was not; (c) baseline, mid- and end of semester interviews with the instructor; (d) weekly discussions with the instructor in which we discussed what were seeing in the classroom as well as what I was learning from focal students; (e) mid- and end of semester individual interviews with focal students; (f) an open-ended survey at the end of the semester; and (g) a reflective piece written by each participant.

Focus group. The five focal students participated in a focus group interview to explore their ideas about vocabulary, its importance in academic study, as well as the activities and strategies that they already use for vocabulary development. This focus group formed part of the baseline data that I needed to assess change in student attitudes regarding vocabulary over the course of the semester. A focus group was helpful at this early stage of the research because it provided participants the opportunity to construct individual ideas about vocabulary through the interaction of the group (Marshall & Rossman, 2006; Merriam, 2009). Participants, therefore, were not required to have their thoughts about vocabulary and its importance in academic study well-considered and ready to articulate; their thoughts were allowed to take shape as they participated in a group which may have challenged or reinforced their beliefs. The focus group questions can be found in Appendix D.

Pre-semester survey. At the beginning of the semester, all students completed an open-ended survey with regards to vocabulary learning practices with which they were already familiar with and using. The survey can be found in Appendix E.

Observations. Bogdan and Biklin (1998) note that a primary data collection technique for case study is “participant observation (supplemented with formal and informal interviews and review of documents)” (p. 55). In addition, regular classroom observations allowed for my own first hand understanding of the intervention, and as such, served to flesh out the data I collected in instructor interviews (Merriam, 2009). I observed on the day that the vocabulary notebook strategy was initially introduced and weekly thereafter, in order to see how the strategy was presented and developed over successive uses, as well as how the students responded to and became comfortable or not with using the strategy. Teacher and student interaction with the notebook, and each other, as well as alternative vocabulary learning methods employed were closely monitored during those weekly observations. Weekly follow up visits with the instructor were held to discuss my observations during the class sessions in order to check my impressions about class activities against hers. The observation protocol can be found in Appendix K.

Interviews. I met with Anna informally throughout the semester to assess her perception of the intervention. Though my classroom observations revealed potential modifications to the vocabulary notebooks, Anna’s perspective as a stakeholder tasked with teaching more than the vocabulary notebook strategy as intervention, was critical. As the person responsible for teaching content area reading skills and strategies that go beyond vocabulary, Anna had a different perspective on the notebook’s primacy within the curriculum. In addition, she had insights into the notebook and the students’ relationship to it that I, as a participant-observer in the class, could not. Instructor insights were valuable in informing the ongoing modifications to the intervention that

were made to better address students' needs. Baseline, mid-semester, and post-semester interview protocols can be found in Appendices G through I.

At the same time, my weekly presence in the classroom allowed for regular and ongoing interactions with the students using the vocabulary notebook. Because the vocabulary notebook requires active student engagement, student willingness to use and adapt it to their needs was essential. This interaction provided students the opportunity to articulate their concerns regarding the strategy, as well as their ideas about what was and what was not working in their use of the strategy, thus ensuring a student-centered source of feedback regarding modifications necessary to the intervention.

In addition to these informal interactions, at mid-semester, the five focal students participated in an individual, semi-structured interview (Mischler, 1986) regarding their perceptions of the efficacy of the vocabulary notebook as well as problems inherent in the strategy. This mid-semester interview speaks to the third and fourth questions in the Reinking & Bradley framework (2008); an attempt was made at this time to understand more deeply the factors that contributed to learning as well as those that detracted from it. Adjustments to the strategy to enhance its effectiveness and appeal were made accordingly, and implemented for the remainder of the semester. For the focal student mid-semester interview protocol, see Appendix J.

This interview also presented an opportunity for focal students to share their vocabulary notebooks with me, in order that they may explain and demonstrate their use of the notebooks as individual learners, showing very concretely what was working well for them and what was not.

The instructor was also interviewed formally at this time, and she and the focal students interviewed at mid-semester were individually interviewed again at the end of the semester, with the focus that time on how modifications to the vocabulary notebook strategy had worked. For focal student post-semester interview protocol, see Appendix K

Survey. At the end of the semester, all students again completed an open-ended survey asking questions about the use of vocabulary notebooks and its fit with the ways they learn, their change in word consciousness, if any, and their self-perception of development as vocabulary learners. The survey can be found in Appendix L.

Document analysis. Documents collected for analysis included the vocabulary notebooks themselves (photocopied and returned to students), reflective statements written by participating students (see Appendix N), pre- and post-tests of vocabulary, activities from class that pertained to vocabulary instruction, practice, and learning, and lesson plans related to vocabulary study, whether related to the vocabulary notebook or not. Analysis of pertinent documents afforded the researcher an opportunity to round out the data collected through observation and interviews, or alternatively, to probe its veracity. Triangulation of the data via document analysis enhances the validity of the research (Merriam, 2009).

Data Analysis

Vocabulary pre- and post- tests were quantitatively analyzed using a paired-samples T-test (Howell, 2008) to assess student vocabulary growth over the course of the semester.

All interviews were audiotaped and transcribed; classroom observation notes were typed with researcher comments included. Weekly meetings with the instructor were

audiotaped and summarized on paper. Audio files from classroom observations were compared with the observation notes. Audio data were mostly paraphrased, although some direct quotes were recorded verbatim, and then summarized and inserted into the observations. Baseline- and post-semester focus groups were also audiotaped; I summarized these as well, although some direct quotes were transcribed. Open ended pre- and post survey data were compiled.

Though I did not begin formal coding until after all of the documents above were finalized, a strong sense of the data began to emerge as soon as the intervention was underway. Anna and I spent time each week discussing what we were seeing in the classroom on my weekly classroom visits, and comparing that with what I was hearing from focal students in focus groups and individual interviews, as well as what she was hearing and seeing on the four days a week that she worked with these students without me. I audiotaped these meetings, which Anna and I referred to as *chats*, and listened to and summarized the content each week. In addition, as I drove home from the site each week, I recorded my own thoughts about what I thought I was seeing and what I thought might be happening, with the intervention. I called these *self-chats*, and I listened to and summarized the content of these each week as well. This on-going talk that I engaged in with Anna and myself, and systematic review of documents, brought to the surface and solidified many of the salient key concepts integral to the data. These key concepts also allowed Anna and me to make modifications or tweaks to the intervention. For example, we identified, based on our observations and students report, that students could not *use* words that they were researching appropriately to communicate.

Retrospective analysis allowed me to revisit the data with greater insight into issues related to the intervention, the students, and the teacher. To code data, I first read through all transcripts and summaries and made comments in the margins via track changes. This open coding (Saldana, 2009) comprised notes such as “use it or lose it,” “word choice,” “definition but not use,” and “social language” and identified commonalities in the issues the students and instructor mentioned. These comments served as Maxwell’s (2005) “‘bins’ for initially sorting the data for further analysis (p. 97).” A page from a mid-semester interview with Hayder, demonstrating a few of these initial codes, is included in Appendix Y.

These initial codes were quite organically related, so after another round of focused coding (Saldana, 2009) I was able to identify subcategories encapsulating a number of codes. For example, the students talked a great deal about themselves as learners, referring to themselves as lazy, discussing their frustrations with learning English, and commenting on how they worked best when learning vocabulary. This subcategory became *Awareness of Self as Learner*.

Next, these subcategories were grouped with other, closely related subcategories, to form major categories, and again, the grouping was organic to the content of the subcategories. For example, in addition to demonstrating awareness of themselves and their learning, students talked a great deal about the stigma of being non-native speakers. Thus, two subcategories, *Awareness of Self as Learner* merged with *Stigma of Non-Native Speech*, into the major category *Student Sense of Self*.

Finally, throughout the intervention, it was apparent that some data were specific to the students and the lives they lead, and were true irrespective of the intervention,

while others were related to the intervention itself. I grouped the major categories into the two broad themes of *Factors Related to Context* and *Factors Related to the Intervention*. See Table 3 for a summary of these themes and the content of each.

Table 3

Initial Codes to Themes

Example Initial Codes	Subcategories	Major Categories	Themes
stigma	Stigma of non-native speech		
how D. learns	Awareness of self as learner	Student sense of self	
daughter's school	Social language		Factors
school test	Academic language		related to
family		Student sense of language	context
home			
work		Adult responsibility	
school			
word choice	Vocabulary notebook →		
use	vehicle	What & how we taught	
deep knowledge	Vocabulary expert needed		
deep processing	Student strategy use and	What the students did	Factors related to
active	evolution		intervention
writing down	School vocabulary notebook		
translation + English	→ personal vocabulary		
space constraints	notebook		

After identifying these themes, I went back to the subcategories to tie them into the qualitative research questions. Research question number one, pertaining to beliefs about vocabulary in academic study, includes social language, the stigma of non-native speech, and adult responsibilities. Research question number two, regarding the strategies in place for learning vocabulary, included awareness of self as learner. Research questions three and four, with respect to the effective and efficient implementation of the vocabulary notebook, and student and teacher description of it, included what and how we taught, as well as what the students did. A discussion of data used to address each of the research questions will be discussed in the following section.

Validity

In this section, I will discuss the trustworthiness of the present study, including a description of myself as teacher stepping into the role of researcher in another teacher's classroom.

Researcher as instrument. I have taught ESL for many years, and consider myself a thoughtful, engaged teacher with a real desire to make learning authentic and meaningful for students. Also, I have been considering vocabulary for several years, and have firm ideas about its importance in SLA and reading comprehension, as well as what constitutes effective vocabulary instruction. In addition, I have used the vocabulary notebook in my own classroom at the University of Kansas and have a fair amount of experience with its use. Finally, I am aware of the differences between social, conversational English and the language of written academic text, and I advocate

immersing students in academic language as much and as soon as possible if they intend to continue into academic study.

I did not know Anna, the teacher in whose classroom I worked, until the week before coming to talk to students about participation in the research. I was particularly concerned about nudging Anna out of the role of teacher, either in her eyes or in the eyes of the students, since I was the expert in the room with respect to vocabulary and vocabulary learning. Although I eventually took over the teaching on the days I was there, it was at her request and it worked best given the turn the intervention took. Overall, Anna and I worked well and cooperatively together throughout the semester, and have continued to communicate with each other with regards to the outcome of the research, and my presence in her classroom did not make her uncomfortable. In addition, because she had an established and friendly relationship with her students in her own right, my presence as the teacher one day a week did not seem to undermine her status with them.

In addition, it has been my experience that ELL learners very much want to please their English language teachers. Though I was in the classroom as researcher, I was respected and looked up to, perhaps even more so than had I been the teacher, simply because of the novelty. This concerned me in that students may have felt inclined to participate in the research in an effort to demonstrate their cooperation with my research in order to please me. For example, one student agreed to participate the first week, but rescinded permission when I emailed her to participate in the first focus group. I also knew that, letting participants know that I used to teach at the school where they were

currently studying English, would increase student comfort level with me at the same time that it increased the pressure to participate.

It was necessary for me to remember that it was Anna's and her students' classroom, and I was a guest there. I tried to present the vocabulary notebook in such a way that all stakeholders bought into it and adapted it as their own, and I tried to be very respectful of their space and their willingness to invite me into it.

Credibility. Because credibility in research is so important, I was careful to address rigor and credibility throughout the data collection and analysis process. I used the following strategies to ensure that my findings are, indeed, credible and rigorous: (a) triangulation of data; (b) establishment of an audit trail; (c) member checking; and (d) use of reflexivity to examine my biases. I will discuss each below.

Triangulation. The first strategy used, triangulation, consists of collecting data in a variety of ways from a variety of sources to ensure that the data is well rounded and thorough, and not unduly biased by the perspective of a single method or source (Maxwell, 2005). Each focal student was interviewed twice and participated in two focus groups, in addition to completing the baseline and post-semester surveys and Vocabulary Levels Tests and the post-semester reflection. During the mid- and post-semester interview, focal students showed me their vocabulary notebooks that each was keeping for class, as well as the personal vocabulary notebook each kept; they shared their thoughts about their notebooks as they showed me how they used and what they liked about each. The teacher participated in three interviews throughout the semester, as well as weekly meetings in which we discussed the progress of the intervention and

established directions for moving forward. Finally, I was in the classroom every week for fourteen weeks, either taking observation notes or audiotaping the class activities.

All of these encounters were either transcribed verbatim or summarized from audio files. I made copies of student notebook pages, both school and personal, for future reference, and I kept the originals of post-semester reflections that all students wrote.

I had a large amount of data from which to answer my research questions, and with the exception of the quantitative question, multiple sources of data for each. Research question number one, pertaining to beliefs about vocabulary in academic study, was answered through data collected in instructor and focal student interviews throughout the semester, as well as the reflective statement that students wrote at the end of the semester. Research question number two, regarding vocabulary learning and teaching practices already in place for learners and the instructor, was addressed with data collected from baseline interviews, focus groups and pre-semester surveys. Interviews, document analysis, instructor observation of students, and researcher observation of teacher and students all contributed to answering the third research question, referring to effective implementation of the VNB so as to increase vocabulary efficiently and effectively. With respect to research question number four, the contribution of vocabulary notebooks to the development of learners as active and engaged word learners, focal student and instructor interviews, post-semester focus groups and surveys, and the reflective statement written by students, provided rich data to answer the question.

Audit trail. I established an audit trail (Merriam, 2009) before the intervention began, saving copies of all emails between Anna and myself, and set up a binder to keep

all of the raw data, such as pre-semester surveys and the Vocabulary Levels Test, as well as transcripts, lesson plans and activities, copies of student work, and observation notes. That original binder contains the raw data that was collected throughout the intervention, including the demographic form, baseline and post-semester surveys, Vocabulary Levels Tests, and post-semester reflection. The second binder contains the compiled raw data, as well as original transcripts or summaries from each focal student and instructor interview, weekly meetings with Anna, classroom observation notes, lesson plans and activities, and copies of student work. The third binder contains the coded transcripts and summaries, and the final binder contains my outline for writing with references to the coded transcripts. All four of the binders are black. These binders represent the progression of the research, as well as the distillation of the data into a useable format from which I was able to write about it; this trail, as Merriam (2009) suggests, would allow an outside reader to follow the path of my research, and understand clearly how and why the study unfolded as it did.

Member checking. Anna and I met weekly to discuss the progress of the intervention, and I interviewed her in a more formal way three times during the semester. In addition, I observed her in the classroom, either teaching or working with students, throughout the intervention. After transcribing interviews, summarizing the audio files of weekly meetings and summarizing classroom observations, including observer comments and interpretive notes, I provided a summary of key findings to Anna in an effort to obtain respondent validation (Maxwell, 2005). She agreed with the summary, and indicated that the subcategories, categories, and themes identified were representative of the intervention and the data collected from her perspective.

Reflexivity. Finally, I examined my biases, considering how who I am, as a product of my experience and background, might influence data collection and interpretation (Merriam, 2009).

I am a white, middle class, heterosexual woman raised in a lower-middle class family in the Midwest. I have a B.A. in education and I intended to teach science in a high school setting; teaching English to adults happened completely by fortuitous accident. Before beginning, in 2005, to teach ESL in an academic setting, I worked in community-based adult education programs, where I taught English primarily to refugee and immigrant populations, and very much loved my work with these students.

Refugees and immigrants deal with many issues. They have to learn the language and the culture of a new country. They may struggle to take care of their families financially, since any credentials they had in their home country are likely not of use here, and both refugees and immigrants can experience a downward change in socioeconomic status. One family emigrated from Hungary to get help for their developmentally delayed son; the father, a university professor at home, was cleaning hotel rooms here. In addition, many of the refugee populations coming to the United States during the late 1990s and early 2000s, when I was teaching, were coming from countries like Somalia and Burma (US Department of Health and Human Services, 2005), where literacy skills and a background of formal schooling were often lacking. It is difficult when you see a 62-year old man copying his name over and over to gain writing fluency not to frame him as somehow lacking, and that deficit perspective is fairly pervasive in adult education ESL circles. One teacher at a workshop shared how

she kept bars of soap on hand so that, when she got new students, she could give them a bar and tell them it was soap, and they should use it every day.

I tried hard to develop and maintain an awareness of manifestations of that deficit perspective, though I imagine that I was never completely free of its influence, and I always found a great deal to appreciate and enjoy in my refugee and immigrant students. Their perspectives are shaped by backgrounds that were generally at least tough, and in some cases, deeply tragic. One former student from the South Sudan, for example, had lost eight of her nine children in the civil war. As a result, these students tend to have their priorities clearly lined out, and they know what matters. Also as a result, they often have a down to earth irreverence when it comes to the “niceties” of manners and material things and I have always found this very refreshing. Finally, English is their ticket to success here, and they are, for the most part, very motivated students.

Because I find these immigrant and refugee students more interesting than their international student counterparts, I chose to conduct the current research at the community college where many former refugee and immigrants were starting their academic careers with a final brush up on their English. I had taught at the community college for the 2005-2006 academic year, and knew that the academic environment was a different way in which to encounter these students, and that was yet another key piece for me to keep in mind as I undertook the present study.

The expectation for students in adult education programs, that students will start where they are and show progress as they can, is different from those in an academic setting, where there is far more pressure to perform to a standard. The focus of each of the settings is different as well; in adult education, the curriculum focuses on developing

the language of daily life, and a lack of formal education can be compensated for. In college, where the focus is on the development of academic skills, working around low literacy and a lack of education is considerably more complicated.

While aware of and cautious against the deficit perspective common in adult education, I myself tend to be somewhat pessimistic about the potential academic success of students who have low literacy skills and/or limited formal education. Thus, I had to guard against the possibility of framing the data through that outlook; to do so, I did the following: weekly checks with Anna and self-questioning.

First, during class each week, I always kept a list of two or three things that I noticed in the classroom, things that might indicate a learner out of his or her depth; as we sat down to discuss the intervention and where we would go next, I asked Anna, who, prior to this semester had had experience only with international students, to tell me how *she* interpreted these classroom events. This gave me an initial sense that much of my interpretation appeared to be on target, in that it was always closely aligned with Anna's.

In addition, I used my audio recorder each week to reflect on what had occurred that week, and where we were heading and why, and each week I considered my pessimistic stance in light of what I had seen in the classroom that day. For example, one student with limited formal education provided no translations for her words on the first assignment, which should have been very easy to do; I thought about that in terms of what it might say about her as a student. Does she not value translation? Does she not know how to use a translator? Do the words not translate? In fact, the third possibility was the case, and it had nothing to do with her ability to function well on an academic

task. Keeping my pessimism at the forefront helped me avoid coloring the data through that pessimistic lens.

Conclusion

Given the importance of vocabulary to the reading comprehension of academic text, it is important to investigate strategies that students may use and adapt in order to develop vocabulary independently of the classroom. This research is an opportunity to consider this vocabulary notebook in light of its usefulness to learners as that independent learning strategy.

I collected the data over the course of the Spring 2012 semester, and began analysis almost immediately after beginning the intervention. Over the course of the semester and the following summer, data were transcribed and/or described. Retrospective analysis began over the summer, with codes, subcategories, major categories, and themes identified and refined, by early fall of 2012. I sketched out an outline of all findings as they pertained to the research questions, and elaborated on each outline as I began writing in the fall of 2012.

Chapter IV

Results

The purpose of this study was to introduce an independent vocabulary learning strategy, the vocabulary notebook, to ELLs who need to develop vocabulary sufficient to interact with academic text. The research questions under investigation included the following:

1. What beliefs do teachers and students have about the importance of vocabulary in academic study?
2. What activities and strategies do learners and teachers have in place for learning and teaching vocabulary?
3. How can a vocabulary notebook be implemented effectively and efficiently to increase vocabulary knowledge?
4. How do learners and teachers describe the contribution of vocabulary notebooks to the development of learners as active and engaged word learners?
5. How does the use of a vocabulary notebook affect vocabulary gains in learners?

This study is significant in that it attempted to identify modifications of a language learning strategy, the vocabulary notebook, which is considered effective practice for ELLs learning English vocabulary (Folse, 2004; Fowle, 2004; McCrostie, 2007; Schmitt & Schmitt, 1995; Walters & Bozkurt, 2009), so as to make it more feasible for them. Learners need to broaden their academic vocabularies at the same time as they

become independent word learners, and this study attempted to identify factors that would foster both of these goals.

Overall Findings

The overall findings in the present study fall into two broad and interrelated themes. The first theme relates to the students and how they influenced the instructional environment and the second theme relates to the vocabulary notebook and its implementation.

The context in which this intervention was implemented includes specific students with needs particular to the realities of their lives: these adult students, mostly refugees and immigrants, hoped to learn English so as to matriculate into academic study in an urban community college. With respect to these students and their goals, three major categories became apparent almost from the first within the research, all closely tied to these students' realities. First, based on interviews and the baseline focus group, students expressed a host of views about their identities both as nonnative speakers and as second language learners, as well as their hopes to subsequently move beyond language learning. In addition, students were far more interested in investigating the language that played a role in their daily lives than the language of the classroom, and seemed uninterested in the disconnect between social and academic language (Corson, 1997). Finally, these adult students had busy lives, characterized by work and family concerns in addition to schooling, and this of course had an impact on their ability and willingness to use the vocabulary notebook as much as they might have liked.

The second broad theme includes those factors that arose as a result of the intervention itself. This includes both the global modifications that were made to the

intervention over the course of the semester including the shift in the purpose of the vocabulary notebook and how that shift was delivered, as well as more local modifications, made at the level of lesson planning. In addition, students modified the intervention to meet their own needs, modifying their use of vocabulary learning strategies and merging the class vocabulary notebook with their personal vocabulary notebooks.

For the sake of clarity, the findings will be presented as they pertain to each of the research questions.

Student and Teacher Beliefs

In this section, I address the first research question: What beliefs do teachers and students have about the importance of vocabulary in academic study? After analyzing the data, three categories emerged with the respect to the students. The first category relates to students' beliefs about language in general and social and academic language in particular. The second category relates the stigma of nonnative speech, and the third category is about the responsibilities that these adult learners had. In addition to the students' beliefs, I present the teacher's beliefs about vocabulary.

Language

Although I assumed that students would be interested in researching academic vocabulary words in order to promote their academic success, they proved to be far more interested in the language "for the life," as Jack put it in the baseline focus group. Although this shifted somewhat over the course of the semester, initially they showed interest in little other than social language.

Social language. Student focus on social language was expressed in several ways. They indicated the importance of social language in all of the spaces that they inhabited throughout their days in addition to school, and where they found the words they wanted to know.

In the baseline focus group, Hayder, who had only been in the country for eight months at that time, summed up the need for social language when he said, “New country, new life—always.” Veronica talked about her early months in the country, when she “started work and I went to meetings and I don’t understand nothing.” The Republicans were in the midst of electing a presidential candidate throughout the spring, and Daniela, who is very interested in politics, was frustrated that her language kept her from understanding as much as she would have liked. Jack indicated that grammar did not matter so much in spoken language, but “You need to have a lot of vocabulary for the life.”

This conversation, taking place at the beginning of the intervention, took me by surprise, since I had not yet realized that these students were so intent on social vocabulary, so I asked about the significance of vocabulary in school. Even when pointed in this direction, the need was framed in terms of social language. Daniela said that one time, she had been eating in the cafeteria at school, and some event was taking place. She was unable to participate, though, because she could not understand what the event was, and she could not ask the questions that would have allowed her to understand.

In the first classroom observation, all students were asked where they found words that they were interested in knowing more about. They quickly listed the media,

newspapers, the bible, song lyrics, and Internet articles. With the exception of the last, all of these sources belong to the category of nonacademic sources, though the language of the bible is likely more complex than social language; Internet articles, depending on source and subject matter, might be either.

Also during the first classroom observation, the classroom teacher asked students what words they were interested in learning. The responses included new words that learners did not understand and could not translate, and words familiar from the first language but different (this from a native Spanish speaker who had encountered false cognates).

After this discussion, students were given initial instruction and in-class practice using the vocabulary notebook (see Appendix Q for a sample page from the notebook), consisting of deciding on part of speech based on the context in which the word had been encountered, translating the word into the native language, recording any information they *knew* about the word from past experience with the word, finding and recording a dictionary definition, and writing an original sentence with the word. At this point, the teacher gave students the following assignment: choose ten words this week that you are interested in investigating, and record them in your notebook, along with any data you can find about the word. Random students would be chosen the following week to present one of their words to the class, along with all of the information they had been able to collect about the word.

The following week, Gita was one of the students chosen to present one of her words. She presented the word *earthquake*, its translation and part of speech, and then read a scientific definition of the word that used much more complicated vocabulary than

the word *earthquake* itself, including “series of vibrations,” and “abruptly shifting plates.” Her sentence was about the recent earthquake in Pakistan, which, because she is Pakistani, was of immense interest to her, as was made clear when Gita went on to give context to the earthquake, mentioning difficulty with search and rescue due to remote mountain villages, food shortages, and homelessness. When Anna asked Gita if this were a new word for her, Gita said, “Kind of.” It would seem that Gita knew the concept, but not the English word for it, and she needed the English word if she were to be able to talk about it with English speakers.

Although the teacher and I had expected students to choose words from their reading text or their other classes, at the beginning of the semester, at least, they routinely defaulted to the words that they needed in social rather than academic contexts.

Four of the focal group students talked about choosing words they needed for their daily lives rather than for the school setting. During the baseline focus group, Veronica discussed her frustration with her limited language, saying, “Every word is important,” because “I am not happy because I cannot express myself. For example, I go to the hospital, or I went to the store, I need something. I know what I need but I cannot explain what I need. That’s why it is always good to learn new vocabulary, to know, but it’s not only new vocabulary, but all vocabulary, not just new vocabulary.”

Mai referred to what she called *normal* words throughout the semester. In response to a question during the baseline focus group about how students decided which words they wanted to know, she said, “Some words you need to use. Like very normal.” Again, at mid-semester, Mai referred to and defined *normal* words as words that “you use it and need to use it.” She noted that these words, as opposed to school words, were

likely to stay with her, since “Because I don’t usually used this [school] vocabularies... maybe after couple months, I forgot it.”

Daniela, the mother of a young child, spoke often of her daughter and the needs of parenting when choosing important words. She said that the “teacher says something about her, and I make teacher explain me, what these words mean, and I know these words important for my daughter.”

Hayder drew an interesting distinction between academic and social language, to the extent that he kept a separate notebook for each. He was very interested in academic language, but he said at mid-semester that “new student needs new word for outside,” and, like Mai, felt that he remembered social vocabulary better than academic because he had more opportunity to use those words. Throughout the semester he expressed frustration at his inability to *use* the words he learned at school, but he found words that came up in daily life easier to make sense of, and thus easier to use.

Since the teacher and I wanted to foster more interest in academic language, and because we wanted to introduce the word lists in the back of their vocabulary notebooks—the 2000 Most Frequent Words in English Language Texts (Mikulecky & Jeffries, 2007) and the Academic Word List (Coxhead, 1998)—I taught a short lesson on word choice. I asked students to tell me what made a word a good word to learn, and got, by this time predictably, responses focused primarily on the social. Daniela offered “words you will need,” and then qualified it with “where you work.” Gita said that you should choose to learn “disrespectful words,” and agreed that these were “words *not* to use.” Patty said that you should learn the “magic words like please,” and other words serving a politeness function. Only Yvonne’s response straddled both social and academic

language, when she said that she thought words with lots of meanings were important to learn. She had worked with the word *settlement* two weeks previous, and had been pleased to discover that it had a legal meaning in addition to the one she was already familiar with.

Although the focus on social language lessened as interest in academic language grew over the course of the semester, it was clear that these students' language needs were very much situated in their daily lives, of which school was only one part.

Academic language. Despite the interest in social language, students were aware of the importance of academic vocabulary within the classroom, even at the beginning of the semester. Veronica was intent on varying words in her essays, so that the teacher would not think that she did not know anything. Daniela was delighted to learn that English words she had always known and used (*maybe* and *but*) had academic counterparts (*perhaps* and *although*) that she could use in her essays.

At least part of this initial awareness of academic vocabulary was fueled by the desire to do well on school tests. Three of the focal students frequently cited school tests as one reason that they studied vocabulary from their books. When Daniela mentioned during the baseline focus group interview that that "all the words the books give me are important for me to know," Mai interjected that "they might test me on it." Asked about circumstances where they felt that they needed to know more words, Mai said, "Reading test is hard."

Daniela and Jack both referenced the importance of tests in their mid-semester interviews. Daniela told me "I use, I learn what I need to know. For example, for the class or for the test." Jack noted that his method of keeping a vocabulary notebook, "help

me to do the test,” and added that that was critical because “the vocabularies, because, you know, the vocabulary it have the 70% of the test.”

The final and an interesting indication of students’ awareness of the difference between social and academic language was discussed during the baseline focus group, when Mai mentioned that her 15-year old son, who had been in the country for a year less than she, had better English than she did. Jack, who had graduated from a local high school, immediately responded, “Cause he study in school.” Mai protested that she was also in school, but Jack said, “But he studies in freshman, he studies a lot of subjects. He studies a lot of words in different subjects. That help a lot. Your son has a lot of words in high school.” Jack referenced his high school experience a number of times throughout the semester, and it was obvious that it had shaped his academic ways of being in ways that the other focal students had no access to.

In general, students were highly focused on the language that they needed to function in their daily lives, and although displaying some awareness of and interest in academic language, it was only once we had a classroom discussion regarding word choice detailed above that students began to shift their focus to the academic language of school.

The Stigma of Nonnative Speech

“In reading test, I feel dumb cause most of the words are new to me. I feel like I’m gonna quit. Easy words, but I can’t do.” This comment, from Veronica, during the baseline focus group, indicates that at least this student equated her difficulty using “easy words,” with being less intelligent. Other students framed their self-perceptions through the eyes of others. Daniela, for example, had noticed that “Sometimes I feel

embarrassed cause this lady think she can speak, doesn't even speak English, and she's acting like she can speak English" and "I don't want to be speaking or talking just kind of. You know, looking stupid." These comments, also during the baseline focus group, demonstrate student belief that native speakers make assumptions about nonnative speakers. Mai said, "Yes, sometimes the people is very rude. I have this feeling too," but she seemed to indicate that it was a fact of life that she could not change when she followed up with, "I don't like it, but..." Daniela mentioned this same sense of resignation when she said, in a post-semester interview, "...people judge you. Before I used to feel bad, but now I just feel bad for the person." Jack framed the stigma attached to nonnative speakers when he characterized vocabulary as more important "for the life," since "Americans don't use standard grammar, just talk short sentences without grammar." In other words, poor grammar does not mark a speaker as less than, but lack of vocabulary does.

When comparing herself to her boyfriend, who had graduated from a US university, though he is not a native English speaker, Daniela talked about how she "would like to impress him," because "he's a professional." Overall, Daniela saw her boyfriend as a useful personal resource in language learning, and mentioned several times that she waited until she had a good sense of a word and its use before approaching him for additional help, because she wanted to know enough so that she could impress him. Indeed, Daniela frequently referred to vocabulary in terms of high or low level. For example, she was frustrated that during the coverage of the spring 2011 primary elections, which used "the high level vocabulary," because sometimes "you don't understand anything. I always ask my boyfriend. He explains to me in street language,

like I use to speak because I don't know and that's what it say? And I say, 'for real?'" Further, she associated high vocabulary with *impressiveness*, noting that you "need a good word to impress or make it better or to say, 'Whoa, this is a good job.'" Learning the language was a path to increased social status for Daniela

In addition, three of the students saw vocabulary as status bearing within as well as outside of the classroom. Jack pointed out that composition class required extensive vocabulary as well as grammar because "you use the word, or teacher doesn't understand you. They don't understand you what you try to say." Along those same lines, Veronica indicated that she liked to use synonyms in her essays, to avoid using the same words over and over. "I cannot use the same word many times in composition; I need to know more words to say the same things. You know what you want to but you don't have the words. You look like you don't know nothing when you look at the paragraph and you say the same thing, same thing over and over." Daniela, who had been in the US for eight years, but had only begun studying in an academic setting in the spring of 2012, noted that, "I have been learning some new words, like *perhaps* and *although* and all those, and it's amazing what is the similar between some words that I already know that actually if I change them in grammar and composition, it will be taking better place that words I already use to know." *Perhaps* and *although*, the academic versions of *maybe* and *but*, respectively, prompted Daniela to note that "Vocabulary is just communication. Whatever you say, and the way you say it, people listen to you. They say, 'Well, she knows what she is talking about.'"

The focal students seemed aware that their status as nonnative speakers compromised them somewhat in terms of their standing in the eyes of others, but this

awareness, while somewhat discouraging, seemed also to motivate them to learn the language.

Adult Responsibility

The difficulty of fitting school into busy lives came up repeatedly throughout the semester for the five focal students. Jack was perhaps the most traditional college student in that he had come straight from high school, lived at home with his parents, and only worked part-time. In fact, all of the focal students except Daniela had jobs outside the home, either full or part time; she had been laid off and when she was unable to find another job, her boyfriend encouraged her to go to school. Three of the focal students were full-time students, taking four classes, each one hour per day, Monday through Friday. Daniela and Veronica were only taking three of the four courses. Two of the focal students had children at home, Daniela a four-year old daughter, and Mai a 15-year old son.

During the baseline focus group, Veronica noted that “kids who come here at the same time as me, they are flying...I told them ‘I’m old. You sleep, you eat your food. And then you wake up. Me—I have to work. I have a lot of things in my mind.’” Mai immediately chimed in with “We have family. We have jobs.”

At mid-semester, Mai told me that she was keeping the vocabulary notebook for school, but she was also continuing a practice that she had established upon first beginning school. She wrote down all the words from a chapter in her reading book on a piece of paper that she could take to work with her. She said, “This paper is easy, I think, to go to the work, because I still have the full-time job, so...” Her vocabulary notebook was always meticulously completed each week, but she was not using all of the tools in

the book (for example, a chart for exploring word family members, and a place to record synonyms and antonyms), and when I asked her why, she said, “Maybe it’s not a good excuse, but I really have not very much time. Because I have the full-time job. If sometimes I have the test, I have to get up at 5:30 to remember something.”

Hayder was an eager student, and seemed sometimes to want to do more with his notebook. For example, he really liked working with the Academic Word List (Coxhead, 1998), and talked about how these words would help him when he got into academics. But he reported being able to spend very little time with the vocabulary notebook other than that required to complete the homework assignment each week, because “I job in Steak and Shake Restaurant. In the afternoon, like it start five till eleven.” When I asked about his days, he said, “After school [which ended at 2:00 p.m. everyday] I going to home and eat something and go to work and come back to home and eat dinner. Homework, sometimes I’m doing homework in night, sometimes in the morning.” Later, he added, “But I like to study more English, and study story, book, you know, short story. But really, I haven’t time.” At the beginning of the semester, Hayder reported working 25-hours per week, but he was up to 37 hours by the end of the semester, with Wednesdays his only day off. When I commented on his busy days at the post semester interview, he responded, “Yeah, busy day. I need both of them. I need education, I need money. I need both.”

The responsibilities of daily life necessarily made focus on school and learning less of a priority than it might have been if these students were more traditional college age students studying right out of high school, with at most a part-time campus job

competing for their attention. Nonetheless, students were fairly sanguine about and accepting of the realities of their lives.

Teacher Perceptions

I also asked Anna at our baseline interview about her sense of the relative importance of vocabulary for second language learners. “Okay, um, I think it’s obviously very important, um, but not, not *the* most important thing on its own,” She continued, “Sometimes I’ve had students come in, and all they want is vocabulary list upon vocabulary list...Especially for beginning learners, um, I’ve had some students feel like they’re not progressing if they’re not memorizing 50 words a week.”

Anna considered vocabulary as one part of the whole in language learning, but students seemed to frame vocabulary as a crucial part.

Strategies and Activities in Place for Learning and Teaching Vocabulary

When providing instruction, it is important to know what skills and abilities students bring to the learning environment so that a teacher can leverage that knowledge. This information is also important when conducting a formative experiment because it can be used to modify the intervention to make it more appropriate for students. That said, the data revealed three categories related to the strategies and activities students had in place for learning. Specifically, the first category identifies students’ strategies, the second category reports what student believe they need in order to learn and the third category relates to learners’ self-advocacy. The final category presents the teacher’s instructional practices for teaching vocabulary. Thus, in this section I address the second research question: What activities and strategies do learners and teachers have in place for learning and teaching vocabulary?

Students' Strategies for Learning Vocabulary

During the baseline focus group, Veronica said, "I think I needed this notebook in Level 2. I had a lot of trouble. I couldn't do my homework. I should have seen this earlier. I already passed, but when I was taught here, I had a lot of trouble. I didn't know how to look for vocabulary and I didn't have anyone to help me make a plan." Veronica indicated that she had, since Level 2, developed her own strategies.

In the baseline survey, students reported various strategies for finding the meanings of new words, from using electronic translators, bilingual dictionaries, and online dictionaries, to asking someone, to writing words down. Notebooks and word cards were both commonly cited as helpful strategies in studying new words, and several students reported trying to use new words as a study tool.

With the exception of Daniela, all of the focal students had a system in place for collecting data about words that they were interested in learning, but the data they were collecting was sparse, usually a combination of some of the following: a translation, minimal definitional information in English, and pronunciation information. Daniela developed a notebook system over the course of the semester, but because many of the concepts that we talked about in class, particularly parts of speech and collocations, were frustrating to her, she recorded only definitional data, and incorporated the notebook into her already-established learning behavior of talking about and exploring the words with her boyfriend.

In addition, all of the focal group students were accustomed to using online or electronic translators to connect English words to their L1. Hayder and Jack both used Google to find information about words in English as well, and Hayder, Daniela, Mai and

Veronica all reported questioning more competent speakers, either at work or at home, to find out about word meanings. Two non-focal participants, Gita and Dae, both had electronic translators that also had an English dictionary included, so they frequently toggled between the two during classroom activities, checking the translation and then finding information in English to contextualize the translation.

In addition, learners used a strategy in the early weeks of the intervention that they did not report on this baseline survey, that of connecting new to known. Daniela delighted in having discovered *perhaps* and *although*, the academic counterparts of *maybe* and *but*. Hayder and Yvonne, in presenting words they had researched prior to the fifth week of the intervention, both connected it to words they had already known. Hayder presented *hence*, and defined it as *therefore*, and indicated that he had known *therefore* but *hence* was new. Yvonne presented *warranty*, and told us that it means the same as *guarantee*.

Finally, Daniela, a native Spanish speaker, demonstrated an awareness of cognates when she told Anna, during the second week of the intervention, that she was interested in learning words that were familiar from her L1 but “I know they are not the same.” Daniela is referencing false cognates here (e.g., English *embarrassed* appears related to Spanish *embarazada*, while in reality, *embarazada* means pregnant), but in our mid-semester interview she used the word “quotidian,” a rare word in English, but a useful cognate.

In addition, focal students discussed what they needed in order to learn, as well as steps they took to advocate for themselves as learners. Both suggest an awareness of learner self that is strategic in and of itself, and will be discussed in detail, below.

What students report they need to learn. Students showed evidence of being clear on what they knew and what they needed to know, as well as how to get there. For example, by mid-semester, it was obvious that Daniela had modified the vocabulary notebook strategy to allow her to do the learning in ways more suitable to her own style. When I asked her to explain her system with respect to the notebook that we were using in class, she said, “Sometimes I feel like stuff is easy for me. Sometimes I feel like no. I know that my brain won't get it because I feel like I know the thing and I will not go back to study it. ... Because sometimes I think I can know it, and sometimes I know that I don't know.” Daniela expressed an awareness of what she *could* do in terms of learning new vocabulary, and therefore based what she *did do* on what she felt capable of attacking at any given time. Daniela, and her need to apportion out difficult tasks so as to undertake them only when she was *able to do them successfully* will be discussed in more detail later, but she clearly had a good sense of her capabilities, and lined out the tasks that she was willing to do in her notebook in light of that sense.

Another student, Mai, was able to give a good history of herself as an English learner over the three years she had been in the country, and her role in pushing herself to learn more and more will be discussed in the section on self-advocacy. Her self-monitoring of progress, however, was clear, and she was able to list with ease the topics that she could talk to the customers on whom she waited in the restaurant where she worked: “I can talk to them about my home country, different countries’ culture, about the food, about the weather.” However, she could not talk about President Obama’s government and the primary elections going on at that time. She did not know enough about these, so she did not have the language to talk about them. In addition, we looked

at some of the words that she had studied over the semester that she felt that she had successfully retained. *Benefits* and *taboo* were words that fit concepts that she already had knowledge of (her *benefits* at work, *taboo* in discussing with restaurant customers what works in disparate cultures), so she could and did attach the words to concepts and was able to use them from the start. *Inappropriate*, however, was vague and unclear to her; “I didn't use it, so...I will remember when I have the test, but after test...”

The above examples indicate that students had a great deal of awareness of their own knowledge of English, what they were getting, what they were not getting, and why some things stuck and some did not, as well as the understanding that what was too difficult for them at the time needed to be put off until later.

Learner self-advocacy. In explaining how she best learned new words, Daniela spoke of asserting herself with her boyfriend in order to get him to work with her on learning. “Well, I write down the word. I look for the meanings....in the dictionary....And then I sit my boyfriend down. So I ask him, ‘I’m interested about this word’ and I start asking him questions.” She then described a process of give and take with her boyfriend, where she would show how she used the word in a sentence context and he would help her to understand her incorrect usages of the words. She noted that, “Sometimes he’s working, and I just go over there and say, ‘Excuse me.’”

Daniela also had no qualms about speaking up in class when a word and its shades of meaning puzzled her. For example, *nondescript* was a difficult word for several of the students, but Daniela was more inclined than others to keep probing for more information, both on the first day that it came up and in subsequent encounters with the word in class. Initially she thought it meant a brand (of clothing, for example). Then

she tried to use it to describe an inexpensive television set, and when the teacher said that was not quite right, Daniela asked for further clarification. Can you use it to describe a house? A car? Clothing? Because the limitations on this word are somewhat hard to capture, it came up throughout the semester, and remained difficult for many of the students to use. Daniela's repeated questions about this word and others appeared necessary for her to process word meanings, and as with soliciting her boyfriend's assistance at home, she was persistent in getting what she needed in the classroom. Since her questions led to a great deal of talk about words, Daniela's classmates benefited as well, as this talk fostered examining words and their meanings from multiple perspectives.

Mai's description of getting a job and then moving into various positions as she gained English portrays a similar self-advocacy. "I come of here about one and a half months, I find a job, because that time I really can't speak very good English. I also can't understand, and I also scared to talk to people....I come here and the first time, only can do the host. It's easy just ask them, 'How many people? Do you want a booth or table?' Then I told my boss, I said, 'I want to learn a little bit more.' So, I do the food runner, because the food runner, you have the chance to see the menu. They have the Chinese and the English, so you know the Chinese, so you can remember the English name." Despite her fears of talking to people in the beginning, she pushed herself gradually, first to get a job, and then to take on more responsibility within that setting so as to improve her English.

Veronica, more than any of the other focal students, seemed to have very little faith in herself as a learner, and mentioned several times that her sisters, who were born

in the US, often teased about her English. Veronica reported having responded angrily one time, saying “I go to school every day. I’m not staying home, eating or watching TV. I got to school, same as you. You go to school, you learn English. I cannot be same as you, but I’m learning.” Although she frequently made self-deprecating remarks about her English language development and her intelligence in general, she was not willing to let her sisters deter her from her goal of improving her English.

As is clear from the examples above, many of the students are aware of the importance of looking out for themselves in the process of language acquisition, and are doing a great deal to ensure their success both as language learners and well-functioning adults.

Teaching Strategies

In our baseline interview, Anna told me that she believed in incorporating vocabulary into meaningful use, so when she talked about teaching vocabulary, she talked about teaching related words that could be used in the context of playing a board game, for instance. She also mentioned discouraging students from memorizing word lists, as in, “this equals this” without ever “connecting them in meaningful ways.”

Because she had worked primarily with lower language learners in the past, Anna had not been able to depend on using English to contextualize new words, so she used “a lot of visuals to help them have visual connections and clues,” in order to develop word knowledge. These visuals included both pictures and acting out, and she hoped that students could then transfer that visual word knowledge and apply it to a new visual, for example, a picture of a scene where students could talk about the scene using the new vocabulary.

Anna did not report vocabulary-teaching strategies in place, so much as a guiding philosophy of making meaningful connections, and I saw evidence of this throughout the intervention. I had asked her to point out part of speech as an important grammatical piece of word data, as well as the context from the reading book in which the word occurred, to guide the search for the correct definition. But when Anna introduced students to the vocabulary notebook the second week, she prompted students to look at more: she asked them to think the significant aspects of words that might contribute to understanding meaning and use, and called their attention to specific morphemes in words, challenging them to compare the *in-* in a new word, *inhabitant*, versus the *in-* in a known word, *incomplete*, and decide if they carried the same meaning.

Implementation of the Vocabulary Notebook

In this section I address how the vocabulary notebook was implemented and the modifications that occurred in the process, in answer to the third research question, with respect to the effective and efficient implementation of the vocabulary notebook so as to increase vocabulary knowledge. This includes discussion as to how the teacher and I modified the intervention, and then segues into student modifications to the notebooks used in the intervention.

Researcher and teacher modifications

First, in explaining the modifications that Anna and I made, I discuss how the vocabulary notebook was introduced to students and then I detail the vocabulary notebook's shift from a strategy for learning vocabulary to a vehicle for discussing the importance of vocabulary and the complexity of vocabulary learning, and describe how theory-informed instruction was implemented, and local modifications were made to

instruction. Specifically, I address (a) dictionary use, (b) word choice, (c) depth of knowledge, (d) deep processing, and (e) using vocabulary. Finally, I revisit the more global modifications that we made, that of shifting the focus of the vocabulary notebook, and how the intervention was delivered.

Introducing the Vocabulary Notebook. Anna introduced students to the vocabulary notebook during the second week of the study. She began by asking them to brainstorm a list of words that they might want to investigate, and students provided a list of 18 words, including the following: *heritage*, *blunt*, *leisure*, *wholeheartedly*, *stigma*, *wetness*, *outgoing*, *inhabitant*, and *herring gull*. When asked where these words came from, a student replied that they are from the essays in the reading book. They then went back through the list to identify good words to investigate and words that might not be worth intense research. Together they decided that *outgoing*, *herring gull*, *leisure*, and *wetness* were not very academic, so they would not pursue those. At this point, Anna tells them to “try to keep pushing yourself. It’s to your benefit.”

Anna then demonstrated how to collect information about the words and add it to their notebook. She had several students use a learner’s dictionary (see below for a discussion of how a learner dictionary differs from a regular dictionary) to look the up the word *stigma*, which she told them she chose because “it’s a challenging word,” while she looked it up on Dictionary.com (<http://dictionary.reference.com/>) and showed all the students the entry on the projector screen. She pointed out the blank in the notebook at part of speech (POS), and asked what part of speech *stigma* is. A student replied that it is a noun, so they added that to their vocabulary notebook. She then encouraged them to translate the word into their own language and write the translation into the vocabulary

notebook. They all added the definition that came up on Dictionary.com to their notebook, which included the word *disgrace*, so they discussed the meaning of that word for a moment. Anna then called students' attention to the word family member *stigmatize*, and asked them to add it to the *other info* section of the notebook. Finally, they tried to use the word *stigmatize* in a sentence. Jack offered "Everybody stigmatizes drug users," and Daniela volunteered, "My country stigmatizes sexual orientation." The next word for study, *inhabitant*, presented an opportunity for an examination of word parts. Prefixes and suffixes were explored in the text that they were using, so one student asked if *in-* meant not. They decided, after looking in the dictionaries and online, that in this case, *in-* was part of the base word, and not a prefix. Anna asked about the suffix – *ant*. What part of speech did that make the word? Students answered that it meant the word was a noun. Finally, they moved onto the word *wholeheartedly*, another opportunity for the exploration of word families and word parts in addition to more basic information about the word.

On this introduction to the vocabulary notebook, Anna laid the groundwork for the semester ahead. She demonstrated the amount of information that was possible to gather about words through part of speech and variant members of word families; translation information; definitional information in English in order to contextualize the English-to-native-language connection; and morphemic analysis for further understanding of word meaning and use. In addition, this exercise generated a large amount of talk about the words under study, which we later came to realize was one of the most valuable aspects of the intervention.

Vocabulary Notebook: From Strategy to Vehicle. Almost immediately upon implementation of the intervention, its focus shifted. In implementing the vocabulary notebook with this class, I had a clearly defined goal of teaching students to keep a vocabulary notebook so that they could continue to learn vocabulary independently when they were no longer in their ESL classes, and would be expected to navigate vocabulary just as efficiently as native speakers. This goal, as I envisioned it at the beginning of the intervention, saw the vocabulary notebook as an end in and of itself—students would learn how to keep a vocabulary notebook, and they would go into their academic work knowing how to keep a vocabulary notebook in order to work with words encountered there.

The goal shifted throughout the semester, as the vocabulary notebook became more of a starting point from which to talk about what mattered in learning vocabulary, as well as a forum for engaging in activities that lead to word learning that students could take away with them. Although two focal students indicated they would continue to keep a vocabulary notebook similar to the one I provided beyond the spring semester, the notebook lost primacy through the intervention, as our focus shifted from the notebook as *the* strategy to the notebook as a way to talk about a whole host of vocabulary learning strategies, as well as the theory that underlay second language vocabulary acquisition. In other words, the vocabulary notebook strategy became a vehicle for talking about sound principles of vocabulary acquisition and engaging in activities designed to encourage it; the *talk* itself, in that it fostered understanding as to the how and why of vocabulary acquisition, and the activities which allowed for practice of the how and why, in effect, took the place of the notebook as the primary learning tool.

The activities that we used throughout the intervention are outlined in Table 4, which includes information on whether an activity was part of the initial plan for the intervention, or a modification to it.

Table 4

Activities by Week of Intervention

Week	Activity	Planned or Modification
1	Solicitation of permission, demographic, baseline survey	Planned
2	Brainstorm words for research, whole group dictionary work	Planned
3	Independent research into self-chosen words	Planned
4	Word presentations, dictionary discussion	Planned; Modification
5	Word choice	Modification
6	Breadth & depth of knowledge	Planned & Modified
7	Breadth & depth of knowledge	Modification
8	Deep processing, word maps	Planned
9	Word map presentations, small group word mapping	Modification
10	Getting to use: Sentence analysis	Modification
11	Getting to use: Contextual analysis	Modification
12	Getting to use: Contextual analysis	Modification
13	Getting to use: Contextual analysis; finding context for analysis	Modification
14	Post-semester survey, VLT	Planned

Theory through Activity and Modifications Made Along the Way. This intervention was rooted in the research germane to second language vocabulary

acquisition discussed in Chapter II, including (1) dictionary use, (2) word choice, (3) deep processing of words, (4) developing word consciousness, and (5) depth of knowledge about words. As such, this theory and research dictated the types of activities we did in class. In conducting these activities, the teacher and I, via observation of student engagement and “take away” from activities, as well as interaction with focal students regarding their own perception of learning from these activities, were able to modify the intervention along the way. At first the modifications were local, essentially at the level of lesson planning, but eventually modifications fundamentally changed what we saw as the purpose of the vocabulary notebook, which necessitated a change in instructional delivery.

The Nature of Tweaking. The modifications (which the classroom teacher and I referred to throughout the intervention as “tweaks”) to the vocabulary notebook were fairly minor changes and somewhat nebulous at first, and involved some questioning on my part as to the very nature of tweaking. In my third classroom observation (week four of the intervention), students were doing “word presentations” for the first time. After their first assignment to choose eight to ten words and to explore their meaning, we had randomly chosen five students to put their vocabulary notebook on the document camera. In their presentations, each student was to tell us their word, why they chose that word, what it meant, and one interesting thing they had discovered about their word. It quickly became clear, that, though all the students had done the work thoroughly and thoughtfully, they couldn’t talk about their word, other than providing a definition. In addition, several of the students who were supposed to be listening to the presentation were not actually attending to it at all. In my observation notes, I wrote “D. doesn’t

understand her word at all...should we check their notebooks for clear entries before assigning for presentation?" and "several of the students are very much not attending...should we do this activity in small groups next week?" and "none are able to talk about interesting info...should we have them add that to 'other info' space next week?" As I made note of concerns as well as ways to circumvent them in future class periods, I jotted down the following, "Is this a tweak? How is this research and not just reflective teaching?"

The modifications Anna and I made were essentially at two levels, the first of which was relatively local. Within the local level, we extended lessons beyond what we initially planned, in order to more fully cover a strategy. For example, we initially planned to introduce the vocabulary notebooks and dictionary use at the same time, with the idea that over the first two weeks, students would implicitly learn how to use the dictionaries by using them. Anna would guide dictionary use during the second week of the intervention, and students would practice independently during the third week, while she and I circulated to provide assistance. Anna did not feel that they were experienced enough at the end of the two weeks, though, and requested that we do one final activity to solidify dictionary use. Accordingly, we did the Dictionary Discussion activity the following week.

Also within the local level, we added lesson topics that we had not anticipated needing. For example, Anna was frustrated at student word choices, and I was beginning to understand that the students did not recognize the disconnect between social and academic language. Thus, we added a lesson on Word Choice. Anna and I noticed early on that understanding a definition did not get a learner to correct use, and students

complained about what I came to call *definition but not use* regularly. For this reason, we decided to not present some deep processing activities we had planned and shift into analyzing word usage in context in a unit called Getting to Use.

However, as data were collected, the tweaking became less about lesson planning designed to promote use of the vocabulary notebook, and took on a far more global aspect. These modifications involved changes in the overall implementation of the vocabulary notebook strategy, including both the shift from the vocabulary notebook as strategy to vehicle, and my taking on a more active instructional role.

Theory to Practice: Dictionary Use. We began with dictionary use. As will be discussed further in the section on depth of knowledge, knowing a large number of words is important, but having a deep knowledge of a given word becomes necessary for comprehension if one encounters the word used in unusual ways (e.g., *Freeze!* used to mean *Stop!*), and for the productive use of the word easily and correctly. Learner dictionaries, as sources of an enormous amount of information about words (including but not limited to the following: pronunciation, part of speech, collocations, connotational information, synonyms tied to various shades of meaning of a given word, antonyms, grammatical information, usage notes, set and variable phrases, and multiple meanings), can be invaluable in providing a wide base of knowledge about individual words. Using a learner dictionary, even if accustomed to using a dictionary in one's first language, is challenging, though. The type of data provided about words in a learner dictionary is quite different from that provided in a dictionary for native speakers, because it is assumed that native speakers naturally know things that nonnative speakers will have to learn (e.g., collocations). Thus, instruction in the use of learner dictionaries is

essential if students are actually going to be able to use them as the rich sources of information that they are (Zimmerman, 2009).

Anna guided the use of dictionaries during the second week of the intervention, as she demonstrated the variety of information that could be gleaned from them. The following week, students practiced independent use of the dictionaries in class, doing research on the words they chose, while Anna and I circulated and assisted as necessary.

We had not originally intended further activities designed to teach dictionary use, but for a number of reasons, we included an activity we called the Dictionary Discussion. First, when Anna introduced the students to the vocabulary notebook the second week of the intervention, she demonstrated gathering word data using Dictionary.com. Students had access to learner dictionaries that I had provided, and they either used those or their own electronic translators. It occurred to me, as I watched Anna present, that she may not know of the existence of learner dictionaries, and indeed, when I asked her during a later conversation, she did not know what a learner dictionary was or how the information made available in one varied from a dictionary suitable for native speakers. Together, Anna and I researched a word on Dictionary.com, and then compared the information to that provided in a Longman's learner dictionary (Longman Dictionary of American English, 2007). She easily noted the difference, and we reasoned that it was likely that students were unaware of the significance of learner dictionaries.

This was somewhat borne out the following week as we assisted students in working independently with the dictionaries to research words of their choice. While students demonstrated a reasonable comfort level using the dictionaries independently to discover definitional and other information about words, only two of them owned a

dictionary, either a learner's dictionary or one meant for native speakers. When they looked words up, they used either an electronic translator or an online dictionary, such as Dictionary.com. Because the various tools useful in finding word data vary in the amount and quality of information provided, and because the students seemed unfamiliar with, and even perhaps less open to, using learner dictionaries, the richest source of information for nonnative speakers, a dictionary activity designed to allow students to explore the sources of information about words (learner dictionaries and translators) and compare the data mined from each, would likely be helpful to students.

Finally, two incidents involving polysemy, words with multiple meanings, and the additional steps necessary to match a new word and its context to one of perhaps many definitions, occurred during our work with students as they began researching words independently. The first, involving Yvonne's pleasure in noting that the word *settlement* carried an additional meaning of legal of which she had previously been unaware, has already been mentioned briefly. During our wrap-up discussion that day, Yvonne talked enthusiastically about her new knowledge, and even brought it up two weeks later when I asked the students what factors made a word a good one to research. The second incident involved the limitations inherent in direct translation. Mai had looked at the word *revolution*, which in the context in which it was encountered meant an uprising. When she translated directly into Chinese with her electronic translator, she came up with a translation pointing to one body moving around another. She knew that the translation did not fit the context, but she was not sure what to do next. We prompted use of a learner dictionary, and she was able to explore the word in its various meanings.

Both of these incidents prompted Anna to tell me later that she thought the dictionary, as “key” to successful independent word learning, needed further in-class focus. In response to her request for a slight modification, I developed and she presented, the following week, a discussion activity designed to encourage students to compare the data collected from translators to that collected from learner dictionaries; this comparison was guided by three questions: (a) What kinds of information is the instrument (translator or learner dictionary) good for collecting? (b) How does that data inform your word knowledge? and, (c) What are the limitations of the instrument? The discussion (see Appendix O for the discussion guide) was to be followed up by an activity in which students explored two words from their current reading selection, *scheme* and *assume*, using both a translator and a learner dictionary, and comment on the usefulness of the data collected.

This activity did not go well. During the lesson, Anna appeared unsure of herself, frequently checking her notes, and seemed to lose her place in the discussion she was guiding. She appeared uncomfortable and unsure throughout the lesson, and towards the end of the class period, she abandoned the lesson plan entirely. I assumed that she was having difficulties executing a lesson plan that she had had no hand in creating, I made a note in my observational comments “organics?” because I thought she might be struggling to implement a lesson plan that had come from outside her own head.

In our discussion after class, Anna acknowledged that implementing a lesson plan designed by another was challenging, but she attributed her lack of ease during class to her frustration with the students and their level of engagement. In word presentations preceding the dictionary activity, students had not been able to say much about their

words other than the definitions themselves. In addition, students had chosen what she considered poor words for research and presentation (*earthquake* and *CEO*), and this frustrated her. Because we were just beginning to understand the students' focus on social rather than academic language, Anna was disappointed that Gita, an engaged and motivated student, had chosen *earthquake*, what Anna felt to be an easy word. We looked at the work students had done over the previous week, and she continued to point out instances of student lack of engagement with the task. One student, for example, had not translated any of her words, and Veronica had translated *brevity* as *brief*. Since this was the first time that they had explored word meanings without our support, I was not concerned, but Anna reported that she felt that they had not invested themselves in the work.

Students would be using dictionaries in class throughout the semester, so I felt that we would have plenty of opportunities to reinforce the knowledge base that had been put into place in class that day. We had established the notions that words are complex and shifting, and that learning new vocabulary to support both comprehension and use is far less simple than a translation or dictionary definition not contextualized with English already in place. Students regularly revisited these realities throughout the semester, but in these early sessions with the dictionaries, students were just becoming aware of the types and amount of information that the dictionary holds about words, and the importance of the dictionary as a tool. These first few weeks helped all students, though, understand the *why* of a conundrum inherent in vocabulary learning: knowing the definition of a word is only the first of many steps to being able to use the word, and correct usage requires deep knowledge.

Theory to Practice: Word Choice. As noted in Chapter II, ELLs have difficulty choosing words to investigate, perceiving all words in the second language to have equal salience and potential (McCrostie, 2007). Indeed, this had been apparent the first day that students presented the words they had researched; Gita had chosen to look at *earthquake*, and though this was clearly an important word for Gita, because of the Pakistani earthquake of 2011, it was not in line with Anna's expectations that they would choose academic words. Jack's choice frustrated Anna. He had chosen to investigate *CEO*, which he defined as *a person who is the chief executive officer*. When she asked him why, Jack responded, "It's easy." Anna asked him if it were smart to choose easy words, and he said no, but he wanted to be a CEO.

Anna's frustration with students picking words that were too easy spurred our thoughts on what we might do to steer them toward better choices. I suggested that we talk to them the following week about the nature of academic and social language, and the differences between them, as well as provide a few questions that they might want to ask about a word before committing to researching it. Anna wanted to begin assigning words from the reading for their weekly word research assignment. At this time, she also requested that I teach the theory-based portion of the lesson the following week, namely, what factors matter when choosing words to research. I agreed, and we outlined a short discussion of important factors to consider when choosing words to be followed up by an examination of the two different words lists included in their books, one listing the 2000 most common words in English (Mikulecky & Jeffries, 2007), and the other the Academic Word List (Coxhead, 1998).

The following week, I presented a lesson on word choice (see Appendix P for the discussion guide). I began by asking students what they thought made a word a good choice for research, and they gave me the following responses: (a) words you will need where you work, (b) words *not* to use, (c) words with multiple meanings, and (d) politeness words. We then discussed four questions that students might want to consider when choosing words for research: (a) are there things that you can talk about in your L1 that you cannot discuss in your L2; (b) are there English words that you encounter frequently but you don't know enough about them to use them yourself; (c) is the word common in English, but one that you do **not** know and (d) is the word an *academic* word?

By this time, students' need to continue developing social language was apparent, and while Anna and I were concerned with their developing academic vocabulary, we had to embrace the whole spectrum of language if we were to keep them engaged in the vocabulary notebook. Thus, the first three questions encompassed social, but did not preclude investigation of academic, language. Only the last question drew a clear distinction between social and academic language.

The first question was designed to get learners thinking about concepts in place for which they have L1 but no L2 vocabulary. This question may apply to social language (e.g., what is the name of the item you stick on an envelope in order to put it in the mail?) or academic language (e.g., what is the word that means I am going to organize several people to work together on a project, and then oversee their work?). For students who had been in the country for a relatively long period of time (e.g., Daniela had been in the US for eight years), the first source of words has likely already been at least partly exhausted, but for those not here for a considerable length of time, some

discrepancies between the L1 and English in common and useful vocabulary are likely open for exploration. When I asked students what they did when they thought of an L1 word that they would like to use in English, they said that they use their translators. None of them said that they followed up the translation with a look at a dictionary in order to deepen their understanding of the English word (e.g., does it have multiple meanings? Are there issues of connotation or formality that might shade the meaning or constrain its use?).

Students were more interested in responding to this question with words that had no translation into English. Dae gave an Arabic word that she had used in Syria, which had no translation, and she could not explain what it meant; Adel, from Iraq, helped her out, saying, “This word means ‘put me in the grave.’ Like we use this for if you love one, you wanna die before them.” Several students indicated that they have trouble translating phrases because they have to do it word by word. Phrases are more difficult to work with, since much of the meaning is encoded at the phrase level rather than the word level, so it was not surprising that a direct translation would not work. I asked them what they did in those instances, where they could not find a translation, and several talked about the strategy of circumlocution, or talking around a word or phrase, explaining the intent of it.

The second question relates to English vocabulary that may be well understood when encountered receptively in most contexts, but are not well enough understood, either in terms of meaning or usage, for students to use the words themselves.

Surprisingly, in light of regularly expressed student frustration with having definitional

but not usage data in order to actually use words, the students seemed uninterested in exploring this receptive versus productive continuum.

For the third and final questions, I showed students the word lists that were included in the appendices of their vocabulary notebook. First, the 2000 Most Frequent Words in English Language Texts (Mikulecky & Jeffries, 2007), comprises two sub-lists: the first thousand most common words are arranged alphabetically, followed by the second thousand, also arranged alphabetically. These words are critical for general, everyday conversation and reading tasks; the Instrumental Hypothesis, in fact, encourages front-loading these common words so that readers can get beyond the basics as quickly as possible (Coady, 1995; Koda, 2004).

In looking at this first list, we found *settle*, the base word for *settlement*, in the first one thousand words. Students were pleased to find that they had studied that word earlier in the semester, and the fact that the word on the list was the base form for the word they had actually studied further reinforced the importance of word family members. None of the students, however, despite the imminent launch into academics that they all faced, expressed concern that their textbook was focusing on words that were among the 2000 most frequent.

The second word list, the Academic Word List (AWL), was of great interest to students. The AWL contains 570 base words (exclusive of the 2000 most common words) that Coxhead (1998) found to be common in academic text across a variety of disciplines. Each of these 570 base words may include a number of variant word forms. I asked if anyone knew what the AWL was, and Jack, a graduate of a local high school, answered, “Common words you will use in something academic.” I explained to students

that, although our list was only two pages long, the full AWL is 27-pages long. This is because the base words on the shorter AWL in our vocabulary notebook may be the only member of the word family, but others might include as many as five or six or even more, and all of these are included on the full list. Jack said, “Uh-oh!” Many of the students laughed.

Together we looked at the vocabulary summary page for chapter three in their reading textbook (McGraw Hill, 2007), and I pointed out that all of the words with an asterisk next to them were from the academic word list, and students took some time to look at the words that had asterisks and those that did not. Daniela asked why the common words were different from the ones used in written academic text, which led to a discussion of the various roots of English words; common words tend to come from the Anglo-Saxon, while academic vocabulary tends to come from Greek and Latin roots. Hayder was curious about the process of creating the list, and wanted to know why the researcher chose these words, so I explained briefly the corpus analysis that Coxhead (1998) had conducted across a range of college level textbooks and across a range of disciplines.

Anna and I followed this discussion up by asking students to go back through their vocabulary notebook and find some words that they thought might be on either of the two lists. Anna and I circulated through the room as students searched their word lists to find words they had previously researched. *Contrast*, *constrain*, and *inhibit* were all on the AWL, while *profit*, *origin*, and *virtue* were on the 2000 Most Frequent. *Estimate*, but not *underestimate* was on the AWL, and *whole*, but not *wholeheartedly*, was on the 2000 Most Frequent. *Stigma*, *stoop*, *cavort*, and *chant* were on neither of the

lists. Students seemed intrigued at the idea that words functioned differently, and came into play in different contexts, and this activity, though not necessarily useful in and of itself (I did not want them, for instance, to translate every word on the lists, or memorize the words on either list), called student attention to the disconnect between academic and social language, a disconnect that most students had seemed previously uninterested in.

Finally, I did a computer search for “Academic Word List,” and showed students a sample of the activities that were available on a variety of websites. We went through a couple of exercises together so that they could see the range of activities available for practicing words on the AWL. Again, the point was not necessarily to recommend that students go to the websites and do the activities, but to further legitimize for students the very real differences between social and academic language.

This activity was successful in that, almost immediately, student focus on academic language increased. Because at first we did not fully understand the students’ drive to improve their social language, we were somewhat surprised at the words they were choosing to investigate, but this focus on social was only part of the picture. Once students were aware of the existence of a specialized vocabulary for academic use, they became interested in it. In fact, Anna had begun assigning words for students to research in the vocabulary notebook the previous week, but after our classroom discussion about choosing good words and introduction to the word lists, students started choosing academic words themselves, and she went back to letting them make their own choices.

Theory to Practice: Depth of knowledge. The idea that vocabulary acquisition includes both breadth—the quantity of words known—as well as depth—the quality of information known about each word—was discussed in Chapter II. Learners need deep

semantic knowledge about words, but there are other facets of word knowledge as well, including those germane to the correct *use* of words.

Many of the classroom activities in the first two weeks of the intervention focused implicitly on the types of information necessary to really *know* a word, as well as sources for finding that information. When Anna first introduced students to the vocabulary notebook, they discussed the importance of part of speech and word families. The dictionary activity in week four made clear the necessity of wading through multiple meanings for a given word, as well as a realization that a word's synonyms and antonyms may inform the learner of shades of meaning that might challenge what the learner *thinks* he or she understands about a word.

I had thought that this work in the dictionaries week after week would help students develop a sense of deep word knowledge, but we decided that we needed to be more explicit about the *concept* of deep knowledge at the same time that we continued to explore various facets of deep knowledge, primarily through further work with word families and introducing collocations.

Accordingly in week six of the intervention, we introduced the notion of deep word knowledge, and its role in informing our *use* of words, by defining parameters that limit usage. I used the example of *good* and *delicious*, which might be loosely described as synonyms. *Delicious*, though, is much more limited than *good*, most commonly used in describing food, whereas *good* can be used to describe any manner of things: people, a song, relationships, a class, a school, or a well-behaved puppy. Because most of the students knew these words well, they easily understood what I meant when I indicated that deep knowledge of words helped define the limits of their use, which makes it easier

to use words correctly. Anna then took over, using the dictionaries to further explore word families, which had proven frustrating to students every time they came up, and then to introduce collocations, words that commonly occur together, or co-locate. Both of these facets of word knowledge continually caused students to use words incorrectly when they tried to write sentences with the words they were researching. Abdul struggled with word form confusion when he wrote *Many people from my back home against adopt (adopt instead of adoption)*; Daniela evinced the same issue when she tried *He won the acknowledge (acknowledge instead of acknowledgement)*. Veronica tried to use the noun *brevity*, but she filled the adjective slot with it: *Whenever I feel tired, I use brevity conversation*. Her meaning was clear, but her usage was incorrect. Mai wrote *Every people needs requirements of vitamin for healthy*, in which both the target word, *requirements* as well as another, *healthy*, were used incorrectly. *Requirements* filled the correct syntactic slot, but would have been better used as the verb form *requires* in place of *needs*. *Healthy*, an adjective, filled a noun slot.

Difficulty using collocations was equally problematic. Jack wrote, *I drink beer moderation*; he either needed to change *moderation* to *moderately*, or he needed the collocation *in moderation*. Mai wrote, *Every people have a different attitude for a thing*, not realizing that, in English, we have *attitude about* not *attitude for*. Daniela, who found collocations frustrating throughout the semester, finally acknowledged their importance when she tried to use the word *stunning* in the following sentence: *She took a stunning decision*. In Spanish, you can *take* a decision, while in English, you *make* a decision. Her use of the word *stunning* was right on target, but her sentence sounded nonnative because of the collocation she used.

Over the course of the two weeks in which we explored the many pieces of knowledge that we could collect about words, students were developing an awareness of the types of data necessary to collect in order to really *know* a word, and they were learning how complicated words are, not just semantically, but syntactically. This work developed awareness of lexical complexity while promoting deep knowledge about words.

Theory to Practice: Deep Processing. When students made their first word presentations in the fourth week, Anna demonstrated her sense of the importance of pushing students beyond simple definitional information about words with her questions. In presenting the word *underestimate*, Mai provided basic definitional information plus a sample sentence. Anna extended the talk by asking Mai what kinds of things she might underestimate, and the following discussion ensued:

Mai: I think something is not so expensive, but it really is expensive.

Anna: So you underestimated the price?

Mai: Yes.

Anna: (to all) Can you guys think of a time when somebody underestimated you?

Student?: It's negative.

Daniela: Maybe negative, but you work harder.

At another point in the word presentations, Gita presented *earthquake*. Anna asked students if they remembered another word that might be used to describe the Pakistani earthquake, and several students immediately responded with, "catastrophic." She then recapped some of the information that Gita had provided about the 2011 Pakistani earthquake, including that 150,000 Pakistanis had been made homeless, and

asked students to connect the two words. Several responded by with the phrases, “catastrophic earthquake” or “catastrophic event,” a word that Anna had used in talking about the earthquake.

The following week, Gita presented the word *nondescript*, and the discussion around the word ranged from baggy pants to clothing labels to plumbers and uniforms to suits. Students were doing most of the talking, but Anna asked questions to focus their analysis of the word. For example, after Gita characterized *nondescript* as “lacking, everybody have distinct or individual personality, *nondescript* doesn’t,” Anna asked, “What would guys look like that dressed *nondescript*? Maybe businessmen?” She encouraged them, with this question, to move away from the idea of distinct and individual as students had been thinking about it—with reference to women and fashion—and apply it to a culturally determined context, where individualism and personality in dress would *not* be so valued. Gita described the clothing that a businessman might wear like this, “most of them, they dress, like same, the ties and suits...They look professional because that’s they supposed to look like in the office. They have to show, like, they have responsibility. They cannot go in the office and wear the baggy pants.” Anna confirmed, saying, “they tend to wear clothes that are *nondescript*, which would be a suit, and tie, and jacket, and dress shoes, and everyone walks into work with their briefcase.” She then continued to probe the idea of *nondescript* by asking about of a businessman who wears an item of clothing, like “a pinstripe suit, and like a red tie, that shows a little more personality.” Students agreed that that was still professional, but this businessman was *not* completely *nondescript*.

This discussion of the many nuances inherent in the word *nondescript* continued for more than three minutes more, including forays into uniforms, color, and clothing brands with respect to the term; for the most part, Anna guided the discussion without dominating it, encouraging students to examine words in all of their semantic complexity.

In our baseline interview, Anna had expressed concern about a lack of expertise in vocabulary teaching, but in these first classroom observations, she demonstrated an understanding that vocabulary acquisition requires deep processing, or making connections between words and contexts in which those words might work. In that first interview, Anna had said that her impression of the vocabulary notebook was that it would, “push them in a direction to prompt...discussion and a sort of dissection of words,” in ways that she was not used to, and indicated that she saw the focus as “building connections between words and ideas.” This first impression of the notebook was correct, and her intuitive prompts designed to get students to talk about words was complemented by my more deliberate attempts to create activities that would foster student recognition of the importance of making these connections.

While Anna had engaged students in activities that support deep processing, we formally introduced the notion of deep processing during the eighth week of the intervention, when we began word mapping. We briefly talked about the types of word knowledge: definitional (knowing the definition and synonyms), contextual (understanding a core concept, as well as some ability to recognize it in variant contexts; and generative (understanding a word when used in an original way as well as using it in novel but appropriate ways), and discussed word mapping as a way to get to generative knowledge. Word mapping, or drawing connections between words, forces deep

semantic examination of words, while justifying the connections generates a great deal of talk about words. See Appendix R for the word mapping activity.

I began the activity by spreading out words, printed on card stock, and color-coded by part of speech. On a blank piece of paper, I put the word *people*, circled it, drew a line to the left, wrote *can be*, and asked students what kinds of words could fit. They correctly identified adjectives and nouns, and so I asked them to suggest nouns and adjectives from the words that would work. Students immediately suggested *anti-American*, *well-to-do*, *blunt*, *gardener*, and *ecotourism*. I asked if *ecotourism* worked, and students disagreed. Some students thought that it worked, since it is a noun, but others realized that this noun form refers to the type of *tourism*, not the people. It took a few minutes of discussion to fully process through the difference between *ecotourism* and *ecotourist* before we could continue.

Next, a student suggested the word *household*, sparking another long discussion of semantic nuance. I asked what *household* means, and Daniela responded with, “the person who take care about somebody else.” Another student suggested, “the members of the house.” A third student added, “household is the person who take care of the person who lives in the house, not people in the family, but whoever lives in the house.” I asked if a *household* were a person, and most students agreed that it is, although some did not. One student said, “like family,” and another, “make too much money.” We seemed a bit stuck, so I looked the word up in the learner’s dictionary, and read it aloud (*having to do with a house*), and asked them to connect that with people. A student offered, “Families,” and I asked how *family* relates to *household*. Another student said, “People can create a family,” and I asked again how families relate to households.

Finally, a student said, “when they get together, they live in one place, and that is the household.”

Deconstructing the meaning of *household* and its relation to people took more than three minutes, and because of learner familiarity with the term *head of household*, which does, in fact, refer to a person, the conversation continued for a further two minutes, as we parsed that phrase and its connection with both people and households, as well as the contexts in which it might be encountered.

We continued working with the nouns and adjectives, and while students identified many that fit appropriately into the slot, *People can be...*, they continued to suggest words that did not fit semantically, indicating a lack of real understanding of word meaning. People cannot be *menial*, but they can have *menial* jobs. In other cases, students suggested words that fit, both in terms of part of speech and meaning, but their interpretation of the utterance indicated a non-native understanding of connotation. Gita, for example, suggested *mysterious*, and said that she did not like mysterious people because “They have secrets themselves and you don’t know what they, like, what they gonna do next,” whereas many native speakers would view a mysterious person as interesting and desirable.

I then drew another line out to the right, and wrote *can have* in a circle. Students told me, correctly, that only nouns would fit the slot, and so we looked for appropriate nouns. Again, students provided many nouns (e.g., *cancer, goals, attitude, imagination*) that fit semantically, but others needed clarification. Ben suggested that people can have *diet*, which caused further examination of the shades of meaning encompassed in the word. Students agreed that all people have a diet, e.g., *a healthy diet, a vegetarian diet, a*

low-fat diet, but we had to negotiate a new syntactic framework for the meaning whereby someone is trying to lose weight: *on a diet*. This syntax does not work with *People can have...*, though, instead requiring a *be* verb.

After several negotiations of this type, we looked at all of the nouns and adjectives that had worked in either context, and began to decide if they were internal or external to the people who are or have each. For example, *vacation* and *indigenous* are somewhat external, while *observant* and *comfort zone* are more internally generated. *Style* caused some disagreement, but we finally agreed that though it is observed externally, it comes from inside, so we classified it as internal.

Finally, we further subdivided the words into these categories: *mental*, *physical*, *both*, or *neither*. Again, many were easy; *gardener* is physical, while *responsible* is mental. Discussion was necessary in some cases, for example, *goals*. The action associated with the goal determines whether it is a mental or physical action. *Making goals* is a mental act, whereas *reaching goals* may include both mental and physical.

This whole-class activity was rich with talk about words; as a follow up, students were asked to create two word maps for the following week, with the added instruction that they needed to be prepared to justify the connections they made in case it was not an obvious connection to the rest of us.

Anna and I noted, while discussing the lesson after class, that the strength of this activity lay in the amount of talk that it generated about the words in question. Anna was especially surprised at the amount of talk that the activity generated, so she asked for a small tweak to the intervention, wanting to reinforce word mapping in class before our next vocabulary session. The class was currently reading a passage on hybrid cars, so I

set up a template for word mapping around the topic of *Cars* (see Appendix S) and sent it to her. She asked students to work in small groups to complete the word map, and reported a great deal of negotiating between group members.

Because it had generated so much talk about the words, Anna and I had decided to continue deep processing of word meaning in week nine of the intervention. Selected students presented their word maps to the whole class, and listeners were invited to ask questions about the connections each presenter had made. For example, Mai mapped around the term *money*, and one connection she made was *uprising*. A student asked how the two were connected, but Mai was unable to justify the connection in English. Dae offered, “I think we are fighting to get much money, cause we don’t have much living.” Mai agreed that people without much money might rise up and revolt. Patty, in her map around the word *travel*, made a connection with *portray*, which was not immediately clear to many of us. She explained that, “Before you go to that place, you can imagine about the place, but when you are there, you can portray that place to the people at home.” Yvonne mapped around the word *feelings*, and two of her connections, *enchanted* and *desirable*, prompted a question from a classmate about her love life. Yvonne blushed and said, “Yes, I am enchanted with a guy. And desirable as a woman.” I asked about the connection with *legal*, and Yvonne said, “your status here in the country. It’s a good feeling, when you feel like your personality is a good status to be here in the country legal. Not illegal.” We discussed the verbs *feel* versus *be*, and decided that *being legal* feels good, but you cannot actually *feel* legal.

The word mapping continued with small group work. Each group had several small cards with organizing concepts such as “quiet words” or “communication words”

on each card (see Appendix T). Groups were asked to look through all of their word cards to find connections, and discuss the connections within their group. Anna and I circulated, commenting on and questioning the connections made. Again, the activity generated a great deal of talk about words, as students negotiated meanings with each other and Anna and me. Gita's group said that *medical* could be a positive word, and gave the example of getting over an illness. Dae's group decided that *brief* is positive if you do not have much time for something, but negative if you need more information. Daniela's group asked if *stigma* and *taboo* are related words, and I asked them to talk about the words and then decide if there was a connection. They did so, and decided that if a behavior is *taboo*, and you do it, it might result in a *stigma*. Patty explained, when asked, that *network* is related to *vehicle*, because you can sell a car on Craig's list, which is a network, and GPS is a network that you can use in a car. Yvonne explained that *extended* is a positive word when used in the phrase *extended family*. Adel's group connected *communication* to *environment* because you had to have a comfortable environment for good talk to happen. Ahmed connected *medical* to *money*, because if you don't have money, you cannot access medical care. Dae noted that *refuse* is a positive word because we can refuse something we do not want. Hayder told me that *style* is a quiet word, because a person can have a quiet, not fancy, style. His group mates decided that he had a quiet style, and I had to agree. Ahmed said that *via* is connected to *communication*, because you can communicate by or *via* email. This activity, and the discussion that it engendered, continued for the remainder of the class period, with all of groups staying quite focused and on task.

Theory to Practice: Getting to Use. During week three of the intervention, Daniela had provided a perfect example of the definition-but-not-use disconnect when she defined her word, *contrast*, as *something that is different, it's to compare*, but then stumbled as she tried to use it in a sentence: *Cuba is a hot place, contrast Canada is a hot place sometimes in the year.* She had many grammatical problems in the sentence in addition to her misuse of *contrast*, but even if she had fixed all of those, she would need to either change the word form to *contrasting* (i.e., *Contrasting Cuba and Canada, Cuba is hot all year, while Canada is only hot sometimes*), or use the collocation *in contrast to* (i.e., *Cuba is hot all year around, in contrast to Canada, which is only hot some of the time*). Daniela was using the word communicatively, making her meaning understood, but she was not using it correctly. Getting to *correct* usage of the words, a goal of students, unfolded as a major goal of the intervention.

When Anna and I met after class that week, this disconnect between definitional information and use came up immediately. Anna noted that students would be able to recognize the word, but not use it correctly, and I pointed out the difference between the three types of word knowledge (definitional, contextual, and generative), noting that Daniela evinced definitional knowledge, but not generative. We began talking, at this point, about how we might incorporate more work on getting from definition to use, though we did not overtly start work on that until the tenth week of the intervention. As students developed, over the following weeks, an awareness of the types of data that were necessary to collect in order to really *know* a word, they were learning how semantically and syntactically complicated words are.

That the vocabulary notebook as data collection point did *not* get students to generative use was made clear from the student perspective as well. Daniela talked in her mid-semester interview of working with her boyfriend to move from definition to use, noting that she asked, “For example, how we can use this word and he will tell me and then I will read if it will match and then I will...I will give him one sentence to see if I can use the word and he will say “yes”, if he will say “no”, he will tell to me why not.”

Hayder indicated in his mid-semester interview that he only copied definitions into his vocabulary notebook, but noted that, “I reading the sentence in the dictionary, that's good,” and explained the problem neatly when he said, “Yeah, I know about new word, definition, I know about definition. I don't know about the sentence, how to use this word in a sentence.”

Mai filled out her vocabulary notebook meticulously each week. After Anna had introduced the notion of collocations, Mai had chosen the word *collocations* as one of her words to explore, but she told me at her mid-semester interview that she had been unable to use the word in a sentence, saying, “Yeah, collocations. I know that often that they say that they go together, but I don't know how to write down.” I helped her write the following definitional sentence, *Collocations are groups of words that are often located together*, which prompted her to ask if the word were not a verb. She was confusing two word forms, *collocation*, a noun, with *collocate*, a verb, but her confusion leant weight to the disconnection between definition and use.

Jack, in his mid-semester interview, told me how, in level three, the reading teacher had provided each new word, a definition, and a sentence example, and this helped him move toward generative use, saying “Look like in the reading three, level

three Miss Victoria always give the sentence example for the word, so it's easy to remember how to use that.”

Veronica told me, in her mid-semester interview, how she used the feedback that Anna provided in checking the vocabulary notebook each week to help her use words correctly. “For using for this class, I finish to write everything and then I give it to the teacher and then when she put the correct and I look at them. One is not okay. One is good. And then what's the other way I can use them...sometimes you can know the word and you can know what it's mean, but it's really difficult to put in the sentence. And then, sometimes when I try real hard to write in it, and then when I give it to the teacher, she say, ‘Okay, that sentence is good.’ And then I feel very happy about it. That's okay. I know how to use it now...Whenever I have time, that's okay, let me look at them, because I know I make some mistake and then I need to know how to use it and then sometimes I went to the Internet again and then to find the real meaning of the word.”

When we began working with contextual analysis, discussed in detail below, to help students get to generative use, we asked students to use sentence models provided (see Appendix U), to try to construct their own sentences for homework. The following week, it was clear that almost all of the students had copied sentences out of a dictionary. I asked students if they had copied, and most honestly said yes, and explained why. Abdul could write his own, but “I want to use a good, a good sentence,” and his sentence would not be good. Adel, too, wanted to “write good sentences,” and does not know how. Ruth copied her sentences because, “I wanna improve my sentences, but I can't start.”

I had mistakenly assumed that providing students the opportunity to collect a good deal of rich data about words would help them intuit the observational and analytical skills necessary to allow them to move into using words correctly, but based on Anna's and my observations, as well as plentiful student self-report, it became obvious that we would have to incorporate explicit instruction on noticing and analyzing the context in which words occur for usage data that would allow students to use the words themselves correctly. I present below an example of Jack trying to use the word *pretension* in a sentence to illustrate the many issues in getting to correct usage that frustrate students.

While Jack did not initially find the school vocabulary notebook useful to him except as a path to good grades, his interest in the notebook increased when we started working more actively with using the words. Like his classmates, Jack often noted that he might have a definition but not be able to use the word. In one class meeting, he was working with the word *pretension*, and he wrote the following sentence: "His pretension wants his children to be successful." He missed the negative connotation in the dictionary definition he was working with "an attempt to seem more important, more intelligent, or of higher social class than you really are," (Longman Dictionary of American English, 2007, p. 794) as well as the nuancing phrase *attempt to seem*. Jack and I worked together for several minutes deconstructing the definition so that he could see those critical pieces of meaning, and he tried over and over to use it correctly without success. Finally I provided sentences for him that showcased the negative sense he was missing: "The father's pretension made him dress his children in expensive clothes that he could not afford," and "The pretentious father dressed his children in clothes he could not afford so

that others would think the family wealthy.” We connected that sentence to the definition we were working with, noting the disconnect between the family’s lack, but *appearance*, of wealth. Though he finally seemed to understand the complexity of the word’s meaning, he had run out of class time to focus on correct usage in a sentence.

Accordingly, our instructional focus in the tenth week of the intervention shifted from collecting word data, and making and justifying connection between words to what Anna and I began to call *getting to use*. We began this modification first by providing model sentences for ten of the words that students had struggled with using in the past (see Appendix U, Sentence Models 1). Together, we looked at the sentence context for the first word set, *advantageous* and *advantage*: (a) It is **advantageous to** have a driver’s license in this city; (b) It is **an advantage to** have a driver’s license in this city; and (c) A driver’s license is **an advantage** in this city, because public transit isn’t great. Using these sentences, I helped them to notice the following things: (a) one is an adjective, the other is a noun; (b) both word forms, if followed by a verb, such as *have*, will co-locate with *to*; (c) neither word form works with people and *be* verbs, though people can benefit from *advantages* or *advantageous* things; (d) the first two sentences mean exactly the same thing, while the third adds a substantial piece of information.

We then put students into small groups and asked them to examine the sentence context(s) for each of the word(s) to guide their own sentence writing. Anna and I circulated and assisted the groups as they worked. All groups continued to work with the first set of models for a while, focusing on identifying things that are advantageous before they begin trying to construct sentences. Abdul asked if this was correct, “Is it an advantage to know about other cultures?” and I said yes. Ruth’s group wanted to talk

about financial aid and insurance, so they plugged financial aid in with *advantage* and insurance with *advantageous*. Patty's group wrote about the advantages of speaking a second language. Adel's group struggled with the part of speech of the two word forms, and Anna prompted noticing the noun form based on the evidence provided by the article *an*, which precedes it.

Eventually, the small groups moved into the sentence models with *nondescript*, an adjective that occurs in two spots in which adjectives occur: preceding the noun and following a linking verb. The grammatical analysis was actually fairly easy for Mai's group, but they had a difficult time deciding on things that they may describe as *nondescript*. They asked if they could use it with house, car, and clothing; when I said yes, they wrote several sentences with *nondescript* in both possible positions. Abdul's group wanted to say that students are *nondescript*, but when I invited them to look around at their classmates, they decided that school uniforms are more likely to be *nondescript*. Gita's group wanted to talk about *nondescript* furniture, but they asked me first if furniture can be *nondescript*. I told them to give me an example of furniture that they would describe as *nondescript*, and they described a brown sofa.

Although we were focusing on contextual analysis, semantic nuances also caused trouble for the groups. Ahmed's group wanted to use *nondescript* to describe a zebra, and we discussed for several minutes why that would not work. I said that a zebra, by virtue of its stripes, is **not** *nondescript*; then they wanted to know if you could describe a zebra without stripes as *nondescript*. I told them that I thought the oddity of a zebra without stripes would be very surprising, so the focus of a comment on the zebra would be more along the lines of commenting on how unusual the animal is, rather than a

nondescript zebra. They were not entirely convinced, but they did stop trying to pair *nondescript* with zebra, writing instead the following sentence: *A nondescript snake is not dangerous*. Mai's group had moved on to *inappropriate*, and produced the sentence *Mai's dress is inappropriate for her shoes*. I asked what this sentence means, how is the dress inappropriate for the shoes? I expected one of two answers: the dress is elegant and the shoes are sneakers, or the shoes and the dress do not match. In the first, *inappropriate* applies, whereas in the second, it is not a matter of appropriateness so much as a matching issue. We discussed this distinction, and they decided to write a sentence about wearing inappropriate clothes to a wedding.

At the end of class, most students agreed that this activity was helpful, but watching them struggle through their sentence writing during the class period indicated that contextual analysis, while a useful tool, was no easy fix for the getting to use problem that students had experienced throughout the semester.

In week eleven of the intervention, we further tweaked the intervention by provided a guiding framework for analyzing context (see Appendix X), which included analysis of meaning, grammatical constraints, word parts, collocational usage, and formality and appropriateness. This provided a template for students to use in analyzing context, and I hoped it would focus their noticing.

We continued analyzing sentence context, based on model sentences, throughout the remaining three weeks of the intervention. Originally, I was writing sentences to provide model context for all of the words that students had studied over the course of the semester (see Appendices V and W, Sentence Models 2 and 3), but when it became clear that a regular classroom teacher could not keep up with the task, we made yet another

small tweak, shifting into showing them how to find context to analyze, using the sentence where the word was first encountered in conjunction with example usages from one or more dictionaries.

Gaining the deep knowledge necessary to be able to use a word correctly is challenging, and covers the spectrum from semantic (meaning, including connotation and domain constraints) to syntactic (word families, grammatical constraints, collocations) to morphemic (word parts) to pragmatic (formality and appropriateness). Much of this can be gained incidentally via repeated exposures to a word over time, but the luxury of learning through incidental exposure was not possible for these learners, who needed to be able to take a more active approach to word learning and usage if they were to be successful in academic classes.

Tweaking Revisited. At their core, formative experiments are expected to be responsive to the context in which the intervention is put into place. Throughout the last section, a number of modifications that Anna and I made to the intervention were mentioned; some of them were quite local, at the level of lesson planning, involving either extending lessons or including lesson topics that we had not anticipated needing. I explore below the more global shifts that the vocabulary notebook intervention underwent, namely, vocabulary notebook as vehicle and delivery of the intervention.

Vocabulary notebook as vehicle. As mentioned earlier, the vocabulary notebook became much more meaningful as a *means* to an end rather than the *end* itself that I had first envisioned its being. It served as a basis for discussion of theory germane to second language vocabulary acquisition, as well as a collection point for word data that we could then access to engage in class discussions about words and word meanings. In addition,

the intense focus on vocabulary throughout the semester seemed to have focused student attention on language and words more sharply. We were spending 20% of their time in class on vocabulary, and delving heavily into what to learn about words and how to learn it than is typically supported by reading textbooks. Finally, the complexity of the vocabulary-learning task, while daunting for students, also seemed motivating, as they took what they were learning and tried to employ it in their own productive vocabulary use.

Our two-pronged approach, covering the *why* as well as the *what* and *how* of sound second language vocabulary acquisition, provided practice opportunities within the classroom, but also allowed students to develop familiarity with some basic theory, which may very well shape their personal practice. The vocabulary notebook's shift from strategy to vehicle was completely unexpected, but allowing that shift to take place made space for all of the intervention outcomes detailed above—dictionary use, word choice, deep knowledge, deep processing, and getting to use. Only three of these, dictionary use, deep knowledge, and deep processing, were part of the planned intervention, and I only intended to teach them implicitly, through practice.

Who is the teacher? In our baseline interview, I asked Anna to tell me her thoughts on implementing the vocabulary notebook in the coming semester. She expressed enthusiasm, saying “I truly am excited to have your input and to try out your method, because, it’s a new topic for me anyway, really. So, I’m excited to kind of have, to try out this more specifically-directed, I guess, ongoing activity to practice and learn vocabulary.” At the same time, she expressed concern at her lack of experience with higher-level students, telling me as she articulated her ideas about teaching vocabulary,

“all I can really speak to is at the lower levels, and at the lower levels I try to use a lot of visuals, to help them have visual connections and clues.” She also expressed a certain unease when she said, “I would guess I’m a little bit, um, not nervous, but not 100% confident yet, just because it’s new to me, and I’m not just 100% sure yet just what exactly I need to do as far as directing them, but I’m sure we’ll talk about that.”

As I observed her teach, however, in the second and forth week of the intervention, she seemed uncomfortable, checked her class notes and hesitated several times throughout the lesson. I concluded that it was hard to carry out the lesson, since she had not had a hand in actually writing it, and wondered if Anna might be responding to the loss of autonomy within her classroom, brought on by a lesson plan imposed from elsewhere. When we discussed it after class, Anna attributed it to different reasons, self-consciousness the second week and frustration at lack of student engagement the fourth week. When we began to sketch out a plan for the fifth week of the intervention, however, she asked me if I would be willing to take over the activities. She said that she thought I might “get a different response, they might be like, ‘Oh. Who’s this? What’s she doing?’”

In addition, as the vocabulary notebook changed from a data collection point about words into a vehicle for teaching theory about second language vocabulary acquisition as well as the practices that supported the theory, Anna felt more and more out of her depth. She had stumbled somewhat during the Dictionary Discussion activity because she had not known what a learner dictionary was. It had never occurred to me that she was unfamiliar with learner dictionaries, because I have been an experienced teacher for too long. When we decided to talk in the fifth week about factors pertinent to

making good word choices, as well as the disconnect between academic and social language, she asked me to teach that portion of the lesson because she did not think she knew enough about it to elaborate the ideas for students. From that point on, I taught every lesson involving theory (deep knowledge, deep processing, and contextual analysis); Anna continued to introduce activities that allowed practical application of theory, as well as providing support to individuals and small groups as they engaged in these activities. Thus, the second global modification we made to the intervention is that I actually taught many of the lessons.

Student Modifications

Anna and I made decisions, based on what we saw in the classroom each week, about where to go with the intervention and how to get there. Meanwhile, the students were taking the vocabulary notebook and using it in ways that better suited them and their learning. The student-made modifications consisted of developing their strategy use in concert with the principles and practice that we introduced in class, and merging their personal vocabulary notebooks with the school notebooks that I was asking them to use.

Student strategies in place and their evolution. Despite strategies students had in place at the beginning of the intervention, they showed evidence of changing their practices from the early weeks of the intervention, based on analysis of student self-report and the work they did in their vocabulary notebook. Hayder began focusing on academic words more, and acknowledged the importance of varied word knowledge, saying in our mid-semester interview, “I write about the family word now.” At the same time, he began using multiple sources from which to find definitional and other information about words in which he was interested, including online dictionaries for native speakers as

well as an online learner dictionary in addition to his translator. He reported being more curious about words that came up, asking coworkers what the words meant, and trying to “remember to go home and look it up on the Internet.” He also began early on to look at the example usages provided in the dictionaries, hoping that it would help him unlock the use mystery.

Veronica compared the vocabulary work in Level 4 to that which she had done in Levels 2 and 3, where their textbook had an electronic component with supplemental vocabulary work, and as well as more teacher-provided vocabulary support in the form of a well-written sentence for each word. She thought she had benefited from the more active approach in Level 4, and discussed her understanding that she needed deeper word knowledge in order to really *know* a word so that she could use it: “And then I pay a little bit attention about them, I say, ‘Oh, okay. This is the noun. This is the verb. This is the...’ But before I just the word, I just put the word.” She also found the notebook a useful study tool, and spent time before tests studying the information she had collected about her words, noting that she spent more time with vocabulary than she had before. Since she better understood how complex words were, she thought that this time spent was a likely path to retention: “For now, I still have to, some of the words I use, I still have to look at them so many times, whenever I want to use it. I find it here. I will remember sometime.”

Daniela did not use the vocabulary notebook that I gave her, but she began keeping her own notebook, and began using online dictionaries to research word meanings. At mid-semester, she explained why she was not using the notebook I gave her. She did not want to collect the information that I was asking her to find about each

word, which was overwhelming and confusing to her, and she got frustrated with trying to puzzle it out: “So, if it’s kind of frustrating for me, I will just let it go even if I know it’s really important for me.”

Daniela never became comfortable with collocations and parts of speech, but by the end of the semester she was willing to acknowledge the importance of a wide range of word data, noting in our post-semester interview that “But now I know that it is not ‘took a decision’ in English. English is English and Spanish is Spanish, and it’s ‘made a decision.’ It’s ‘made.’ Collocation is one of the strongest that I must do.” It was not yet easy for her, but she was developing an awareness of what she needed to attend to when researching new words.

Mai, like Veronica, found the more active approach in Level 4 likely to increase learning over the more teacher-supported vocabulary work in Level 3, noting that, “When you do the your homework and you check the computer and this is your first time you start to learning it. And then you write on it, it give you a little bit more memories.”

Despite her preference for more active learning, Mai often found using the dictionary to be confusing, saying that, “But sometimes, you know, sometimes the dictionary give you the different meanings. I really sometimes was confused. But, Victoria (Level 3 teacher) give us just a very clear meanings.” At the same time, she realized the value of the dictionary, especially the learner dictionaries we used in class and the one she found online, saying.

Before I don’t have this, I just write down the new word and transfer to Chinese, know what’s the mean. But I don’t really know how to use this...But they have

the some definition and for the Longman's dictionary, they like, explain with you very carefully all the stuff. And also you could try to write a new sentence.

In addition to modifying their own practices and strategies, students actively modified the vocabulary notebook and the practices associated with it in order to better complement personal learning preferences and needs. From finding ways to incorporate the notebook into already-in-place ways of learning to collecting learner-specific information about words, students found ways to work with the notebook in ways that made it useful to them.

Daniela liked to talk about words, and more than any other student, if she had any doubt about the nuance of a word's meaning, she asked questions. This personal strategy that she used with her boyfriend now began to encompass elements of classroom practice that she was taking in. She spent time trying to use the words correctly, then approached her boyfriend to talk over all of the data she had collected and the correctness or not of her usage attempts. As they talked, she added his sentences with correct usages of the word to her notebook, as well as any shades of meaning that he told her about. These conversations made the notebook a more useful tool for Daniela, at the same time that classroom activities around the vocabulary notebook informed her conversations with her boyfriend.

Hayder, perhaps the student most frustrated by the disconnect between definitional and generative word knowledge, outlined a three-step approach that *he* would take if he were the teacher in this class. He would

Okay, first collect new words...tell about first what the definition, and you know, use the simple word, easy word, that the student can understand me. Not use this

hard word, you know....And use different sentences, you know....sometimes if have, if the word have the synonym and you tell them, and I want the student write for me two sentences, use the word.

His distillation of all of the complexity of word knowledge into a three-step process to use was impressive in its simplicity, and though it was difficult for him to execute without the use of sample contexts for analysis, he persisted with this approach as he tried to move into generative use: gather all the semantic data possible, from multiple sources, and then analyze context so as to understand how to use the word correctly. The vocabulary notebook served as a data collection point for Hayder, as well as a starting point for his organically defined process for getting to generative use.

The ways that students found to personalize the vocabulary notebook to better suit their own needs, as well as their shifting strategy use, were quite interesting to watch. In the next section, I present how each of the focal students found ways to merge their personal vocabulary notebook with the school vocabulary notebooks I had given them.

School vocabulary notebook merges with personal vocabulary notebook.

Fowle (2002) suggests that teachers provide a model of a vocabulary notebook, and let students then create their own. Because of the potential for several lost weeks while students were getting materials together and organizing their binders, I chose to present them with a notebook designed along the lines of Fowle's model: a personal dictionary for collecting word data in the front, and a back section for making connections between words, via word maps, word family work, and others. Most of our work centered around the front section, and focal students expressed frustration with it from the first.

In our mid-semester interview, Daniela indicated that she found the school vocabulary notebook (SVNB) frustrating. She complained about the space, saying, “It’s make me sometimes confused. For example, some words, the meanings are really long, and then I am not able to, put it in the space. It gonna give me trouble, because I’m really organized. I like put everything in the place how it is, and then if I’m going over it, it’s so sloppy for me and it won’t make me feel good.”

Daniela was the only focal group student who had not always kept a vocabulary notebook, but she did not like the one that I provided due to space limitations, so she made her own. Her personal vocabulary notebook (PVNB) had no imposed structure at all. She used a spiral notebook, where she had as much space to record whatever she chose. In some cases, she recorded just definitional information from her reading textbook, in others she copied out of the dictionary, recording part of speech and word family members, as well as synonyms and antonyms, but no collocations. Daniela’s PVNB was a part of her process, but just a part. She liked the idea of a word data collection spot, but she only wanted to record what she could work with, and the data collection was just the first step, before she engaged her boyfriend in talk about the words.

Jack also complained, in his mid-semester interview, about space constraints, saying “this structure in here, they have a lot of box in here,” and “I don’t like the structure because too much box. Look like it should be my sentence should be like that because you have more space for definition and another information.” The box for sentence writing was much smaller than the box for collecting other information; yet,

because using the new word correctly in a sentence was the most important and difficult step for Jack, the size discrepancy seemed misleading.

In addition, Jack had a PVNB that he had been keeping since arriving in this country as a junior in high school. His PVNB was a small, pocket-sized notebook, and the information that he collected was minimal: “It’s like a vocabulary notebook, but it’s easy for me because just one line, one word and one definition, and behind that, a translation Vietnamese. So I just study that.”

Jack said that this was his habit, and he preferred his PVNB to the SVN because it was easier to use. I asked him how he used the SVN, and he candidly admitted, “Just do my homework.” We compared the words he had collected in each, and there was virtually no overlap, with the SVN containing only words from the reading textbook, and the PVNB including words from a variety of sources, including his speaking class and his part-time job.

Like Jack, Veronica told me in her mid-semester interview that she had always kept a “notebook of vocabularies. So, whenever, anything I see I don’t know what it’s mean, I just put it and I find out what it’s mean.” She also complained about space constraints, though, and indicated that it interfered with her retention, because when she “put some other information, I can really understand, it is easy for me, but I don’t have enough space to put all the information that I want to put. Sometimes when I get back in the notebook, I looking for some word, but I only put the meaning, but it’s difficult for me. I have to think twice. What is that word, what does it mean? But if I have more space, I can put my information and then it’s easy for me to understand.” She indicated

that, when the semester was over, she would make her own, but leave one page for each word so she could collect a wide variety of word data as well as experiment with usage.

Mai also had well-established habits when it came to her PVNB. She had always collected important words on a sheet of paper, and translated each into Chinese. If a native speaker would say it for her, she would write down the pronunciation. Because of its portability, she would continue to use this method, but she indicated that the SVNБ was much more conducive to really knowing a word at the same time that it served as a check point for future reference. For example, she noted that, “And when after my test, if I did some mistakes in my test, I will come back to read it again...If they use it in a sentence I really don’t know which one is a very good to put in there.” The sample sentences on the test (mostly fill-in-the-blanks) that she got wrong gave her more information that she could compare to what she already knew about the word. She did the same with the weekly corrective feedback that she received from Anna, examining what she thought she knew about a word in light of new information. In this way, her SVNБ became not only a place to record information about words, but to reexamine a word whenever new data became available to her.

Finally, Hayder intended to continue to maintain both a PVNB and a SVNБ, but they were to serve different purposes. In his mid-semester interview, Hayder mentioned the notion of “outside” words, and drew the distinction between “new words for academic class and new words for outside.” Unlike Jack’s notebooks, Hayder’s two notebooks did have some overlap in the words they contained; many of the words from his reading textbook were in both his PVNB and his SVNБ; if it was a word he had heard before researching it for the SVNБ, he thought it was “good for me, like, new words,

special words for me, write the both, the school notebook and my homework notebook. That is good write two times, maybe later for my mind.” But his PVNB had words like *annoy* and *manager* and *comfortable*, that were not in the SVN. These were words that he was learning outside, and because he heard them repeatedly, they were easier to remember and to use. He liked to write them down, though, because, “some words not hard but maybe I forget the word. I can save it.” And sometimes, he knew a word and then forgot it. When he encountered it again, he wrote it in his PVNB. Hayder also noted putting a different amount of effort into the research that he did for words in each of the notebooks. He did a considerable amount of research on words for the SVN, which he referred to as a “little dictionary,” but wrote down just enough to remember the word for those he entered into the PVNB, including “only definition my language and English.”

The distinction between Hayder’s two notebooks was important to him, and seemed to reflect his burgeoning sense of the disconnect between academic and social language. Since he had only been in the country for eight months at the time that the present study was conducted, he was still very much in need of amassing a basic knowledge of social vocabulary, so his need to focus on the two as separate types of language may have served to simplify his vocabulary growth.

Most of the focal students found a way to modify the SVN in ways that both augmented and complemented the practices that they found helpful in keeping a VNB so as to keep track of new words and collect information about each.

The vocabulary notebook and active and engaged word learning.

Anna and the students had much to say about the vocabulary notebook's contribution to active and engaged word learning. Much of what students said is described above, in their discussion of how they adopted new strategies for word learning, and changed the school vocabulary notebook to better serve their needs, but their additional thoughts, as well as Anna's, are discussed below. Specifically, I address (a) dictionary use; (b) word choice; (c) deep knowledge; (d) deep processing; (e) getting to use; and (f) word consciousness.

Dictionary Use

Although students used online sources (Dictionary.com and Google Translate) and handheld electronic translators to find information about words, they appeared to be entirely unfamiliar with learner dictionaries. We only spent two class periods focusing on the learner dictionary, week two somewhat implicitly, by using them, and week four, more explicitly, by asking them to evaluate the quality of information retrieved from electronic translators versus learner dictionaries, and students were intrigued. In a subsequent class period, Gita articulated her own sense that the dictionary was a critical tool in uncovering meaning. When she was asked to present her work with the word *nondescript*, her sentence about a classmate, "Dae is NOT nondescript," was quite appropriate. She went on to clarify, saying that Dae had her own individual style, and did not look like every one else. Daniela, though, was unclear, and the class talked about plumbers, uniforms, baggy pants, and office attire in their attempts to get at the word's meaning. At one point in the discussion, when students were trying to determine the limits of *nondescript* (e.g., can you use it with a car? a house? a door on a house?), Gita said, "You can't just use your mind. You have to use a dictionary," nicely articulating

the dictionary's function of providing verifying information to support student intuition about word knowledge, in addition to the wealth of new information that can be found there.

Mai, along with two other students, mentioned the dictionary in her post-semester reflection that students were asked to write, saying, "Before, when I found new words, only way I can do was check my Chinese dictionary. I only knew the mean in Chinese, didn't know how to use. Sometimes I wound find wrong meaning and made mistakes."

Yvonne, who had been pleased early on when she found that settlement had a legal meaning in addition to the one that she already knew, said that she "could use the dictionary and stopped using the translator. The dictionary gives examples through sentences, and I could see whether or not the word has different kinds of meanings."

Patty wrote, "In the past, when I didn't know the meaning of a word, I used to only use a translator, but during this class, I learned that it is very important using a dictionary, specially one for English learners since it offers more information about the word that those used by Native speakers." Although many of the students said that they used English dictionaries at the beginning of the semester, it seems that those quoted above developed more familiarity with the information provided within them, as well as an ease of use through extended practice with dictionaries.

In our discussion after the third week of the intervention Anna described the dictionary as key, "because they can't just magically come up with the definition," and then asked that I create an activity that would give them more exposure to learner dictionaries. She herself was a convert to the use of learner dictionaries, and found an

online source, the Merriam Webster Learner's Dictionary, that she later shared with students in class.

Word Choice

After the word choice discussion, students became more thoughtful in the words they chose to investigate, and Anna was pleased to note that they were choosing vocabulary words from their textbooks, as well as words from the AWL, and after assigning words for two weeks, she let them choose their own thereafter. In addition, we both thought that the questions that came out of the discussion of word choice—one about the nature of the disconnect between academic and social language, and another about the construction of the AWL (Coxhead, 1998)—indicated a level of interest that went above and beyond the practicalities of word learning, and further encouraged our movement into making theory explicit and then demonstrating it in practice.

Hayder specifically referenced the word choice discussion when he told me during the mid-semester interview that he had begun choosing a few words from the AWL to add to his notebook each week, noting that, “I can use them in my college and university.”

Deep Knowledge

Developing an awareness of word complexity requires deep knowledge of words and using the vocabulary notebook to teach deep knowledge seemed to frustrate some students, even as it motivated others. Once students began focusing on words and their complexity, they could no longer shut out the complicated bits of data needed to know a word.

Daniela struggled throughout the semester with some of the word data that I asked students to collect, particularly part of speech and collocation data. She assured me, though, that she would embrace them eventually, telling me in her mid-semester interview, “Prepositions, preposition. I must needs to dance with them. I must get a challenge because I know I got a problem with it.” She noted that when she was challenged, she felt compelled to prove herself, so even though parts of speech and collocations frustrated her, she had to get past it. At the same time, she indicated that her process of gathering knowledge about words was more efficient, because she knew what she needed to know about words. Thus, she asked more questions of her boyfriend and knew better what to look for in the dictionary when she did word research herself. Even if she could not understand in her conversations with her boyfriend, “I will keep the word in my mind and find out, I mean, what they talking about or how many, you know, how many meanings the word have, and then actually I going to my learn dictionary and use Google in there and find out what is going on.”

Veronica believed that the notebook, because it forced her to “learn how to use [words] in the different situation” pushed her to learn more words, and more about each, so that she *could* use them how she liked. Mai, whose vocabulary notebook was always nicely completed each week, said that she took her notebook seriously because she had come to realize how much work learning words is. She had always collected information about words that she was studying for tests, but it only included minimal information (a translation and sometimes the pronunciation) about the words she was working on. She continued to keep that sheet, because it was portable and easy to store in her purse, and thus convenient to pull out any time she had a chance to study. Like Veronica, though,

because Mai was learning the value of collecting extensive information about words, she believed that the vocabulary notebook kept her energized for the hard work of learning new words and how to use them.

None of the focal students seemed lacking in motivation to begin with, but as a structure for exploring the extensive information that actually *knowing a word* entails, the vocabulary notebook seemed to focus that motivation, at the same time that it created the understanding that the task was more complex than expected.

Deep Processing

We taught deep processing through word maps. These activities so engaged the students, that Anna was pleased when we sat down to discuss the intervention after class in week eight. She said then that she believed, “the activity we did is really beneficial because they are forced to put the word into a context, and then have to justify why they connected the word, and they are having to use the word; for example, a network of friends is a network of people that you communicate with.” Later, in our mid-semester interview, Anna characterized the notebook and the activities around it as “a basis for class discussion” and noted that, “They’re still learning the definitions of these vocab words. And I think that they’re more willing to have discussions, kind of work through their, maybe their misconceptions about what the word means. So, I think I’ve seen a great growth in their discussion ability about words.” Given the subtle nuances that words so often manifest, this talk about words in the interest of negotiating shades of meaning seemed a necessary skill for students to practice and further develop. In addition, since several students reported relying on native speakers for confirmation

about word information and use, this ability and willingness to talk about words would stand them in good stead in future vocabulary learning.

Getting to Use

We realized early on in the intervention that students could not *use* the words they were learning so much about, so the biggest tweak at the lesson planning level involved teaching students how to notice and analyze context in which words occurred, and to mine context for usage tips regarding semantics, syntax, morphology, and pragmatics.

Students reported finding the contextual analysis activities difficult, but useful. Dae appeared to be referring to parts of speech when she said it was helpful to look at context because “we have to think about where it is in the sentence.” Gita agreed, saying that “when we learn the new word, we have to research to find out how to put them together and how we using them. We are, like, making our knowledge greater to use it, how to make it work.”

Anna found the work with contextual analysis to be especially engaging. Students had reported struggling to use new words from the beginning of the intervention, and when we got to the sentence writing activities, she described the students as having “the tools to go, ‘It’s a vocab issue.’ And try to work that out.” She described the conversations that students engaged in with each other and us as “useful and helpful when paired with the sentence analysis.” Anna thought that the activities around getting to use had engaged students within in the classroom, as well as provided them tools for future encounters with new words.

Word Consciousness

Although we did not teach a lesson on word consciousness, it is not surprising that our intense focus on vocabulary seemed to promote its development in focal students. For example, Daniela reported that the vocabulary work throughout the semester had made her more conscious about words in her aural environment, and more tenacious in pursuit of those words, either by asking her boyfriend or going to the dictionary. She also noted that she was noticing words she had worked on in her notebook in her environment, particularly on CNN, a program that she watched frequently with her boyfriend. She reported telling him, “I say, look. Listen. It was there before, but I didn’t hear it.”

Hayder was also able to talk about becoming more aware of words because of the focus on them in his reading class. In describing his increased attention to words, he described an interaction at work, in which a coworker used a “new word, there’s a new word like *gross*, because, like, one month ago, I don’t know about the *gross*...I asked him, ‘What’s it mean?’ Like this, I know some word is new for me.” He also described trying to remember to go home after work and use the computer to do further research on words encountered elsewhere. Because of this, sometimes words that he thought he understood became confusing again, when the new information gained did not fit with the previous. *Gross*, Hayder came to realize after looking it up on the computer, was a considerably more complex word than he had realized.

Mai also found that the vocabulary notebook made her pay more attention to words, primarily because *knowing a word* was so much more complicated than she had realized. With reference to word families, she said, “I can guess little better more. And even if the adjective or the, like, the nouns or verb, even when I don’t know the means,

but if they have the sentence, I can guess it's needed to noun or the...verbs," to explain that she now stopped to examine words she did not know in her reading, whereas before she had generally skipped them.

In sum, these focal students indicated that the intense focus on vocabulary in the reading class encouraged more attention on English in general, and vocabulary words in particular. Further, data suggests that they developed word consciousness at the same time as that they learned strategies for probing semantic and other facets of word usage. Although word consciousness is part of good vocabulary instruction, it may not require explicit teaching. That is, word conscious may, in some situations, develop naturally through an intense focus on, and discussions related to, vocabulary.

The Vocabulary Notebook and Vocabulary Gains

My final research question is: How does the use of a vocabulary notebook affect vocabulary gains in learners? To address this, I conducted a paired-samples *t* test to compare student vocabulary levels before and after the intervention based on the Vocabulary Levels Test scores. While students scored higher on the posttest ($M = 3.37$, $SE = .53$) than on the pretest ($M = 2.50$, $SE = .32$), these differences were not statistically significant, $t(7) = -1.83$; $p = .11$, $p > .05$; $r = .57$, though they approached clinical significance, $t(7) = -1.83$; $p = .11$, $p \leq .10$; $r = .57$. This is possibly a result of such a small sample size ($N = 8$), but, given the direction the intervention took, the Vocabulary Levels Tests was probably not a useful test to measure the effects of the intervention. That is, rather than teaching students to use the vocabulary notebook so that they could learn a larger number of words independently, the intervention focused more on helping students understand the difference between social and academic words, the importance of

and how to choose academic words to learn, and the complexity of word meaning and what it takes to know a word.

In the following chapter, I discuss these results and the conclusions they point to, as well as implications of the research for students and practitioners in other contexts. Finally, I present limitations of the research, as well as directions for future research.

Chapter V

Discussion

Vocabulary knowledge, both breadth and depth (Qian, 2000) is a significant predictor of reading comprehension (Blachowicz et al., 2006), and as such, is critical to success in navigating written text. In addition, the language of academic written text is significantly more complex than that of spoken language (Biber et al., 2002). ELLs hoping to successfully navigate academic text in a community college setting are likely at a disadvantage relative to their native speaking peers with respect to vocabulary knowledge.

ELLs need explicit classroom instruction in target words, with a focus on working with words at multiple knowledge levels (definitional, contextual, and generative; Stahl & Fairbanks, 1986), so that they can gain enough word knowledge to be able to use the words correctly. This instruction should include enough exposures to the target word to ensure retention (Nation, 2001), and it needs to encompass the qualities that define good L1 vocabulary instruction, including development of word consciousness (Graves, 2006) and active learner engagement with words (Blachowicz et al., 2006).

This explicit classroom instruction is not enough, however; ELLs need too many words to be able to learn them all through instruction, and thus must become independent vocabulary learners themselves. A variety of independent vocabulary strategies will stand ELLs in good stead, including the abilities to (a) use learner dictionaries (Zimmerman, 2009); (b) unpack word meaning using morphemic analysis (Baumann et al., 2005); (c) infer word meaning via context clues (Folse, 2004; Nation, 2001); and (d)

collect word data in a vocabulary notebook (Folse, 2004; Fowle, 2002; McCrostie, 2007; Schmitt & Schmitt, 1995; Walters & Bozkurt, 2009).

The present study sought to implement a vocabulary notebook strategy in a community college ESL class in an effort to learn how effective it might be with adult learners, and what they might take away from the semester-long intervention. This chapter discusses the findings from the intervention in relation to established research, and considers the implications for classroom practice. Finally, this chapter discusses limitations of the research and suggests directions for future research.

Learner and Teacher Beliefs Regarding Vocabulary

In this section, I discuss learners' beliefs based on five main categories: status, social vocabulary, academic vocabulary, adult responsibilities, and established habits of learning. Next, I discuss the teacher's beliefs about vocabulary and instruction.

Learner Beliefs

Students were clear from the start regarding the importance of vocabulary to language learning, on at least two accounts. First, students equated vocabulary with status, both within and outside of the classroom. In addition, they demonstrated an intense interest in social vocabulary, and thought of academic vocabulary primarily with respect to school tests in reading class, and school tasks, like writing essays.

In connecting vocabulary to status, these learners evinced a fair amount of social distance from the target culture (Schumann, 1976). Some students seemed aware of the power difference between cultures when they noted their desire to improve their English, their vocabulary in particular, so as to be on par with native speakers. Veronica, in particular, living with sisters who speak English natively, told how her sisters teased her

about her poor English, and she recounted lashing out at them at one point in defense of her English and her attempts to improve it.

At the same time, since all of the focal group learners intend to make their lives here, they have an intense need to invest in the target culture (Schumann, 1976), which may very well offset at least partially the disconnect they may feel from their adopted culture.

Regarding language type, learners' interest in social as opposed to academic language was apparent from the first. Focal students, in the baseline focus group interview, reported mostly social contexts when explaining where they found words they were interested in, and identified social settings as the places where they most needed vocabulary. Although this intense focus on the language of daily life surprised Anna and me somewhat, it is not unexpected given the research on SLA in connection to both learner motivation (Dornyei, 1990; Gardner, 1988) and status as non-traditional students with adult responsibilities (Bernat, 2004; Teranishi et al, 2011), as well as Cumming's distinction between basic interpersonal communication skills (BICS) and cognitive academic language proficiency skills (CALPS, Cummings, 2003).

Given the students' intent to make lives for themselves and their families in this country, these learners certainly had both the integrative (Gardner, 1988) and instrumental (Dornyei, 1990) motivation to learn. Students expressed motivation to improve English for purposes of achieving effortless navigation of daily life; they wanted to be able to raise children, function at work, and express needs in the places in which they operated. At the same time, these students all had ambitions for improving their economic lot in life, so learning English as a path to improved job prospects was central.

For example, Daniela, unemployed at the time of the intervention, intended to improve her chances of employment, first via a certification program, at which point she hoped to continue to pursue an Associate's and Bachelor's degrees as she worked part-time.

As adults, these students had a clear sense of their goals and the English they needed to achieve them (Bernat, 2004). One student was very vocal about what she needed in vocabulary learning—a great deal of talk about the words—as well as what she would not do—consider word families and collocations. Although Daniela did eventually concede that word families and collocations were important, she only came to that conclusion when she was ready, and only when her unwillingness to countenance their importance interfered with her using words correctly.

In addition, Jack, who participated eagerly early in the intervention, had little to say towards the end of the study. Although he was clearly interested in vocabulary study, the intervention did not seem to offer him a path to vocabulary learning, and despite the fact that he completed his notebook every week for homework credit, he always favored his personal vocabulary notebook in terms of practical use. A Generation 1.5 student (Blumenthal, 2002; Curry, 2004; Forrest, 2006), Jack had attended a local high school for two years before enrolling at the community college, and already had a good sense of what he needed to do to be successful academically. When the intervention coincided with his ideas about academic success, such as when we worked with getting to word use, Jack was very much engaged, but his own learning habits took precedence over the work of the intervention when they did not coincide.

In short, both students found their own ways of being in the intervention, and push back on Anna's or my part would not likely have changed this. As Bernat (2004)

suggests, challenging their established patterns of learning or feelings about what language they need and how they need to learn it, would have been alienating to these students, and thus not helpful to their learning.

In addition, students were clear about the competing priorities that shaped their lives as non-traditional students (Bernat, 2004; Teranishi et al., 2011). For example, students spoke of wishing to do more with the vocabulary notebook, but generally followed up by recounting the realities of full or part-time jobs with no benefits. They also spoke of getting up early to study for tests, before their other responsibilities took priority. In short, students recognize that their slow progress in learning English was due, in part, to their inability to focus only on school, while children and students with fewer responsibilities were learning English more quickly. Again, as these adult responsibilities reflect learner attempts to integrate into the language and culture of their adopted country, they likely served to boost vocabulary acquisition. At the same time, though, these responsibilities circumscribed the words students chose to research, and constrained their ability to do as much with that research as they might have liked.

Finally, Cummings' (2003) distinction between the language needed for interpersonal communication (BICs) versus that needed to fulfill academic tasks (CALPs), as well as Blachowicz and colleagues' (2006) recommendation that L2 vocabulary instruction include Tier 1 words (Beck, McKeown, & Kukan, 2002), would seem to predict student focus on social language. This is especially true for Hayder, who had only been in the country for eight months at the time of the intervention. His interest in the word *gross*, which came up at work and caused a considerable amount of consternation as he tried to puzzle through its multiple meanings, clearly reflects this

need for the language of daily life. The other focal students had all been in the country longer than Hayder, ranging from three to eight years, but because they lead complex and busy lives, the language needed for *Basic* Interpersonal Communication might not be enough for the more advanced and complex interpersonal interactions they were attempting to navigate; they were still in need of social language appropriate to those interactions.

In the following section, I discuss Anna's beliefs about the importance of vocabulary for second language learners.

Teacher Beliefs

As a second language learner of Italian, Anna recognized the importance of L2 vocabulary. At the same time, she thought that some students were *too* focused on vocabulary learning, even at the expense of other language skills, and often went about learning vocabulary in ways that were not helpful. For example, Anna had seen students memorizing translations of random lists of words that were not connected in any meaningful way, and suspected that this practice was not conducive to student progress in SLA, despite any sense of accomplishment that it might give them. Consequently, students' learning strategies that Anna sees as ineffective tempered her perception of the importance of vocabulary to SLA. However, her characterization of vocabulary as "important, but not the most important," is interesting in its contrast to student perception of the primacy of vocabulary in their L2, and is significant in that her belief may very well reflect the long tradition in SLA of focusing on grammar, with the assumption that vocabulary knowledge would come incidentally (Carter & McCarthy, 1982; Folse, 2004).

These findings are important because they demonstrate that students do want to learn vocabulary and they take vocabulary learning seriously. However, adult responsibilities and/or habits of learning may limit how students participate in class or to the degree with which they complete assignments. It is important, therefore, for instructors to realize students desire to learn vocabulary and to provide the necessary support. However, that support may only occur if instructors first explore their own beliefs about vocabulary, particularly given emphasis on grammar that is common in SLA, and consciously plan for systematic instruction of vocabulary.

Learning and Teaching Activities and Strategies in Place

Students had several strategies in place for learning vocabulary. Although this would seem to be beneficial to students, as findings revealed, these strategies may not necessarily provide the support they need. That is, while strategies may help students to glean some information about a word or to attain short-term goals (e.g., passing grade on a test), these strategies do not lend themselves to developing a deep understanding of words or how to use these words to communicate effectively, nor do they support long-term retention.

Learner Strategies

Students reported a number of strategies in place in the baseline survey and focus group interview, including the use of electronic translators and English dictionaries, asking proficient speakers about words and their meanings, and keeping a notebook or word cards. Further, I observed two additional strategies that students relied on, that of connecting new English words to those they already knew in English, and the use of cognates.

Electronic translators were common and almost every student had one or used Google Translate to translate words. We encountered two problems over the semester relative to translators, both illustrative of the weaknesses inherent in the devices. First, when a student looked up the word, the translators provided only one meaning for the word and not necessarily the correct one. In addition, students indicated that translators did not translate phrases, which they often needed. Despite these glitches, students continued to use translators, which is a valuable first step in gaining at least surface knowledge of a word (Schmitt & Schmitt, 1995).

Students also reported using English dictionaries, though not specifically English *learner* dictionaries. As with translators, dictionaries are excellent tools, but they are difficult to use (Zimmerman, 2009), especially for novice users. Unlike translators, though, dictionaries often provided too many meanings and it can be difficult for students to determine which definition best fit the word.

All but one focal student indicated that they kept a notebook or notecards to record and study vocabulary prior to the intervention. Although their personal vocabulary notebooks included different types of information about words, for the most part it was minimal, including at most a translation, some pronunciation data and/or an example of how a word might be used. The information they were collecting, while potentially useful in building receptive word knowledge and as a study tool, was not enough to build the deep knowledge that would allow learners to actually use the words productively (Nation, 2001; Stahl & Fairbanks, 1986; Zimmerman, 2009).

Another strategy that learners commonly reported was the use of native, or at least more proficient, speakers to gather information about words. Because this requires

contextualizing the new word with English that is already in place in the learner's lexicon, it builds a connection of new to known, effectively allowing the new word to take root in the lexicon (Schmitt & Schmitt, 1995).

In addition, students demonstrated strategy use that they had not reported. The first, connecting new to known (Schmitt & Schmitt, 1995), was actually quite common. The second was one student's awareness of Spanish-English cognates, both false and solid, which is essentially another way of connecting the new to known. This allowed the student to access rare words in English that her classmates, not L1 Romance language users, were not privy to (Blachowicz et al., 2006; Dressler & Kamil, 2006). However, because the student did not report cognate use as a strategy, and only talked of cognates in a vague way, characterizing them as "familiar from my language, but I know they are not the same," it is not clear if she used cognates strategically.

These findings are important because they show that students do employ a number of strategies, knowingly or not. However, what was also apparent is that the students did not have a comprehensive approach in place for vocabulary learning. Further, because the students did not have a systematic means of learning vocabulary, they developed a miscellaneous array of strategies, some of which, like memorizing lists of words and the perhaps incomplete understanding of cognates, may be less than optimal. Thus, this study points to the need to provide students a coherent set of vocabulary learning strategies throughout their program to help them to develop effective habits of vocabulary learning.

Teacher Strategies

Anna believed in providing context in which to embed new words, and talked about using visuals to establish and situate meaning, familiar situations in which related words might be investigated, and authentic experiences, like playing a game, in which new words could be practiced. All of these practices support deep processing (Stahl & Fairbanks, 1986), a necessary investigation of word meaning if generative use (Nation, 2001; Stahl & Fairbanks, 1986) is to eventually occur.

In addition, although Anna had expressed concern at the beginning of the intervention that she did not have enough knowledge of or expertise in vocabulary teaching, she seemed to have an intuitive sense that deep processing was necessary, as well as how to foster it in students. She asked questions that encouraged students to make connections between words and the contexts in which they might occur; she encouraged them to apply their word knowledge to new contexts; she prompted them to explore morphemes in words for hints to meanings; and she prompted them to probe the limitations of word meanings, as well as how limitations might shift, depending on the context. All of these are effective ways to foster deep processing (Nation, 2001; Stahl & Fairbanks, 1986), and she did them with no prompting from me. Perhaps her own experience of learning a second language had developed this sense in her, that word meaning must be deeply considered in order to move toward generative use. In addition, as noted in Chapter IV, Anna had indicated an interest in the notebook at our baseline interview, noting that she thought it would, “push them in a direction to prompt...discussion and a sort of dissection of words,” in ways that she was not used to, and indicated that she saw the focus as “building connections between words and ideas.” In fact, this critical look at the notebook may have also pushed her in the direction of

fostering this building of connections with her students, in ways that she may not have done previously.

Irrespective of the reason that Anna prompted deep processing without having been prepared to do so or perhaps even aware of doing it, the critical importance of deep processing to vocabulary learning should not be left to chance; this issue will be discussed further in the Implications section below.

Effective and Efficient Implementation of a Vocabulary Notebook

In order to help student to understand the facets of word knowledge, over the course of the intervention, we discussed: parts of speech, morphemic analysis, word families, translation, definitions, collocations, pronunciation, connotation, synonyms and antonyms, and grammatical constraints. In delving in to all of the facets of word knowledge, we hoped to establish the idea that words and word meanings are complex and shifting (Nation, 2001; Zimmerman, 2009), that deep knowledge of words is necessary to negotiate that complexity (Nation, 2001; Qian, 2000; Stahl & Fairbanks, 1986; Zimmerman, 2009), and that use of words would require deep processing of each (Nation, 2001; Stahl & Fairbanks, 1986). In order to demonstrate these ideas for learners, we devised activities each week that promoted active engagement with words (Blachowicz et al., 2006; Mezynsky, 1983) designed to unpack word complexity.

Dictionary Use

We introduced and practiced dictionary use to help students to compare and contrast learner dictionaries with electronic translators. Students explored the variety of information that dictionaries, especially learner dictionaries, provide, as well as how to access and make meaning of all of the information (Zimmerman, 2009). It also fostered a

great deal of talk among students and with Anna and me, about words, word meanings, parts of speech and word family knowledge. This active engagement with words and dictionaries (Blachowicz et al., 2006; Mezynski, 1983) clarified for students the need for deep word knowledge beyond the basic L1 translation (Nation, 2001; Qian, 2000; Stahl & Fairbanks, 1986; Zimmerman, 2009). It also points to the need in vocabulary instruction to go beyond simply telling students to look up words, requiring practice so as to understand how to use dictionaries and, and examining the strength and weakness of different types of dictionaries.

Deep Knowledge

In conjunction with dictionary use activities, we exposed students to the variety of information that there is to know about words if deep word knowledge and correct word usage is a goal (Nation, 2001; Zimmerman, 2009). We focused primarily on word families and collocations, but also touched on synonyms and antonyms and domain constraints.

Deep Processing

Deep word knowledge also requires deep processing of words (Nation, 2001; Stahl & Fairbanks, 1986) and many of the weekly activities promoted deep processing. Further, Anna prompted deep processing by encouraging a great deal of talk about the words, and students began to understand that words are nuanced and multi-faceted. One activity involved weekly word presentations, such as the long discussions about *contrast* and *nondescript* detailed in Chapter IV, in which students frequently had rich conversations about, for example, why a word worked in one context but not in others. During these presentations, learners asked many questions as they tried to puzzle through

all of the layers of word knowledge in order to really *get at* the word so as to be able to use it. Likewise, word mapping supported deep processing. For this activity, students identified and justified connections between the words, which led to focused and rich discussions as students analyzed words both semantically and grammatically to make connections and then explain them. Consequently, like dictionary use, vocabulary instruction should include opportunities for deep processing. However, just asking students to present words to the class or to complete a word map is not enough. Deep processing occurs through the discussion of vocabulary that helps students to understand the many facets of words and their meanings.

Researcher and Teacher Modifications to the Intervention

Anna and I began identifying potential problems with the intervention almost from the first. Initially these were very local, at the level of lesson planning, identifying instructional topics that required additional instruction, as well as unanticipated topics we needed to teach, and then designing appropriate activities to be able to do so. These local modifications are discussed below. The two more global modifications are discussed in the following section.

Dictionary use. Despite the difficulty of L2 dictionary use (Zimmerman, 2009), we planned to review dictionary skills by having student use the dictionaries for class activities. Anna guided dictionary use the second week of the intervention, in a whole group activity in which she and students used the dictionaries to find word data to add to their vocabulary notebooks. The next week, students worked independently with the dictionaries as they researched words and added them to their vocabulary notebooks. However, over the course of these two weeks it became obvious that students had very

little experience with using dictionaries, particularly learner dictionaries, so we extended dictionary work by adding the Dictionary Discussion activity. This activity provided learners a chance to compare the word data available from electronic translators to that available from learner dictionaries.

Word choice. Anna and I had both assumed that students would naturally gravitate toward academic words as those they wanted to research, but found instead that they focused almost entirely on social language. It is not clear whether this was an indication of students as poor word choosers (McCrostie, 2007), or simply a byproduct of their need to feel successful and at ease while navigating through their days (Bernat, 2004; Cummings 2003; Gardner, 1988). Although Anna hinted several times at the importance of choosing “good, meaty words” for research, we needed to be more explicit about how we defined good words for investigation if we wanted students to focus on more academic words.

The word choice discussion allowed us to introduce students to the very real disconnect between social and academic language, and it helped us to understand that students framed *academic* language only as it related to school tests and school tasks. In short, students were not aware of the qualitative differences in vocabulary (Corson, 1997), grammar (Gee, 2005), and overall discourse structures (Shanahan & Shanahan, 2008) that differ significantly from the language of social discourse (Cummins, 2003). Despite including the 2000 Most Frequent Words in English Language Texts (Pearson-Longman, 2007) and the Academic Word List (Coxhead, 1998) in their vocabulary notebooks, students did not seem aware that they were different from the words they chose until our discussion, which then allowed students to compare the words found on

each of the lists. In addition, they asked why academic vocabulary was so complex (the source of the words, from either Anglo-Saxon or Greek and Latin roots) and how the AWL was created. Their curiosity, as well as their almost immediate shift to choosing more academic words for their research, confirmed my suspicion that they had no real concept of the disconnect between the language of every day and the language of academic study prior to our discussion. Thus, when helping students to learn vocabulary, particularly academic vocabulary that will allow them to continue their formal education, it is important to explicitly teach them the difference between, as well of the value of, social and academic language.

Deep knowledge. Encountering multiple layers of word knowledge (Nation, 2001; Zimmerman, 2009), particularly parts of speech and word families, as well as collocations, was part of the original intervention. We made the idea of deep knowledge more explicit, though, in keeping with the shift from strategy to vehicle. We also extended our teaching of both word families and collocations because students were struggling with them conceptually, as well as putting them into use. Deep knowledge about words (e.g., how they collocate), as well as even *meta*-knowledge about words (e.g., word form is dictated by its function within the sentence) are critical to correct usage, and students seemed largely unaware of these phenomenon. Time constraints limited our ability to focus on deep knowledge explicitly for more than two weeks, but Anna and I both referenced the concept regularly for the remainder of the intervention, prompting students to think about word families and notice collocations.

Deep processing. Deep processing (Stahl & Fairbanks, 1988; Nation, 2001) was also part of the original intervention, but because it fostered unexpectedly rich talk about

the words, and because we realized that learners needed to explore unpacking complex words and word meanings through talk, we extended it an additional week. Students gained skill in talking about words, a skill that they can use as independent word learners. Additionally the deep processing activities further reinforced student understanding of deep word knowledge, as it forced students to examine their guesses about words in light of their semantic, syntactic, and morphological properties.

Getting to use. Students struggled to write sentences with new words for their weekly vocabulary notebook assignment. It was difficult for them to synthesize a large amount of word data about and then write a sentence that took into consideration the subtleties inherent in the words, so many of their first tries were unsuccessful. Despite deep knowledge and deep processing of that knowledge, *use* was still elusive, so in the tenth week of the intervention, we shifted from collecting and processing word data to synthesizing it so that student could use words to communicate effectively. Students were prompted to ask questions aimed at uncovering semantic nuance and domain for words under study, in addition to exploring context for keys to grammatical constraints, collocation use, proper register, and word family data that might inform correct usage (Zimmerman, 2009). These activities went well, and gave students insight into how words work, as well as the analysis that is part of getting to use, but they were not enough to get students to ease or accuracy of use. This finding is supported in the literature, which suggests that productive use, requiring both greater word knowledge and motivation to use new words, develops more slowly than receptive use (Nation, 2001).

Students did, however, begin to understand the nature of the difficulty inherent in using words correctly, as well as strategies for working through that difficulty. Because

they had a tendency to get frustrated with themselves, often blaming their lack of progress on personal laziness or even a lack of intelligence, I hope this work helped student to recognize that using new vocabulary, especially low-frequency, academic words, is an extremely active and arduous process, and failures along the way are an expected part of that process. Using vocabulary expressively, both orally and in written form, is important and challenging, and requires a great deal of practice, with feedback from native speakers likely necessary as well.

In the next section, I discuss the two global modifications that Anna and I made to the intervention.

Vocabulary notebooks: Strategy to vehicle. The goal of teaching students to keep a vocabulary notebook as a place to collect word data, as well as a convenient study tool, so as to become independent word learners began to shift, as we completed the fourth week of the intervention. At this point, Anna and I had come to fully appreciate students' focus on social language and became more aware that the social-academic disconnect did not exist for them, but if we wanted them to shift their attention to academic vocabulary, we needed to make it real. Accordingly, we talked to them about the nature of academic versus social language, and worked on a strategy for choosing good words to spend time doing their word research.

This was a significant shift in the intervention. It marked the vocabulary notebook not as the end goal, but rather a tool or vehicle for talking about principles of good vocabulary learning, and developing strategies for carrying out these principles. This goal remained primary throughout the remainder of the intervention.

The shift in vocabulary notebook from strategy to vehicle can be attributed to the following three reasons. First, it was clear from the beginning that learners needed an enormous amount of input from Anna and me in all facets of keeping a vocabulary notebook and learning words (McCrostie, 2007; Schmitt & Schmitt, 1995; Walters & Bozkurt, 2009). Second, students seemed to have very few comprehensive and coherent strategies in place for learning vocabulary, and needed to understand what words to invest in as well as *how* to learn vocabulary (Folse, 2004; Fowle, 2002). Finally, Walters and Bozkurt's (2009) research, indicating that students who liked the vocabulary notebook would not continue the hard work of maintaining one if it did not count for a grade, helped me understand that for students who would only keep a notebook with minimal word data, a more pragmatic goal was teaching them principles for good vocabulary learning and strategies for applying those principles.

This decision, to focus on talking to students about theory and develop strategies commensurate with that theory, led naturally to the next global modification, that of my taking over the teaching for the remainder of the intervention.

Who is the teacher? Anna and I had gone into the intervention with the expectation that I would create activities for classroom use and she would teach them. These activities would embody theory guiding effective vocabulary learning. But because the teaching of dictionary use, depth of word knowledge, and deep processing of words would be taught implicitly, via participation in activities designed to complement and extend use of the vocabulary notebooks, she did not need to have a deep understanding of the theory that generated the activities.

From the start, the fact that I created the lesson plans and activities for Anna to implement seemed problematic, in that she appeared uncomfortable trying to stick to a plan that she had not developed. Also, although Anna said that my presence in the classroom did not make her nervous, she did admit that, because she was trying to do a good job, she felt a bit self-conscious. I did not want to challenge her autonomy this way, but we were at an impasse until we shifted into explicitly teaching principles and strategies of effective vocabulary learning. At this point, Anna felt very much out of her depth and asked that I take over the “theory” part. Initially she continued to orchestrate activities, but eventually, for the sake of continuity and flow, I took over most teacher-fronted portions of the Wednesday afternoon vocabulary sessions.

The researcher as teacher in formative experiments is found in the literature (Ivey & Broaddus, 2007; Jiminez, 1997). For example, Ivey and Broaddus (2007) reported that, when they were in the primary teaching role, they deprived the teacher of opportunities to learn from the intervention; the researchers remained in control of the intervention throughout, working with the most challenging students and guiding development of engaging reading and writing activities in which students would participate. On the other hand, Jiminez (1997) always intended to be the primary instructor in his formative experiment with five Latina/o middle school students, although he first carried out extensive classroom observations so that he was aware of the type of instruction the learners were being exposed to.

Unlike Broaddus & Ivey (2007), I do not worry that I deprived Anna of any chance to learn from the intervention; indeed, she was present in every class, circulating during independent and small group work, answering questions and assisting, as I was,

and she and I met weekly to debrief and plan. Because my presence in her classroom did seem to make her uncomfortable, my taking over the teaching role seemed the right thing to do. This raises the question, though, of whether or not a teacher without some significant professional development would be able to implement this intervention in his or her own classroom, and I will address this question in the Implications section.

Student Modifications

The students also had a stake in the intervention, and they modified the vocabulary notebook strategy to suit their needs and learning habits almost from the first. Much of the modifying students did involved overlaying the practices they already had in place with respect to their personal vocabulary notebooks with the strategies that we were learning in class.

For example, Jack, Hayder, Veronica, and Mai had always kept a vocabulary notebook, but, with the exception of Jack, they each changed the type of information that they were collecting. Hayder continued to collect minimal word data about words that he was hearing at school, work, and other places where the focus was not academic, although he augmented that with information from a wider variety of sources. He began collecting more varied and nuanced information about the words he encountered in his classes and on the AWL. Veronica began collecting more word data as well, because she understood the need for deeper word knowledge in order to use words, as well as the need to be active in pursuit of word knowledge. Mai also developed an understanding of the need for deep word knowledge, and, though she struggled to find the correct definitions sometimes, she found the learner dictionary to be an excellent source for word data.

One student was different, Daniela. Her frustrations with the vocabulary notebook, and all that it asked of her, clearly details how adult students have to bend school to fit their lives. She had never kept a vocabulary notebook, and wrote little in the notebook I provided. However, she immediately began keeping track of words in her own spiral notebook, and used this as the basis for her interaction with her boyfriend about words, a strategy she had already had in place. In her first semester at the community college, Daniela was just settling in to the demands of an academic environment (Teranishi, et al., 2011), but her resistance to the vocabulary notebook I provided her, as well as the free-form design of her own, were clear indications that she wanted to maintain her right to either meet those demands or not (Bernat, 2004). Her boundary setting had such a strong voice, partly because she is the person she is, of course, but I think it is also a reflection of being an adult trying to fit school into an already very complicated life.

In general, students developed an awareness of the complexity of words and learned to collect varied word data (Nation, 2001; Zimmerman, 2009). They found new sources for word data, and gained experience in using these sources (Zimmerman, 2009). They recognized the need for active engagement with words (Blachowicz et al., 2006), and practiced strategies for engaging with words actively, most notably, deep processing activities (Nation, 2001; Stahl & Fairbanks, 1988), such as word mapping and contextual analysis (Nation, 2001; Zimmerman, 2009).

In summary, the modifications that the students, teacher, and researcher made to the vocabulary notebook strategy involved turning the notebook into a forum for teaching the nature of *knowing* words, learning how to collect varied word data, and learning how

to synthesize the data so that new words can be used correctly. We might have covered some of the topics, for example, dictionary use, more thoroughly, had we had more time. Students who felt overwhelmed by the conceptual understanding of word families and collocations might have benefited from more time to work with those concepts as well.

In the pre-semester survey, I asked questions to get at student strategies in place, but these questions were not aligned with the principles and strategies that I know to be effective in vocabulary learning. In retrospect, it is clear that a critical first step in implementing this strategy is to assess the strategic competence that learners have in place in terms of practices associated with solid word learning principles, such as use of learner dictionary, familiarity with types of word knowledge, and analysis of context for clues to use. Since the learners in this instance had very little in place, the vocabulary notebook as a strategy in and of itself was unhelpful; instead, we needed to teach concepts (words are multi-faceted) as well as strategies for accessing (learner dictionaries) and collecting words and word meanings (deep knowledge and deep processing), as well as usage data (contextual analysis). Finally, practice in synthesizing word and usage data allows learners to move into using words correctly.

The Role of the Vocabulary Notebooks in Developing Active and Engaged Word Learners

Key to vocabulary instruction is helping students to become active and engaged word learners. When students talked about how the intervention—the vocabulary notebook—contributed to their development as engaged and active word learners, they may in part, be responding to the amount of time they focused on vocabulary learning, and not specifically to the vocabulary notebook strategy. That is, one day per week was

devoted to vocabulary learning. Having said that, students regularly reported enjoying the activities involving the notebook (Walters & Bozkurt, 2009), and for the most part, engaged wholeheartedly in them. Had we not structured the learning activities in line with good vocabulary learning principles and practices, students may not have found the time as well spent. In addition to time and enjoyment, students identified several factors that helped them develop into active and engage word learners.

What the Learners Said

First, students reported that the vocabulary notebook helped them to be more conscious of words in their environment (Graves, 2006), reporting that they noticed words we had studied in class in other contexts. Further, they were more likely to follow up on words they heard at work and in other places by asking or looking them up.

Second, while exploring semantic and syntactic aspects of words was frustrating at times, it helped students to gain an understanding that words, word meanings, and word usage is complex. Gaining deep word knowledge (Nation, 2001; Zimmerman, 2009) was an arduous first step toward word use, but also freeing for students. That is, they almost seemed relieved to realize that it was not easy to use words, orally or in writing, and it absolved them of the responsibility of getting there quickly. Thus, failure to use a word correctly did not indicate lack of effort or intelligence, but rather, the nature of a complex task.

Third, students indicated that while collecting information about the words served to contextualize them, it was the interactions with classmates, Anna, and me during class activities (Blachowicz et al., 2006) that brought them to life. Thus in addition to collecting words to study, becoming active and engaged learners required students to

discuss puzzling aspects of words, which, in turn, provided deep processing opportunities (Nation, 2001; Stahl & Fairbanks, 1986) that learners need to really *know* words.

The active approach that we used served to help them retain words and this was the fourth factor that students identified that helped them to become active and engaged word learners. That is, as more information was collected, more “memories” were created and, indeed, this increased the number (Nation, 2001) and quality (Blachowicz et al., 2006) of exposures, all of which are critical to retention.

Targeted feedback, the fifth factor, helped students as word learners. That is, using the targeted feedback that Anna provided each week to check what they *thought* they knew, helped students to make sense of semantic and use issues associated with the words they were researching. In conjunction with this, students spoke about regularly tapping into native speaker knowledge at work (McCrostie, 2007; Schmitt & Schmitt, 1995; Walters & Bozkurt, 2009), which may allow them to continue to seek corrective feedback and develop as word learners.

Finally, several students discussed how the intervention helped them to realize the importance of dictionaries and how their comfort with dictionaries increased over time (Zimmerman, 2009). While consulting electronic and online translators was common prior to the intervention, these sources provided students with minimal information about words; learning to use the learner dictionaries helped them to gather the rich information needed to be an effective word learners. By the end of the intervention, students eagerly and mostly comfortably used the learner dictionaries, a resource they will likely continue to need and use as they embark on their academic careers.

What the Teacher Said

Anna also believed that the vocabulary notebooks had a role in developing active and engaged word learners, and focused mostly on two areas. Initially frustrated by the students' word choices, she was impressed by how quickly they began choosing more academic words after we had the word choice discussion and pointed out the word lists at the back of their vocabulary notebooks. Because students framed academic vocabulary only in terms of school tests and tasks, their choice of mostly social words was probably a result of both being poor choosers of words (McCrostie, 2007) and not understanding the nature of the disconnect between social and academic language (Corson, 1997; Cummins, 2003; Gee, 2005; Shanahan & Shanahan, 2008). Anna thought that our explicit discussion of word choice had led them to think about words, and the varying contexts in which words exist, in a far more concrete and comprehensive way.

In addition, Anna felt quite strongly that the deep processing activities, primarily word mapping and contextual analysis, helped students become better at talking about words, at asking the right questions to allow learners to make meaning out of words, make connections between words, and begin to use words correctly in sentences (Blachowicz et al., 2006; Nation, 2001; Stahl & Fairbanks, 1987). Given that academics was the next step for these students, this ability to talk about words would be an asset in that environment, where little beyond content-specific vocabulary would be a focus.

The Vocabulary Notebooks and Learner Vocabulary Gains

As noted, the Vocabulary Levels Test (Schmitt, Schmitt, & Clapham, 2001) used as pre- and post-test was, in retrospect, not an informative test, given the direction that the intervention took. Had the focus stayed on learning a great deal of information about a great many words, the test might have been a more useful instrument, but once we

shifted to the *why* and *how* and *what* of learning a great deal of information about a great many words, the words, as well as the notebook itself, became peripheral to this new goal. A test designed to assess their awareness of the word complexity, as well as the ability to collect useful semantic and syntactic information about words, and then put that information to work using the words, would have given a better idea of the intervention's success, or lack thereof. Instead, the Vocabulary Levels Test, designed to test breadth, did not measure our emphasis on depth.

Surprisingly, the scores of two of the learners dropped from pre- to post-test, in contradiction to Read's (2000) relatively high scalability scores. Although it is impossible to pinpoint the reasons that these two students' scores dropped, it is interesting to note that both students whose scores dropped were focal students. Perhaps their desire to demonstrate that they had learned a great deal caused them to perform less than they were truly capable of. Nevertheless, these results, coupled with the small sample size ($N=8$) render the results largely unhelpful.

The Formative Experiment Framework Revisited

Reinking and Bradley's (2008) framework guiding formative experiments includes six questions (see Chapter III). The first and second questions, related to the pedagogical goal and intervention, were addressed in Chapter III. The fourth question related to modifications was addressed in Chapter IV and previously in this chapter. I now address the third question about factors that enhanced and inhibited the intervention, and the last two questions, which relate to positive and negative consequences as a result of the intervention and how the instructional environment changed as a result of the intervention.

Factors that Enhanced or Inhibited the Intervention

A hallmark of a formative experiment is to identify factors that enhance or inhibit an intervention so that modifications can be made to make it feasible to implement, yet still effective (Reinking & Bradley, 2008). In this section, I identify four factors that inhibited the intervention and two factors that enhanced it.

Factors inhibiting the intervention. Four factors posed challenges for students; though, one is easily modifiable, the other three are a function of the students' lives and therefore not as amenable to modification.

Space and structural limitations. The structure and size of the boxes in the vocabulary notebook were constraining to students. The varying sizes of the boxes seemed to impose a judgment of relative importance regarding word data, and some students disagreed with these implied levels of importance. Further, some students believed the small spaces forced them to be "sloppy" or limited the amount of information they could write down. Simply put, student believed they needed more space to record a word's meaning. Obviously, changing the format of the vocabulary notebook is an easy modification.

Mismatch between researcher assumptions and learner preferences.

Another point of tension was the large and varied information about words students needed to collect in order to learn to use words effectively. I assumed that, because students were so interested in learning vocabulary, they would willingly collect a great deal of word data, in addition to just the translation that they were accustomed to collecting. I did not realize, though, that students would find the types of data, primarily collocations and word families, so conceptually challenging. Although most students

eventually came to recognize the importance of deep word knowledge, including usage constraints, they were more comfortable examining words semantically and struggled moving beyond the first steps of the word learning process.

Real life. The students in the present study were adults and learning English was just one of their many adult responsibilities. Managing school, work, and family life is a delicate balancing act, and completing the vocabulary notebook was a time-consuming process. Thus, time and the tension of balancing multiple life demands in addition to school is a reality of these learners' lives, and is not something that is likely to change. Thus, the vocabulary notebook needs to figure prominently in the allotment of class time, and while that was possible in this particular case, not all instructors may be willing or able to devote so much class time to teaching vocabulary. In fact, Anna mentioned a number of times her concern that she was getting behind with the material in the textbook.

Intense native-speaker involvement. Intense native-speaker input, that is, Anna's and my interaction with students, was instrumental to students' implementation of the vocabulary notebook. This was evident in the lengthy discussions that we had with students to help them to gain deep understanding of words, rather than simple definitions. Students recognized they needed support from a native speaker, when, for example, they talked about the value of Anna's weekly feedback in the notebook and when they sought guidance to use words correctly in sentences.

The above four factors all created challenges among the students, teacher, and researcher. While the first inhibiting factor can be addressed in a variety of ways (e.g., having students use a three-ring binder and build their own vocabulary notebooks),

potential solutions for the other three factors will be explored in the Implications section below.

Factors Enhancing the Intervention

Factors that enhanced the intervention included both student and teacher buy-in and contributed to its implementation.

Student buy-in. Students were open to and enthusiastic about the intervention from the first. Key student factors included motivation, readiness, and willingness to participate in the research project.

Motivation. First, in the baseline survey, all students rated vocabulary as *Very Important* ($N = 14$) to learning and reading in a second language. Further, in the baseline focal group interview, students noted that a good vocabulary was useful both inside and outside of the classroom. Outside of the classroom, a good vocabulary allowed nonnative speakers to appear smart and worthy of being listened to, while inside the classroom, vocabulary allowed learners to function well academically both as readers and writers. None of the students expressed any concern that 20% of their class time had been spent focusing on vocabulary. In fact, the last week I worked with the students, I asked them if that amount of time spent on vocabulary was “too much or ok?” and a number of students responded, “More.”

Part of this motivation may have been fueled by their immigration status and the fact that they were preparing to become legal permanent residents (LPR), or by the fact that some students were already LPRs, and planned to remain in the US for the foreseeable future, thus needing English to function more easily in work and society.

Readiness. In addition to the motivation inherent in needing English for their daily lives, students were in a position to *acquire* rather than *learn* English (Krashen, 1982). That is, as noted, these community college students, immigrants and LPRs, were different from the international students that Anna had worked with at the university, because their need to be out in the “real world” made a difference in their English language exposure. For example, she said, “They have a lot of context for placing these words, for relating to the words. If they hear the word ‘stigma’ they may not be able to give a definition, but they can tell you about a time they heard it,”

Along with readiness as a factor of linguistic and cultural immersion, these learners were in a Level 4 class, and had sufficient amount of English to engage in explicit conversations about the theory underlying vocabulary acquisition, albeit in basic terms, as well as the practices that would allow them to put that theory into their strategic repertoire. They understood, for example, the idea that depth of knowledge and contextual analysis were necessary for ease of use, and they knew the steps to take to increase the depth and analyze context for words that they wanted to add to their productive lexicon.

Willingness. From the first week of the intervention, when I explained the research project and solicited student participation, students took this project seriously and they seemed willing to participate for two reasons. First, I am a researcher from a university, which in itself lends a bit of weight to my presence in their classroom; but it also allowed them to participate in something bigger than themselves. Second, they were willing to participate because vocabulary really mattered to these students, and becoming independent vocabulary learners meshed well with students’ goals for themselves.

Further, they appreciated the amount of time that we spent focusing on words and word learning.

Teacher buy-in. Although Anna did have three semesters experience teaching at the university and she had worked with the basic language level students, she was a new teacher to the community college program and inexperienced with Level 4 students. Thus, it was not surprising when Anna expressed some reservation about her level of expertise, particularly with respect to the high level students she would be working with. She expressed both pleasure and caution about using the vocabulary notebooks in class, noting that,

I truly am excited to have your input and to try out your methods, because, because it's a new topic for me anyway, really. So I'm excited to kind of have, to try out this more specifically directed, I guess, on-going activity to practice and learn vocabulary.

In addition, Anna viewed this project as a learning opportunity for herself. Since completing the present study, I have been in contact with Anna and she continues to tell me how much she learned from working with the vocabulary notebooks with her students.

Anna's relative inexperience with the Level 4 Reading and Vocabulary class, as well as her eagerness to build her own teaching repertoire, led her to be open to my presence in her classroom and implementing the intervention. In addition to the time commitment, she was comfortable with the collaborative nature of the study and provided suggestions for how we might put the theory into practice. In sum, Anna was willing to

participate in this study because she believed it would benefit her students and inform her own instructional practices.

Positive and Negative Outcomes of the Intervention

Question five of the Reinking and Bradley's (2008) framework asks about possible positive and negative consequences of the intervention, and positive consequences were easy to identify. First, students responded well to the intense focus on vocabulary and they developed independence as word learners and users, which was evident as students worked with words in the classroom. Further, as the vocabulary notebook shifted from strategy to vehicle, it became clear that students would continue to keep a vocabulary notebook on their own because they always had. However, when it came to the words that they really needed to comprehend academic texts, they would have the knowledge to explore all of the layers of that word, to analyze the context in which a word occurred, to understand the word semantically, syntactically, morphologically, and pragmatically, and to use it.

There were no obvious negative consequences for the students or the teacher. While some students did, at times, become frustrated or overwhelmed using the notebook, and one student indicated that the notebook did not add to his well-established method for learning vocabulary, all students remained engaged and used the notebook through the entire semester.

Changes to the Instructional Environment

Reinking and Bradley's (2008) last question aims to identify changes to the instructional environment as a result of the intervention. Three changes were apparent throughout the course of the intervention.

First, most students were enthusiastically engaged in the word learning activities each week. The activities almost always involved small group work, allowing for peer interaction, they encouraged learners to think and talk about words, and learners had access to native speakers that they could always turn to in a pinch. Thus, in contrast to workbook activities that involve filling in the blanks and completing matching exercises to process vocabulary, the vocabulary notebook, or at least its implementation in this class, created an environment of active engagement. Further, students talked about the value of small group work because it encouraged talk about words that could not happen if one works independently in workbooks. In sum, students believed that they needed this kind of class environment for learning and found they it motivating and exciting.

Second, the instructional environment changed because rather than confining ourselves to a single definition that matched the usage of the word in the book, we looked at words as entities in and of themselves, devoid of a given context. Thus, the decontextualizing of vocabulary and vocabulary learning allowed for far more flexibility in how we looked at the words. Though students had to attend to the textbook context at least somewhat, in order to pass their tests, they were able to explore the richness of the words aside from that one context in which they had encountered it and to develop a more nuanced understanding of words.

Finally, the shift from vocabulary notebooks as strategy to vehicle prodded students to move from being word translators to word learners, and they knew *how* and could do it, at least to a certain extent. They are not independent word learners, especially with respect to using words, but they are different word learners than they were before the intervention.

Implications for Instruction

Many of the issues that came to light in this study have clear implications for classroom instruction, as well as curriculum and materials development. In this section, I discuss these implications, starting first with addressing the issues that were identified as inhibitions to the intervention. Then I address the notion that vocabulary likely needs more attention than it currently gets in most ESL programs, and lastly, I discuss the importance of rich instructor staff development.

Factors Inhibiting the Intervention and Possible Solutions

Learner preferences, the real lives of students and teachers, and the need for intense native speaker involvement, were identified as factors inhibiting the intervention, and these are discussed below.

Learner preferences. Learner preferences are a factor in every classroom, of course, and in this case, learning vocabulary required pushing students to go beyond their comfort level. To mitigate the frustration that some experienced, students need time using this more active approach to learning words and word meanings, and this kind of instruction should start sooner in their program. That is, we asked students to gather and learn large amounts of information about words, at the same time that we were asking them to learn many new words. Had some of those word-learning strategies already been in place, the pressure may have been less intense.

Real life. The realities that constrain students' lives and teachers' classrooms will always present challenges, requiring, as in this case, negotiation for class time, or even other modifications to the intervention, such as a less ambitious agenda. If learners had been engaged in active word learning before the semester began, and had had a

comprehensive and coherent set strategies in place at the beginning of the semester, we might have been able to focus more on the “getting to use” component of the intervention.

Recognizing, and then accepting, that students wanted and needed to focus on social language, was necessary if we wanted to keep them engaged, but it is also an indication that their lives are complicated. Active and engaged word learning instruction that begins as soon as a student enrolls in an ESL program allows for the learning over time, thus ensuring that learners have a chance at becoming strong independent word learners. The stronger and more independent a word learner is, the less arduous the task of word learning becomes, and thus less time consuming.

Native-speaker involvement. Intense native-speaker involvement is necessary to word learning, no matter what the approach. ELLs simply do not have the language knowledge that allows them to make decisions about semantic, syntactic, morphemic, and pragmatic issues buried in all of the layers that constitute word knowledge. Fostering that rich talk about the words within the classroom environment helps learners develop the skills to talk about and around words with other native speakers, those with whom they work, live, interact, and study. Talk about the words as an instructional strategy, as Anna and I implemented, not only teaches how to unpack words and their meanings, but it teaches students *how* to talk about words.

Finally, I discuss two implications that this research points to, the need for more explicit vocabulary instruction with ELLs and the necessity of providing staff development for classroom teachers who teach vocabulary.

Vocabulary Class?

Folse (2004) noted that, while most academic ESL programs have a grammar class, it is rare to find a vocabulary class. I think the present study, in which vocabulary learning and vocabulary learning strategies were dealt with almost totally separately from the Reading and Vocabulary class in which it was embedded, provides a strong argument in favor of designing and implementing vocabulary classes in academic ESL programs.

In the Vocabulary Levels pre-test, two of the students scored at <2,000 word families, five at 2,000, and three at 3,000. These are very low levels of vocabulary knowledge, quite far from the 8,000 to 9,000 word families that Schmitt and colleagues (2011) expect a student to need in post-secondary education.

In addition, the students in the present study seemed to have little understanding of how vocabulary learning should be structured, particularly in the areas of understanding word complexity and finding and deconstructing word data. Their strategies for learning vocabulary were for the most part limited to word lists with translation, which, while a necessary step (Schmitt & Schmitt, 1995) is far too shallow to effect any real word knowledge, much less use.

Also, students had limited understanding of words and their multi-layered meanings and characteristics, how members of word families filled different sentence slots, and they were entirely unaware of collocations. Deep word knowledge, while not sufficient to get learners to correct usage, is certainly necessary (Nation, 2001; Zimmerman, 2009).

Finally, these students began intensive vocabulary study, via the intervention, when they were nearly to the point where they would begin academic study. They had some strategies in place, but not a comprehensive plan for learning vocabulary. They

were unaware of learner dictionaries, the existence of multiple layers of word knowledge and how to investigate them, or the disconnect between academic and social language. All of that is simply too much to teach in one semester, and would better be taught and reinforced over time.

In addition, Anna worried that the weekly vocabulary class was limiting the amount of material that she could cover and she eventually decided to teach fewer chapters. While a separate vocabulary class allowing for deep study of words would alleviate that difficulty, it also frees up time for the reading teacher to integrate vocabulary work *within* reading instruction. Instructors could discuss explicitly how vocabulary knowledge supports reading comprehension, and practice application of word-learning and contextual-analysis strategies to language in authentic texts.

Teacher Development

Vocabulary sections of reading books often involve rote, fill-in-the-blank and matching exercises that require learners to have only a surface understanding of a word in order to answer correctly. That is, vocabulary instructional materials in textbooks do not, in general, promote active engagement with words and their meanings. Further, the vocabulary notebook does not inherently foster talk about the words. Only the activities we created in conjunction with the vocabulary notebook gave students opportunities for rich conversations that helped them develop a deeper understanding of words, word meanings, and word uses. This talk about the words is both necessary to, and an indicator of, active engagement with vocabulary. Consequently, classroom instructors need to be knowledgeable in engaging students in conversation about words, regardless of the instructional materials they use.

While a significant amount of research exists on second language vocabulary acquisition, it is unclear if teachers are aware of what is considered exemplary practice (Folse, 2010) and whether they put it into place in their classrooms. Johnson (1992) calls for continuing professional development for practicing teachers since, over time, teachers become somewhat resistant to changes in theory that informs their belief systems, and thus, their practice. Further, Johnson notes that, while teachers usually have a theoretical basis for why they teach the way they do, it is typically rooted in the theory that was current at the time of their teacher training. This means, of course, that their practice, as informed by their beliefs, is likely to be tied to theory that may no longer be current.

If deep knowledge about words, and deep processing of that knowledge, are both necessary in order to really learn vocabulary both for comprehension and use, then classroom instructors need opportunities to develop their own skills in creating and implementing activities that foster both depth of knowledge and deep processing.

Limitations of the Study

The present study was limited by at least five factors: time, the researcher as teacher, the intense researcher/teacher involvement in the learning process, the inability to measure learner gains, and the implementation in one classroom.

First, time was one factor that limited this study. For example, I know from personal experience with students, as well as the research (Zimmerman, 2009) that students need to be taught to use a learner's dictionary so that they are well equipped to take advantage of all the information that is provided in them. However, in the interest of time, I chose not to explicitly teach dictionary skills. If I were to do this intervention again, I would rethink this position, since the dictionaries are such a wealth of word data,

and can be a powerful tool for independent learners. As noted earlier, some of the learners became convinced that dictionaries are extremely important for developing vocabulary knowledge. Yet the instruction provided was a little too haphazard both for preparing them to use the dictionaries effectively and efficiently on their own; further, it did not convince all students that learner dictionaries are qualitatively different from those designed for native speakers. Also, toward the end of the semester, we didn't have the time for student to thoroughly practice contextual analysis to be able to adequately analyze the context in which a word was used, and then to use it generatively. While students were using words and lots of them, they were not always using them correctly because they needed more time and practice to use words productively *and* correctly (Nation, 2001). In short, the limited amount of time in which this study was conducted forced us to make difficult decision about instruction and curtailed practice students need to become more skilled word learners.

Given the time limitations, a two-semester intervention, with some basic dictionary and research skills practiced during the first semester, followed up with the intense focus on vocabulary learning principles and practices in the second semester may lead to greater gains in vocabulary learning.

A second limitation was that it became necessary for me to take over as the vocabulary teacher. It concerns me that an instructor without the background knowledge and experience that I have would not have been able to shift the focus of the vocabulary notebooks from strategy to vehicle. Further, the purpose of a formative experiment is to test, develop, and refine an intervention in an authentic setting (Reinking & Bradley, 2008), so it is unclear how the intervention would have played out if Anna had

implemented it in full. Nonetheless, this limitation does raise the questions about teacher development and the need for instructors to be knowledgeable about principles and practices to effectively engage their students in vocabulary instruction (Folse, 2010; Johnson, 1992).

The need for intense instructor involvement is another limitation (McCrostie, 2007; Nation, 2001; Walters & Bozkurt, 2009). That is, students essentially had two native English speakers providing support during one class session per week. This level of support helped them, for example, to understand the complexity of knowing a word, to learn subtle differences in words, and to learn strategies for uncovering word meanings. Further, some students depended on Anna's weekly feedback in the vocabulary notebooks to help them to understand a word's meaning. While necessary, providing such feedback is intense and time-consuming for an instructor.

A fourth limitation is the test used in the intervention. While the initial focus was on learning how to keep a vocabulary notebook, this focus shifted to understanding the complexity of words and for developing more effective strategies (i.e., learners developed strategies for gathering, organizing, and analyzing various types of word data in order to begin working toward independent and correct use of words researched). Although this shift could not have been foreseen, beyond what students told me, and what Anna and I observed, we cannot say with any certainty that the intervention resulted in real change in student vocabulary learning.

Finally, this study was limited to one class and one teacher. Thus, it is not appropriate to generalize issues that arose or findings to classrooms dissimilar to this one.

Suggestions for Future Research

The present study investigated how an independent vocabulary learning strategy, the vocabulary notebook, could be implemented with community college ELLs almost ready to matriculate into academic study. The vocabulary notebook strategy, and its development into a vehicle for teaching principles and practices of effective vocabulary learning, is based in the idea that active engagement with vocabulary results in learning and using words. Based on this, there are at least four fertile areas of research directly related to this intervention.

First, research might examine the vocabulary activities included in commonly used ESL reading textbooks designed to teach vocabulary and use for their fit with the notion of active engagement with words. What exactly does *active engagement with words* mean in each of the various textbooks that promote it, and what is missing in those that do not? For those textbooks that do seem to promote active engagement with words, are the activity types similar, or is there quite a wide variation in the types of activities that can prompt active engagement?

Second, given the perception of vocabulary instruction as somewhat less critical than grammar instruction in SLA, as well as Johnson's (1992) finding that teachers generally espouse a body of theory that was in vogue at the time of their university studies, research might examine what typical practices instructors use to teach vocabulary, as well as how well that instruction guides students in accessing and deeply processing word knowledge so that they may use them to communicate effectively.

Third, the vocabulary notebooks strategy in this intervention developed into a forum for talking about the theory guiding effective vocabulary learning, as well as the strategies that promoted learning. This shift could only take place because the ELLs in

this class had a great deal of English language in place. In other words, we could make theory explicit, talk about it, tie the theory into the activities we pursued in class, and the students, for the most part, were hooked. At the university Intensive English Program where I teach, I am working with beginning language learners, with whom I cannot have these conversations about theory, so the strategies are taught via modeling and practice, in other words, implicitly. Research examining the efficacy of implicit versus explicit vocabulary strategy instruction and practice would be helpful in pinning down the actual factors that matter. Is it the strategies, or the talk about the *why* and *how* of the strategies that is most effective? This research would allow vocabulary and vocabulary strategy instruction to be differentiated across various levels of language learners, maximizing the effectiveness of the instruction to each level.

Finally, there is a need for more focus on vocabulary instruction. For example, should a program for ELL begin with an emphasis on vocabulary learning and then develop over time to help student to develop a comprehensive and coherent set of strategies for investigating words and their meanings? If so, would it create more successful independent word learners and what would that program look like? Also, how could such a program be integrated into an already existing four-skills approach program?

Final Reflections

After completing the present research, I realize how little I understood about getting to correct usage of words. The *definition-but-not-use* conundrum was frustrating for these students, but *getting to use* really challenged them, and will continue to do so. An example is Daniela's sentence, *She took a stunning decision*, in which the vocabulary

word was used correctly, but her sentence was still not native-like. In short, using words without the L1 language sense that a native speaker has, is extraordinarily complex.

Next, the lack of comprehensive vocabulary instruction in language programs is both more problematic and more pervasive than I realized. All of the learners in Anna's class talked about past vocabulary instruction, but in reality, they really knew little about systematically learning words and their meanings. Although research (Folse, 2004, 2010) supports heavy focus on vocabulary teaching in second language contexts, this research has not made it into practice, at least at the level of intensive language programs situated in post-secondary educational institutions.

Finally, as a result of this study as well as other reading that I have done, it is a concern that teachers are not properly staff developed to understand the theory behind vocabulary learning, and to put it into practice creating activities to promote active engagement with words, their meanings, and their use. Teachers cannot teach what they do not know, but given the importance of vocabulary to reading comprehension, all second language teachers of reading need to know how to embed strong vocabulary instruction into reading instruction.

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Appendices A-Y

Appendix A Study Approval



1/24/2012
HSCL #19837

Diane Taveggia
EDU
204 Lippincott

The Human Subjects Committee Lawrence Campus (HSCL) has received your response to its expedited review of your research project

19837 Taveggia/Bradley (EDU) Adapting a Vocabulary Notebook Strategy to the Needs of Community College English Language Learners

and approved this project under the expedited procedure provided in 45 CFR 46.110 (f) (7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

The Office for Human Research Protections requires that your consent form must include the note of HSCL approval and expiration date, which has been entered on the consent form(s) sent back to you with this approval.

1. At designated intervals until the project is completed, a Project Status Report must be returned to the HSCL office.
2. Any significant change in the experimental procedure as described should be reviewed by this Committee prior to altering the project.
3. Notify HSCL about any new investigators not named in original application. Note that new investigators must take the online tutorial at http://www.rcr.ku.edu/hsc/hsp_tutorial/000.shtml.
4. Any injury to a subject because of the research procedure must be reported to the Committee immediately.
5. When signed consent documents are required, the primary investigator must retain the signed consent documents for at least three years past completion of the research activity. If you use a signed consent form, provide a copy of the consent form to subjects at the time of consent.
6. If this is a funded project, keep a copy of this approval letter with your proposal/grant file.

Please inform HSCL when this project is terminated. You must also provide HSCL with an annual status report to maintain HSCL approval. Unless renewed, approval lapses one year after approval date. If your project receives funding which requests an annual update approval, you must request this from HSCL one month prior to the annual update. Thanks for your cooperation. If you have any questions, please contact me.

Sincerely,

Stephanie Dyson Elms
Coordinator
Human Subjects Committee Lawrence

cc: Barbara Bradley

Appendix B Student Consent

Approved by the Human Subjects Committee University of Kansas,
Lawrence Campus (HSCL). Approval expires one year from 1/24/2012.
HSCL #19837

Adapting a Vocabulary Notebook Strategy to the Needs of Community College English Language Learners

INTRODUCTION

The Department of Curriculum and Teaching at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You may refuse to sign this form and not participate in this study. You should be aware that even if you agree to participate, you are free to withdraw at any time. If you do withdraw from this study, it will not affect your relationship with this **Community College, the Applied Language Institute, or your grade in this class.**

PURPOSE OF THE STUDY

The purpose of this project is to examine the effectiveness and usefulness of a vocabulary learning strategy for community college English language learners, and to make changes that will help the strategy be more effective and useful to learners.

PROCEDURES

If you agree to participate in this project, you will be **required** to do the following:

1. Complete a form that includes questions such as your age, native language and formal education.
2. Take a 20-minute pre- and post-test that is part of the class activities.
3. Participate in a 45-minute small group interview with classmates at the beginning and end of this semester.
4. Participate in a 30-minute audiotaped interview in the middle and end of this semester. **Audiotaping will stop if you become uncomfortable at any time.**
5. Be videotaped during class when the vocabulary notebook is in use. **Videotaping will stop if you become uncomfortable at any time.**
6. Allow the researcher to make a copy of some pages from your vocabulary notebook.

BENEFITS AND RISKS

Participation in this research may help you better understand your strengths and needs in learning vocabulary. There are no risks associated with participation in this research.

PARTICIPANT CONFIDENTIALITY

Your name will not in any way be associated with the information collected about you or with the research findings from this study. The researcher will assign a pseudonym to you if you are quoted in any publication. **This research does involve audio recording of interviews and video recording of class activities. Audiotapes will be transcribed into written form by the researcher and accessible only to the research team.** All data collected, including pre- and post-test scores, audiotapes, videotapes, observation notes, and transcripts, will be kept in a locked filing cabinet. The information provided by you in this consent form will be kept on file by the researcher for seven years, until May

2019. Permission granted on this date to use and disclose your information remains in effect indefinitely. By signing this form you give permission for the use and disclosure of your information for purposes of this study at any time in the future.

REFUSAL TO SIGN CONSENT AND AUTHORIZATION

You are not required to sign this Consent and Authorization form and you may refuse to do so without affecting your right to any services you are receiving or may receive from the Applied Language Institute at the Community College or the University of Kansas or to participate in any programs or events of the Applied Language Institute at the Community College or the University of Kansas. **In addition, refusing to consent will not affect your grade in this class in any way.** However, if you refuse to sign, you cannot participate in this study.

CANCELLING THIS CONSENT AND AUTHORIZATION

You may withdraw your consent to participate in this study at any time. You also have the right to cancel your permission to use and disclose further information collected about you, in writing, at any time, by sending your written request to: Diane Taveggia, 204 Lippincott Hall, 1410 Jayhawk Blvd., Lawrence, KS 66044. If you cancel permission to use your information, the researcher will stop collecting additional information about you. However, the research team may use and disclose information that was gathered before they received your cancellation, as described above.

QUESTIONS ABOUT PARTICIPATION

Questions about procedures should be directed to the researcher(s) listed at the end of this consent form.

PARTICIPANT CERTIFICATION:

I have read this Consent and Authorization form. I have had the opportunity to ask, and I have received answers to, any questions I had regarding the study. I understand that if I have any additional questions about my rights as a research participant, I may call (785) 864-7429 or (785) 864-7385, write the Human Subjects Committee Lawrence Campus (HSCL), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7568, or email irb@ku.edu.

I agree to take part in this study as a research participant. By my signature I affirm that I am at least 18 years old and that I have received a copy of this Consent and Authorization form.

Type/Print Participant's Name

Date

Participant's Signature

Researcher Contact Information

Diane E. Taveggia
Principal Investigator
Curriculum & Teaching

Barbara A. Bradley, Ph.D.
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204 Lippincott Hall
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Lawrence, KS 66045
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Appendix C Demographic Information

Contact Information

Name _____ <small style="text-align: center;">Please print clearly</small>	Email _____ <small style="text-align: center;">Please print clearly</small>	
Address _____		
<small>Number & Street</small>	<small>City</small>	<small>State/Zip</small>
Telephone _ (____) _____		(____) _____
<small>Home</small>	<small>Cell</small>	<small>Other</small>

Background Information

1. Where are you from? _____
2. What is your native (or first) language? _____
3. Do you speak any other languages besides your native language and English? If so, what are they? _____
4. How long have you been in the US? _____
5. Check the highest level of education you completed *in your native country*.
 - _____ Elementary school (grades one to six or one to eight)
 - _____ Some high school
 - _____ Completed high school
 - _____ Some trade or vocational school
 - _____ Completed trade or vocational school
 - _____ Some college or university
 - _____ Completed college or university
 - _____ Other: _____
6. Check the highest level of education you completed *in this country*.
 - _____ Elementary school (grades one to six or one to eight)
 - _____ Some high school
 - _____ Completed high school
 - _____ Some trade or vocational school
 - _____ Completed trade or vocational school

- ____ Other: _____

Current Educational Context

1. How many semesters have you studied this community college? ____
2. What level(s) did you study in your first semester?

3. If you are taking any other Applied Language Institute classes this semester, which are they?

4. If you are taking any academic classes this semester, which are they?

5. Check all of the following that apply to you as an adult student.
 - ____ Attend school part time
 - ____ Attend school full time
 - ____ Work part time in addition to school
 - hours per week? _____
 - ____ Work full time in addition to school
 - ____ Have children at home
 - ____ Am eligible for the Pell Grant
 - ____ Pay for school on my own

Goals Regarding Future Study

1. Why are you studying English here? Check (✓) all that apply:
 - ____ Enroll in a vocational program where I can learn a trade or specialized skill
 - ____ Enroll in community college to get an Associate's degree
 - ____ Transfer to a university in order to get a Bachelor's degree
2. How long do you think that it will take you to reach your goal? _____

Appendix D
Focus Group Questions: Baseline

1. Are there times when you feel like you need to know more vocabulary? When?
 - a. Reading textbooks?
 - b. Conversation?
 - c. TV or movies?
2. Is vocabulary important to learning in English?
 - a. Why do you say that?
 - b. Compared to grammar?
 - c. For social needs? For academic needs?
3. Do you try to learn vocabulary on your own? If so, how?
 - a. Translator or dictionary?
 - b. Notebook or index cards?
 - c. Other?
4. Where do you find words that you need to know?
 - a. Conversation?
 - b. TV and videos?
 - c. Textbooks?
 - d. Other?
5. How do you know which words are important for you to know?
6. What activities do you do in the classroom to learn vocabulary?
 - a. Which are helpful? Why?
 - b. Which are less helpful? Why?

Appendix E
Student Survey: Baseline

1. How important is vocabulary to learning a second language?

Very Important Somewhat Important Not Very Important

Comments: _____

2. How important is vocabulary to reading in a second language?

Very Important Somewhat Important Not Very Important

Comments: _____

3. Where do you find vocabulary words that you want to learn? Check all that apply.

TV and Video Conversation Textbooks

Lectures Newspaper Other

Comments: _____

4. What do you do to find out the meanings of new vocabulary by yourself?

Translator Bilingual dictionary English dictionary

Ask someone Write words down Other

Comments: _____

5. How do you study new words?

Notebook Word cards Using new words Other

Comments: _____

6. What kinds of class activities help you learn vocabulary?

Book exercises Talking with teacher Tests Other

Comments: _____

Appendix F
Observation Protocol

TIME	Instructional Activity	Observer Comments

Time	Focal Students	Teacher	OC
	Other Students	Teacher	OC

Appendix G
Instructor interview: Baseline

1. What are your thoughts on the role of vocabulary in 2nd language instruction?
2. Would you describe for me how you teach vocabulary in your classroom?
3. Do you think your methods work well? Tell me why or why not.
4. If you could do it however you like, how would you teach vocabulary?
5. What are your thoughts on undertaking this strategy as a way to teach vocabulary?
 - a. How does it fit with your ideas about vocabulary instruction?
 - b. How does it not fit?
6. Anything else?

Appendix H
Instructor: Mid-semester Interview

1. What is working with the VNS? Why?
2. What is not working with the VNS? Why not?
3. What signs of growth do you see in students?
4. What signs of frustration do you see in students?
5. Compare this strategy with what you have done in the past in terms of
 - a. Time spent on vocabulary
 - b. Efficacy of learning methods
 - c. Depth of knowledge about words
 - d. Number of words covered
 - e. Student engagement with/enjoyment of vocabulary learning
6. How might you change this strategy if you were to use it again?
7. How does this strategy fit or not fit with your ideas about vocabulary instruction?
8. How do you feel about the modifications we have made to the strategy?
 - a. Are they working? If so, how?
 - b. What else can we change? Why?
9. What are some limitations of this method with these students?
10. Anything else?

Appendix I
Instructor: Post-semester Interview

1. How did this strategy fit/not fit with your ideas about vocabulary instruction?
2. What worked? Why do you think it worked?
3. What did not work, and why do you think it didn't?
4. What kind of growth did you see in students?
5. What signs of frustration did you see?
6. Compare this strategy with what you have done in the past in terms of
 - a. Time spent on vocabulary
 - b. Efficacy of learning methods
 - c. Depth of knowledge about words
 - d. Number of words covered
 - e. Student engagement/enjoyment of vocabulary learning
7. How do you feel about the modifications we made?
 - a. Did the work? How?
8. What were the limitations to the strategy?
9. Next semester, I'm out of here. What will you keep/not keep, and tell me why.
10. Anything else?

Appendix J
Focal Student Interview: Mid-semester

1. Show me what kinds of things you do with your vocabulary notebook.
 - a. How do you use it?
 - b. Do you add more data about your words to your dictionary as you find it?
 - c. Do you study from your notebook?
2. Do you like working with your vocabulary notebook?
 - a. Why or why not?
 - b. What do you like/not like? (go through section by section)
 - c. What is easy? Difficult?
3. How much time each week do you spend working on your vocabulary notebook?
 - a. In school?
 - b. Out of school
 - c. How is this amount of time working or not working?
4. Do you notice (pay attention to) words more or less or the same amount?
 - a. Explain.
 - b. Why do you think this is so?
 - c. Where do you notice words?
5. Does your vocabulary notebook help you learn vocabulary?
 - a. How is it helping or not helping?
6. Will you continue to keep a vocabulary notebook next semester?
 - a. Why or why not?
7. What would make keeping a vocabulary notebook easier? Better?
8. Can you think of any better way to learn vocabulary?

9. If you were the teacher, how would you teach vocabulary?
10. Anything else?

Appendix K
Focal Student Interview: Post-semester

1. Show me your vocabulary notebook.
 - a. Has anything changed in your use of your notebook since we last visited?
 - b. Tell me what you liked/didn't like about keeping a notebook (go through section by section).
2. Did you find this a useful way to learn/study vocabulary? Why or why not?
3. Compare the notebook to other ways that you have studied vocabulary.
 - a. How is it more/less useful?
 - b. How is it more/less work?
 - c. How is it better/worse for learning?
4. What parts of this learning strategy will you continue to use? Why?
5. What parts of this strategy will you not continue? Why not?
6. How have your thoughts about these things changed over the semester:
 - a. The importance of vocabulary to language learning
 - b. Noticing words
 - c. The necessity of learning new words independently
7. The VNS encourages learning words, but also learning a lot about each word. Is that helpful? Why or why not?
8. Anything else?

Appendix L
Class Survey: Post-semester

1. How much time did you spend outside of class with your vocabulary notebook in a week?

less than an hour 1 to 5 hours 6 to 9 hours More than 10

Comments: _____

2. What activities did you do in that time?

- | | |
|---|---|
| <input type="checkbox"/> studying words | <input type="checkbox"/> adding new words |
| <input type="checkbox"/> adding other information about words | <input type="checkbox"/> making word maps |
| <input type="checkbox"/> looking for collocations | <input type="checkbox"/> writing sentences with words |
| <input type="checkbox"/> translating words | <input type="checkbox"/> finding word families |
| <input type="checkbox"/> analyzing context to use words | |
| <input type="checkbox"/> other _____ | |

Comments: _____

3. Which vocabulary notebook activities did you find most helpful this semester?

- | | |
|---|---|
| <input type="checkbox"/> studying words | <input type="checkbox"/> adding new words |
| <input type="checkbox"/> adding other information about words | <input type="checkbox"/> making word maps |
| <input type="checkbox"/> looking for collocations | <input type="checkbox"/> writing sentences with words |
| <input type="checkbox"/> translating words | <input type="checkbox"/> finding word families |
| <input type="checkbox"/> analyzing context to use words | <input type="checkbox"/> classroom activities |
| <input type="checkbox"/> other _____ | |

Comments: _____

Appendix M
Focus Group: Post-semester

1. What did you like or dislike about keeping a vocabulary notebook?
2. Do you pay more attention to words now? Explain that.
3. How do you choose words to study?
4. How do you feel about your ability to learn vocabulary independently now?
5. Will you continue to use the vocabulary notebook independently? Why or why not?
6. Which vocabulary notebook activities did you find easiest and most difficult to use?
Why?

Appendix N

Post-Semester Reflection

Please write a paragraph or two in which you discuss the use of the vocabulary notebook this semester. Consider the following questions as you reflect on the notebook and its effect on you as a vocabulary learner and reader:

- Was it difficult to use? Why?
- Was it worth the time you took to use it? Why or why not?
- Did you learn from class activities (for example, how to choose good words, using a dictionary and a translator, constructing word maps, analyzing sentence context for information about using the words)? How and why?
- Have you learned anything about learning new vocabulary that you will be able to use in the future.
- Do you feel that you are any better at learning words independently (by yourself, without a teacher's help) than you were in the beginning of the semester?

Appendix O

The Dictionary Discussion

Translator

1. What are translators good for?
 - A direct translation
2. How does that help?
 - Connects new English vocabulary to known L1 vocabulary, known L1 concepts in place
3. What are the limitations of translators?
 - A very limited slice of information about the word
 - Sometimes incorrect or misleading (e.g., *revolution* from last week)

Learner Dictionaries

1. What are learner dictionaries good for?
 - They provide a wealth of information about the words, including parts of speech, variant forms of the word, synonyms, collocations and other
2. How does that help?
 - Helps you develop a depth of knowledge about the word so that you can use it yourself and understand it when it is used in unusual ways
3. What are the limitations of learner dictionaries?
 - Dictionaries can be difficult to use if you don't already know something about the word.

Activity:

1. Have them look up the following on their translators
 - scheme
 - assume
2. Then ask them to look them up in the dictionaries that we have made available to them. Show them (and perhaps explain?) the variety of info provided in the dictionary.
3. Talk about the info gleaned in light of the previous discussion.
4. Have them choose another word to look into on their own or in small groups

Appendix P Word Choice

Choosing good words to explore is not easy! Researchers (Walters & Bozkurt, 2009) have found that students often choose words that are too easy, or useful only in very limited situations. If you are going to spend time investigating words, you want to make sure that you are choosing useful words that will help you in your academic reading.

These are some questions that you can ask yourself when you are trying to choose which words to study. When you think you *might* be interested in researching a word, ask yourself these questions to make sure that you are not wasting your time!

1. Are there things that you can talk about in your language that you can't talk about in English? You might find words there that you want to investigate.
2. Are there words that you come across in everyday conversation or in your reading that are interesting to you, but you don't understand well enough to use them yourself? These might be good words for you to explore.
3. Is the word a common word in English, but one that you do **not** know?
 - Look at the **Word Lists** section at the back of your book (page 67). Appendix 1 (page 303) lists the 2000 most frequent words in English. If you are interested in a word that you do **not** know, and it is on this list, you should probably find out as much as you can about it. You will hear these words a LOT! in conversation, and you will see them ALL THE TIME! in your reading, so spend some time getting to know these words..
4. Is the word an *academic word*?
 - Again, look at the **Word Lists** in the back of the book. Appendix 2 (page 308) lists the 570 most common words found in college textbooks! These words will be **really** important for you to know when you leave ESL and start your academic study at this community college or university. If a word appears on the Academic Word List (AWL), it is probably worth spending some time researching it.

Using a vocabulary notebook is a LOT of work, so you might as well choose really good, useful words to research. The questions above will help you decide if a word is a **good** word to spend time with.

Appendix Q
Sample Vocabulary Notebook Page

New Word:	Translation	POS
Definition:	My sentence:	
Other information		
New Word:	Translation	POS
Definition:	My sentence:	
Other information		
New Word:	Translation	POS
Definition:	My sentence:	
Other information		

Appendix R Word Mapping

Name _____ Date _____

Review...

- **Breadth** = the quantity of words we know;
- **Depth** = the quality of the words we know
 - Flexibility
 - Contributes to reading comprehension above and beyond the effect that can be attributed to breadth

Processing new words...

- **Definitional knowledge:** knowing the definition and synonyms
- **Contextual knowledge:** understanding a core concept, as well as some ability to recognize it in variant contexts
- **Generative knowledge:** understanding a word when used in an original way as well as using it in novel but appropriate ways



Deep processing of new words will get you to generative use, but how do you process your new vocabulary deeply? Two ways to process deeply that we will practice this week and next are listed below.

- considering words and their connections to other words (word mapping)
- considering words and the features (characteristics, or qualities) which are true for each (semantic feature analysis)

We will word map around people today. You will also create a word map or two for homework. Below are some ideas that will help you get started:

- work words (Can *innovative* be a work word? How about *flourish*?)
- community words (Can *prevent* be a community word? Why or why not?)
- environment words (Can *mysterious* be an environment word? *Powerful*?)
- travel words (Can *radically* be a travel word? Why or why not?)
- house words (*Inexpensive? Advantageous?*)
- words that talk about rudeness (*Cut in? inappropriate?*)
- words that talk about pleasant things (*Comfortable?*)
- money words
- fun words
- blah words

Appendix S Word Map: Cars

Name _____

Date _____

Instructions: Using these words from the article you read on hybrid cars, create a word map to show the relationships between the words. The words along the top might work as broad categories, and those below might fit into those categories. Or, arrange the words however you like. You may use words more than one time.

Types of Engines	Parts of Cars	Vehicles	Fuel Efficient	Cars
pollution	engine	locomotives	hybrid engines	
generator	problems	parallelexhaust/emissions		
transmission	gasoline-powered	fuel tank	4-cylinder engine	
moped	series	high mileage	global warming	
gas pump				



Appendix T
Word Map Cards

Words that have a negative sense to them...	Words that refer to time....	Things that make noise....
Words that have a positive sense to them....	Things that are quiet....	Mechanical words
Words that are soft...	Words that refer to communication...	Words that are difficult....
Words related to money....	Words related to fun...	Words related to work....

Appendix U Sentence Models 1

Name _____ Date _____

Instructions: Sometimes it is hard to *use* a vocabulary word in a sentence, even if you know what it means. Read the sentences below. Look at the **bold-faced** vocabulary words. Think about how it works in the sentence. Then write your own sentence using the same word.

1.
 - a. It is **advantageous to** have a driver's license in Kansas City.
 - b. It is **an advantage to** have a driver's license in Kansas City.
 - c. A driver's license is **an advantage** in Kansas City, because public transit isn't great.

2.
 - a. The man wore a plain, **nondescript** jacket.
 - b. The woman's clothing was plain and **nondescript**.

3.
 - a. High school students must meet strict **criteria for** admission to Harvard.
 - b. The **criteria for** becoming president of the US include being native born.

4.
 - a. Her behavior was **inappropriate** and upsetting.
 - b. He used **inappropriate** language in the classroom, so the teacher asked him to leave.

5.
 - a. I spent **virtually** no money this weekend! I'm proud of myself.
 - b. My house is a **virtual** junk store, but I can't seem to throw anything away.
 - c. My house is **virtually** a junk store, but I can't seem to throw things away.

6.
 - a. The **requirements for** getting an Associate's degree include at least one math class.
 - b. An Associate's degree from this school **requires** at least one math class.

7.
 - a. We **acquire** a second language both from study and practice.
 - b. Second language **acquisition** in adulthood **requires** both study and practice.
 - c. A second language **is acquired by** lots of study and practice.

8.
 - a. He lives in a more **affluent** part of town than I do.
 - b. The **affluence** of the wealthiest US Americans can almost be disgusting.

9.
 - a. She has a really good **attitude about** the hard work it will take to get through school.
 - b. The **attitudes** expressed at the meeting tell me that we have some real problems to figure out in our group.

10.
 - a. If I want to **obtain** a W-2 from my employer, I have to fill out a form.
 - b. Most students at the ALI would like the opportunity to **obtain** an academic degree.

Appendix V Sentence Models 2

Name _____ Date _____

Instructions: Go back through your vocabulary notebook. If you had trouble writing a sentence with one of your words, find the example sentence provided for that word, and use the example to write a sentence.

1. The mother **abandoned** her child at birth, leaving her on the steps of the church.
2. She and I are not really friends. We are more **acquaintances**, really.
3. Foul language is really not **acceptable** in the classroom.
4. How many people can the restaurant **accommodate**?
5. Her written grammar is very **accurate** because she can think about the rules as she writes.
6. I am very **active** in student government on campus.
7. I am not **accustomed to** eating with chopsticks.
8. Please **acknowledge** receipt of this email.
9. All students are working hard to **acquire** the academic English they will need to succeed in school.
10. I **admit** that I am not much of a sports fan, but sometimes I watch a game with friends.
11. I would like to **adopt** a baby, but I know that it takes a long time.
12. If you know **in advance** that you won't be able to come to class, you should email your teacher.
13. Having a car is such an **advantage** in Kansas City.
14. Having a college degree is **advantageous** in tough economic times.
15. a. I made the **assumption** that you would be at the party, since you guys are such good friends.
b. I **assumed** that you would be at the party, since you guys are such good friends.
16. I can **assure** you that the final exam will not cover any material that we haven't gone over in class.
17. I **ate** too much sushi.
18. When you **attempt** something new for the first time, sometimes you don't do it very well. You get better, though.
19. My **attitude** toward school is good. I really think an education is worth a lot!
20. Last week I had an **adventure** with my friend. We took a road trip to St. Louis, and visited lots of places.
21. The **author** of this book has written many other books as well.
22. I was always **aware** of the price of gas when I drove a long way to get to work, but now that I walk, I barely pay attention!
23. I am so **awkward** on the stairs. I almost always trip unless I watch very carefully.
24. My teacher **assigned** pages 10 and 11 for homework.
25. Kate is an **associate** of mine. We have worked together for many years.
26. I can't **afford** a new car. I will have to buy a used car, I think.
27. I work **among** a whole bunch of people who speak my language. This doesn't help me learn English.
28. The **ancient** cities of the Mayan people are so interesting to explore!
29. Loud music really **annoys** me. It makes it hard for me to think.
30. It is **apparent that** you are angry with me. Will you tell me why you are so mad?

31. I applaud your efforts at learning to play the guitar. You are really doing well.
32. This strawberry yogurt has artificial strawberry flavoring. Why can't they just use strawberries?
33. Steve Jobs **ascended to** the leadership of Apple Computers in the mid 1980's, though later he left the position of CEO.
34. I went **backpacking** around East Africa in 2002. **Backpacking** trips are so much fun, though **backpacking** can be hard! It's a lot of weight to carry on your back!
35. The way that Americans write the date—month first, and then date—is **backward** to the way that most other countries do.
I put my shirt on **backward** today, but I didn't notice it until I got home from school.
36. I am pretty good at **bargaining** at the farmer's market on Saturday.
37. One of my teachers always **barks** instructions at the class. It really **annoys** me.
38. The **base of** the glass is wider than the top.
39. I don't like fighting the **battles** I have to fight at work. It really takes away from my ability to do my job.
40. I want to stay in a **beachfront** hotel in Florida. That way I can see the ocean out of my window!
41. **Begging** in some areas of the city is becoming really common. The bad economy has really affected the work lives of a lot of people.
42. **On behalf of** the Applied Language Institute, we would like you to participate in our International Day.
43. I left my shoes **beneath** the bed, and the cats played with them all night.
44. a. I would like to have a **job with benefits**, but it's hard to find them.
b. I always **benefit from** trainings that help me do my job better.
c. The **benefits of** getting a college degree are many. The easiest one to note is the financial advantages that accrue for those who have a degree.
45. The houses on that street are so **bleak** and depressing.
46. My husband and I created a **blended family** when we married. He had a child, and so did I.
47. She was very **blunt** when she told me that she did not think my writing was good.
48. The **boundary** between Kansas and Missouri is a river in some places, and a road in others.
49. Abrupt **braking** wastes a lot of gas.
50. I am the breadwinner for my family of four, but I don't make a lot of money, so we have to be thrifty.
51. The speech was one of **brevity** and hard-hitting rhetoric. President Obama did a good job.
52. The governor tried to **bribe** citizens to vote for him.
53. The **bulk of** the work was completed before 10:00.
54. a. I don't think I am **capable of** writing all these sentences!
b. I am not **capable of** writing all these sentences!
c. I am **capable of** writing lots of sentences, though.
55. The tornado in Joplin last spring was **catastrophic**, causing a number of deaths and millions of dollars in property damage.
56. a. Jobs can be divided into a number of **categories**: professional, blue collar, and white collar are just a few.
b. We can **categorize** jobs into professional, blue and white collar, and others.
57. The children **cavorted** in joy as their mother got the ice cream out of the freezer.
58. a. It **never ceases to amaze me**, how hard English learners work.

- b. Apple has **ceased** production of the MacBook.
59. The **CEO** of Hewlett-Packard resigned from the company after he was caught stealing from the company.
60. a. The fans **chanted** “Rock Chalk, JayHawk,” throughout the entire game.
b. The monks **chant** while meditating every morning.
61. a. I will **charge** this plane ticket, since I’m a bit short on money this week.
b. The police officers **charged** forward, with their guns ready in case one of the rioters shot.
62. I need to complete my **chores** before I can go out for lunch.
63. Where did you get this information? Can you **cite** your source?
64. I don’t really understand this. Can you **clarify** it for me a bit?
65. She picked up the **cleaver** and began to slice the meat into thick slices.
66. Katy is my **colleague**. We have worked together for many years.
67. **Collocations** make English much harder to learn, but they are fun to try to find!
68. Some people like to give **commands**, but I prefer asking people to do things.
69. a. I made a **commitment** to work really hard this semester.
b. I **committed** to working hard this semester.
70. a. I would like full **compensation for** the hours I worked.
b. I would like to be fully **compensated for** the hours I worked.
71. There are three basic **components** in a computer: the hard drive or CPU, the monitor, and the keyboard.
72. a. I want to **conquer** my fear of heights, so I will practice climbing the ladder and stepping onto the roof.
b. The small band of soldiers was able to keep the **conquerors** back and save their town.
73. a. My mom **consented** to let me wear makeup when I was fifteen.
b. Can you sign the **consent** form to participate in this research?
c. The school needs parental **consent** in order to take the kids on a field trip.
74. Immigrants and refugees **constitute** the future of the US melting pot.
75. The most important **continental** divide in the US flows through the western part of the country.
76. a. The educational system in the US does not provide free university, **in contrast to** the systems in many other countries.
b. In the US, we have to pay for university. This **contrasts with** the educational systems of many other countries.
77. a. Kathy was very **cordial** to me when I saw her at the party. I was surprised, since we had had such a nasty argument last time we saw each other.
b. Her **cordial** behavior was really surprising.
78. I live in a small **cottage** near the sea.
79. Bob is a true **craftsman**, able to build the most beautiful wooden pieces you can imagine.
80. The **criteria for** enrollment at this college include English language study.
81. a. It is **critical that** students learn vocabulary in their ESL program.
b. Vocabulary is **critically** important for academic study.
82. The vocalist **crooned** in a soft, smoky voice.
83. US **cuisine** consists of food traditions from all over the world.
84. a. I want to **cultivate** a relationship with the staff of the library.
b. I love **cultivating** things in the garden.

85. I'm not sure if that is **decidable** today. We may have to wait until we have more information to make our **decision**.
86. They brought a **decoy** of a duck out hunting with them, and it worked.
87. a. The Kansas Jayhawks were not able to **defeat** Kentucky.
b. The Kansas Jayhawks were **defeated by** Kentucky in the NCAA championship.
88. I don't like my friend's **dependence on** me. It feels a bit clingy.
89. Winning the championship is a **desirable** thing.
90. a. The land in the western US is open and wide, almost **desolate** in its lack of plants.
b. She was **desolate** after her divorce, for several years.
91. The computer is such a necessary **device** in my life...I'm pretty sure I couldn't exist without it now.
92. a. She took a quick **dip** in the pool.
b. **Dip** your fingers in the water and see if it's cold enough.
c. I love guacamole **dip**.
93. It was a gray, rainy, absolutely **dismal** day.
94. a. I loved the **display of** children's artwork at the school.
b. She doesn't **display** her work in galleries very often.
95. a. Her **disposition** is such that she never gets impatient or angry.
b. She is **disposed to** being calm and relaxed most of the time.
96. a. I can't quite **distinguish between** the twins. They look the same to me.
b. She is a **distinguished** professor of economics.
97. a. I am not a **do-it-yourselfer**, but my boyfriend is.
b. Painting is an easy, **do-it-yourself** job.
98. The two commitments **dovetailed** and made it impossible to keep up with both.
99. a. The library book is **due on** April 7.
b. Your assignment is **due to** me on Tuesday.
100. a. Can you **duplicate** this for me? I need ten copies.
b. I need **duplicates** of these photos.
101. a. The teacher is so **dynamic** and alive. She really brightens up the classroom.
b. The classroom **dynamic** is perfect. The students really work well together and spur each other to think hard.
102. I am so very **eager** to finish this.
103. The **earthquake** in Japan caused a **catastrophic** tsunami in Northeastern Japan.
104. a. The prairie **ecosystem** is almost gone now, only a few hundred years after Europeans began to settle there.
b. The various **ecosystems** on earth will not be able to handle climate change.
105. **Ecotourism** is really big in South and Central America, where the economy is fed by the responsible use of nature.
106. Having a defined study plan is more **efficient** and effective, both. (efficient = saves time and energy; effective=better results)
107. a. Sometimes the **ethical** thing to do is difficult to define.
b. Many people question the **ethics** of tourism if it is likely to harm local **ecosystems**.
108. a. The **elements of** a good essay include a good thesis statement and careful development of the ideas proposed in it.
b. Vocabulary is **elemental** to academic study.
109. **Tailpipe emissions** are more strictly regulated in California than any other

- state.
110. There is ample **empirical** evidence that smoking causes lung cancer.
 111. I don't **envy** Kaitlin. She has so much to deal with right now.
 112. When I was a child in Catholic school, I took the Eucharist every day.
 113. The **exhaust** from his tailpipe was white and smelled quite strong. I think he is burning oil.
 114.
 - a. I had a really bad **experience** at that restaurant. I won't go back.
 - b. I **experienced** really bad service at that restaurant. I won't go back.
 115. When you park your car in the sun every day, the paint really **fades** badly over time.
 116. The temperature in March is 86 degrees **Fahrenheit**? That is crazy!
 117.
 - a. She is such a **fast** runner. I can't keep up.
 - b. Muslims **fast** during the holy month of Ramadan.
 118. He is a really fine **fellow**. I like him a lot!
 119. The **ferocious** storm blew down a bunch of tree limbs.
 120. The characters in that novel were all **fictitious**, but all of them reminded me of people I know.
 121. We had a **fierce** storm last night.
 122. She likes **fine** dining at expensive restaurants.
 123. Please don't **flatter** me. **Flattery** will not get you an A, but hard work will!
 124. Tom is **flourishing in** his new job.
 125. The team had to **forfeit** the game because they didn't have enough players.
 126. Her excessive **formality** makes me really anxious. I never want to meet the queen again!
 127. The **frivolity** downtown after the game was really fun and charming, with college kids high-fiving the police!
 128. I hate paying \$3.69 at the **gas pumps**.
 129. I just didn't **get the drift** at first, but I think I understand it now.
 130. Teaching is a common profession for women, but even here they face a **glass ceiling**.
 131. The reality of **global warming** is still being argued in the US.
 132. The **goal** of the ALI is to get you up to speed in academic English.
 133. I eat lots of **grains** in my diet.
 134. Obama's 2008 campaign was a very **grassroots** effort by lots of young people.
 135. CO₂ in the atmosphere acts as a **greenhouse**, holding in the heat from the sun, thus contributing to the **greenhouse effect** and, ultimately, **global warming**.
 136. I can't **guarantee** that I will come to your party, but I'm pretty sure I will.
 137. The **handmade** scarf she gave me was beautiful.
 138. Don't worry. Those kids are **harmless** and won't hurt the puppy.
 139. I want to save money and the environment. Hence, I bought a very fuel-**efficient** car. I bought a Prius, a **hybrid** between a gasoline- and battery-powered engine.
 140. Her political **ideology** is very different from mine. She is way far to the right.
 141. The Great Lakes are **immense**, so big that you can't see land.
 142.
 - a. She **implied that** I was getting an A in her class.
 - b. The **implied** message is that I am getting an A in her class.
 - c. The **implication** is that I am getting an A.
 143. Her behavior was so **inappropriate**. What was she thinking?

144. a. I want to **infuse** the class **with** a sense of excitement.
b. She always **infuses** the class **with** exciting ideas.
145. I am an inhabitant of Lawrence Kansas.
146. **Innovation** is prized in industries like the computer and tech fields.
147. She **inspired** me **to** study harder.
148. I don't want to **intervene** in this argument, but you two need to settle down.
149. The themes of poverty and sorrow were **interwoven** throughout the film.
150. I am **intolerant** of racism. It has no basis in reality and is just **unacceptable**.
151. If the quiche still **jiggles**, it is not fully cooked.
152. Women with small children are often interested in **job sharing** if they can.
153. The tree at the top of the hill is a famous **landmark**.
154. I want to try to **leapfrog** ahead of the others if I can.
155. **Lecturing** is very common in college. Professors often stand up in front and **lecture** for the entire fifty-minute class period.
156. Is it **legal** to drink alcohol at age 18 in your country?
157. Eating plenty of **legumes** is a good way to get protein without the fat of meat.
158. I love to play my guitar in my **leisure** time.
159. a. She is very conservative, but I am quite **liberal**.
b. The salary and benefits at that company are quite **liberal**.
160. I love reading good literature, but I don't have much time for it anymore.
161. The **locomotive** moved slowly down the track.
162. The **mass** of people in the streets slowly left and went home.
163. The **medical** field is a good place to find a job.
164. The US is considered a **melting pot** because we are a nation of immigrants.
165. The work was **menial** and low pay, but it was all I could get.
166. **Migratory** birds sometimes fly thousands of miles when they **migrate**.
167. The **mileage** on this car is quite low, and it gets really good **gas mileage**.
168. Drinking **in moderation** is ok, but don't overdo it.
169. I drive a **moped** around town.
170. **Moreover**, I want to point out the significance of air pollution in relation to lung problems.
171. The country was very **mountainous**.
172. They are **newcomers** at this school.
173. The woman was dressed in a **nondescript** dress and shoes.
174. My neighbor is such a **nuisance**. She plays loud music at all hours.
175. The **numbing** pain of my tooth was unbearable.
176. The **numerical** figures are not in yet, but we will know something once we get the numbers.
177. There are **numerous** places to eat in this town.
178. You have to **nurture** plants if you want them to grow and produce fruit.
179. My little sister is not very **obedient** and she gets in trouble all the time.
180. Fiction writers have to be very **observant** if they want to capture the essence of real people.
181. I'd like to **obtain** my driver's license. How do I do that?
182. I enjoy the **occasional** chocolate cone, but I eat ice cream **in moderation**.
183. She is such an **odd** girl, but I really like her.
184. That song is such an **oldie!**
185. I always **omit** to read instructions on tests, and sometimes my grade suffers.
186. I am not much of an **optimist**, but I feel **optimistic** about this project.
187. She is really friendly and **outgoing**. She makes friends easily.

188. I was **overcome by** total exhaustion after the game.
189. The **mime pantomimed** opening the refrigerator and pouring a glass of milk.
190. The two roads run **parallel** to each other.
191. She **parlayed** her job promotion into a substantial raise.
192. He was given a sentence of three years **parole**.
193. I can't **perceive** sounds at higher pitches.
194. His **physical** strength was low after his illness.
195. Saying "How are you?" as you see someone in the hall is just a **politeness**.
196. Many words in English are **polysemous**. That's why it's a hard language.
197. I don't **possess** a TV, but I can watch movies on my computer.
198. She has a great deal of **potential**, but she needs to work hard.
199. He is a **medical practitioner**.
200. Most colleges are not concerned with making a **profit**.
201. Jet **propulsion** is very interesting, but I don't understand it very well.
202. The **prosperity** of this country is in doubt if the **masses** are struggling to feed our families.
203. The **pundits** all say that Romney will get the republican nomination.
204. Her idea was a **radical one**, but it worked out really well.
205. The two sisters are **radically** different, but they are the best of friends.

Appendix W Sentence Models 3

Name _____ Date _____

Instructions: Go back through your vocabulary notebook. If you had trouble writing a sentence with one of your words, find the example sentence provided for that word, and use the example to write a sentence.

206. The instructor **rallied** her students right before the test, and the students did well.
207. a. My **reaction** to the news was shock! I can't believe they did that.
b. I had a bad **reaction to** some of the chemicals in that lotion. I got a rash.
3. a. I dropped out of school with great **reluctance**.
b. I was **reluctant to** drop out of school.
4. a. The **requirements for** getting an Associate's degree include at least one math class.
b. An Associate's degree from this college **requires** at least one math class.
5. a. I am **responsible for** getting my children up in the morning.
b. It is my **responsibility to** get my kids up in the morning.
6. Last night I was **restless**, so I took a walk downtown.
7. The **revenues** generated from the sale were not great, but not bad, either.
8. The Middle East is exploding with **revolutions** in various countries.
9. Bob is not my **rival**, but I prefer not to work with him.
10. It's not good for your car to go over 4000 RPMs for very long.
11. I am not very **savvy** when it comes to slang.
12. The **worst-case scenario** is that the students throw their notebooks away as soon as the course is over.
13. I have a clever **scheme** for tricking Ruthnie into coming to my house for her surprise birthday party.
14. She had **a series of** health problems last year, but I think she's better now.
15. The **settlement** was a quiet place, and not many people lived there for the first few years.
16. a. We need to **shift** our attention to study grammar now.
b. Can you drive a stick **shift**, or only an automatic?
17. The room was **silent** as Ruthnie walked in, and then we all exploded with, "Surprise!" and "Happy birthday!"
18. I need another **slice** of bread to make one more sandwich.
19. Many countries **revolt** to regain **sovereignty from** their corrupt governments.
20. She **startled** me when she walked into the room with pink hair.
21. a. There is a **stigma associated with** not being able to speak English well.
b. She hated the **stigma of** declaring bankruptcy, but she had to do it.
c. Being a homosexual **carries a social stigma** in many communities.
d. The **stigma of** declaring bankruptcy is strong, even in these poor economic times.
22. His **stinginess** is disgusting. He doesn't even tip restaurant servers!
23. I have a bad back, so it is difficult for me to **stoop over** and put my shoes on.
24. I really like Veronique. She is really **straightforward** and honest, and I appreciate that.
25. There is **strife** in the community over the poor condition of the schools the children attend.

26. Nonnative speakers form a **subculture within** the dominant majority, and there are further **subcultures within** nonnative speakers, depending on language and country of origin.
27. He was arrested for possession of an illegal **substance**.
28. a. There was a **swarm** of fruit flies on the rotten apple.
b. The fruit flied **swarmed** the spoiled banana.
29. I'm so sorry for your loss. You have my sympathy.
30. a. Touching a Buddhist on the head is **taboo**, so you shouldn't do it.
b. Playing string games in the summer is **taboo** in the Navajo culture.
31. I don't **take stock in** rumors and gossip.
32. My cell phone is **tangible**, but my cell phone number is not!
33. I am not very **tech-savvy**, but my boyfriend is!
34. The streets were **teeming** with people after the big win.
35. I called tech support about my computer and got a **telecenter** in India.
36. Kansas serves as a **testing ground** for many commercial products, since we are in the Midwest.
37. I was **thoroughly** delighted when the students did so well on their essays.
38. A great **torrent of** water broke through and flooded the streets.
39. The current **trend** is toward lower unemployment, but jobs are mostly in the service industry.
40. When I turned on the faucet, only a **trickle of** water came out.
41. The **turnaround** point for me was when I realized he didn't love me.
42. My reasons for going back to school are **twofold**: I want to upgrade my skills and get a better job.
43. I **underestimated** how long it would take to write all of these sentences!
44. I have to **undergo** surgery on my knee.
45. Her **unwillingness to** come to class or do homework will ensure that she gets an F in this class.
46. **Uprisings** throughout the Middle East over the past year have been inspiring to watch.
47. The **vastness of** the prairie was amazing back in the early 1800's.
48. Motorized **vehicles** can't be used on this path.
49. I want to get to St. Louis **via** the back roads.
50. The dog was **vicious**, and bit the child repeatedly.
51. I am losing **vigor** as I get older, but I guess that's normal.
52. a. I spent **virtually** no money this weekend! I'm proud of myself.
b. My house is a **virtual** junk store, but I can't seem to throw anything away.
c. My house is **virtually** a junk store, but I can't seem to throw things away.
53. I need a job where I can earn a **living wage**. \$16,000 a year just isn't enough money to survive on.
54. I **wholeheartedly** support the development of an ESL program at this college.
55. The flu was **widespread** in the Kansas City area this year.

AppendixX Contextual Analysis

When you see a word that you would like to use, you should analyze the context in which you find it, as well as any information that you can find in a learner's dictionary that will help you *really* understand the word's meaning and how to use it.

Questions to ask about words met in context....

1. Meaning

- Is there context that helps me understand the meaning?
- Could this word be used to refer to people? Animals? Things? What else?
- Does this word have any positive or negative *connotations*?

2. Collocations

- Are there words that often occur before or after this word? (for example, *bar of _____*, where *soap* or *chocolate* might fit, but not *alcohol*)?
- Is it a phrasal verb (verb + preposition combination like *get up* vs. *get on*)?
- If it is a phrase, is it
 - fixed (*back and forth*, *in and out*)?
 - variable (*off and on* **or** *on and off*)?

3. Grammatical patterns

- verbs
 - Is the verb transitive (carry an object, like *I eat burritos*) or intransitive (do **not** carry an object, like *I work in a restaurant*.)
 - Can the verb occur in the passive?
 - The place *was robbed* by a woman.
 - The car *was parked* in the lot.
 - *The Reading and Vocabulary class is studied in by me.
- nouns
 - Is the noun count or non-count?
 - Is the noun a collective noun (for example, family)?

4. Word Parts

- Is the word a member of a word family? For example, *play* (noun and verb), *playfully*, *playful*
- Does the word have any useful word parts, like prefixes, roots, or suffixes that provide useful information?

5. Formality & Appropriateness

- Is the word used by and for both men and women?
- Is the word appropriate for both speaking and writing?
- Is the word appropriate at home? At school? At work?

Appendix Y

Example of Initial Codes

H. - Midsemester interview

(Diane invites H. to take a seat and prepares her notes for the interview)

Diane: What do you think about this notebook?

H.: This notebook is good. It is good for me. I use like this notebook before myself. (0.23)

Write new word, vocabulary, write definition, things, information. It's good, but the same.

You can write notebook, I write about family word now. But it's good. And then book to...

Diane: To show me. (0.45)

H.: Yeah. This side is good.

Diane: Mm-hmm. The word lists?

H.: Yes, the word lists. This is very good. But, if I can use this, it's very good. If I have the time

and if I use this new word, it's good for me. But I haven't time, you know, like last night you

called me I can't answer because I have work. (1.08)

Diane: Right.

H.: Uh, it's bad, you know. The time is very bad here, but this vocabulary is good for me. I

use this section, this section is very good for me.

Diane: Are you here on a green card? (1.25)

H.: Yeah, I have green card, because my parents here.

Diane: Okay, so you're planning on staying in the US. What do you...tell me about your job.

What do you do?

H.: I job in (1.34) Steak n' Shake Restaurant, Steak n' Shake. In the afternoon, like it start 5

until 11.

Diane: Uh-huh. Wow.

H.: Yeah. After school I going to home and eat something and go to work and come back to

home and eat dinner. Homework sometimes I'm doing homework in night, sometimes in the

morning, you know.

Diane: So, you don't have very much time.

H.: Yeah.

Diane: Do you work every night at Steak n' Shake? (2.05)

H.: Yep, every...only Wednesday, I'm off. Like today.

Diane: Oh, wow. Okay. So, you are already keeping your own notebook? (2.18)

Diane Taveggia 3/22/13 8:58 AM

Comment [1]: HVN

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Comment [2]: word lists

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Comment [3]: word lists

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Comment [4]: use

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Comment [5]: use

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Comment [6]: lack of time, work

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Comment [7]: adult responsibility

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Comment [8]: lack of time

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Comment [9]: word lists?

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Comment [10]: immigration status

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Comment [11]: work

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Comment [12]: work and school

Diane Taveggia 3/22/13 8:58 AM

Comment [13]: HVN