The Role of Vocabulary Notebooks

in the Retention and Use of New Words

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ABSTRACT

The Role of Vocabulary Notebooks in the Retention and Use of New Words

Giuseppina D'Onofrio

Research has shown that tasks that involve learners in explicitly attending to words and their meanings lead to retention and accurate use. However less is known about the types of tasks that are most effective. This study of secondary learners of English used a pre-post design to investigate the students' knowledge of 50 words they had studied using two notebook templates, one that focused largely on definitions and another that engaged learners in creating personal knowledge links. It was hypothesized that words entered in the notebook templates would be better retained than control words that did not undergo any treatment. The study identified learning results but the expected differences were not found. It also investigated whether vocabulary that the learners selected themselves for study would be better retained than words selected by the teacher. Contrary to expectation, results showed an advantage for teacher-selected items. A final question was qualitative in nature and looked into students' and a teacher's perceptions of the materials and the learning process. Results showed that over half of the students found the activities relatively easy to use. Most of the students found both templates to be useful. Although a little more than half of the students reported that they did not enjoy using the templates, the teacher was favorable. The findings are discussed in relation to classroom practice and future research.

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CHAPTER 1: INTRODUCTION

Using vocabulary notebooks in language classrooms has many potential benefits. Vocabulary notebooks can range from a loose-leaf binder to cards in a box; new words are recorded, analyzed, studied and used in future productions. They allow for learners' systematic inclusion of new words into an already known second language repertoire and can promote good organization of material to be learned. New words along with synonyms or translation equivalents listed in a notebook can be used to study in an efficient manner. More complex information, such as collocations, connotations and idiomatic uses, can be recorded and studied in ways that require deep mental processing and foster retention. They offer opportunities to recycle and review learned material at gradually increasing intervals of time as recommended by memory researchers such as Pimsleur (1967). Furthermore, vocabulary notebooks help to develop learner autonomy and accountability as students collect vocabulary of their own and employ learning strategies that are individually appropriate (Schmitt & Schmitt, 1995).

The manner in which students can remember many new and cognitively challenging words for long periods of time and use them effectively has been an issue of interest in vocabulary learning research for many years. There seems to be no clear consensus on how to organize vocabulary learning, and in my experience, most language teachers do not set aside classroom time to train students how to organize vocabulary learning effectively. I believe that the use of a personal vocabulary notebook is one way teachers can promote individual learning and verify to some extent whether the strategies used are helpful and useful. For these reasons, I decided to tackle the topic of using

vocabulary notebooks in recording target words and to test retention and appropriate use of these words as well.

As the literature review will show in the next chapter, very little empirical research has been conducted into what constitutes a good vocabulary notebook in terms of learning outcomes. Some studies provide sound pedagogical suggestions but do not offer much information in terms of actual classroom implementations and vocabulary learning results. To my knowledge, none addresses short-term and long-term learning among Quebec high school students. How learners in this context perceive vocabulary learning through the use of notebooks has not been addressed either. These are issues that the proposed research will explore.

The main goal of this thesis is to explore if the vocabulary notebook in and outside the English classroom significantly improves the use and retention of new vocabulary words. The vocabulary notebook will consist of two distinct graphic organizers that target particular vocabulary learning strategies. In depth explanations are provided in chapter 3.

The literature review in the next chapter begins with the explanation of positions held by researchers and theorists with regards to the role of instruction in acquiring new vocabulary knowledge. It is followed by four other sections: 1) a discussion of incidental and intentional vocabulary learning, 2) an examination of intentional vocabulary learning strategies, 3) an exploration of recent vocabulary notebook studies, and finally, 4) a detailed discussion of four selected vocabulary learning strategies (inferencing, sentence writing, dictionary use and semantic mapping/webbing).

CHAPTER 2: LITERATURE REVIEW

The majority of words in a learner's first language (L1) are learned through extensive and multiple exposures in the input; far fewer are learned through direct instruction; therefore, there is reason to think that vocabulary learning in a second language (L2) should follow the same route (Coady, 1993). However, according to the same author (1997), there are four distinct positions among researchers and theorists who have addressed the role of instruction in acquiring new vocabulary knowledge. One position is that it is essential to teach vocabulary learning strategies rather than vocabulary itself (Cohen, 1990; Oxford & Scarcella, 1994). A second position supports explicit vocabulary instruction combined with contextualized reading and the development of strategies such as guessing in context (Nation, 1990). A third approach in Allen (1983) argues for teaching vocabulary directly through practical classroom activities and traditional grammar-translation techniques; these are independent of any specific methodological frameworks. The last position is one with no role for direct vocabulary instruction at all since it assumes that students will acquire vocabulary naturally through extensive reading. A well-known defender of this position is Krashen, who claims that language can only be subconsciously acquired by understanding messages (1989). According to this view, new word knowledge is acquired through repeated exposures in a variety of contexts, and the learner does not need to consciously focus on words and their meanings. As long as the input is comprehensible, word learning is assumed to occur 'naturally'.

In the next section, recent research supporting two of these positions, that is, the combined approach (explicit vocabulary teaching with contextualized reading and strategy

development) and the exposure only approach (repeated exposures with no direct vocabulary teaching) will be examined more closely.

Implicit and Explicit Methods for Learning Vocabulary

There are two main forms of vocabulary learning: implicit (incidental) and explicit (intentional). Implicit learning relates to accidental learning of information without intending to remember that information (Hulstijn, Hollander & Greidanus, 1996); it corresponds to the fourth position outlined above regarding L2 vocabulary instruction, the view espoused by Krashen that posits no role for instruction.

In support of the fourth position (exposure-only), it is well established that incidental learning of word meanings does occur during normal reading and that children have no problem learning L1 vocabulary in context as they read and listen to the input. In L1 vocabulary acquisition, children learn very little vocabulary through direct instruction, partly due to lack of class time allotted to this type of exercise (Nagy, Herman & Anderson, 1987). In L2 acquisition, it has been argued that one learns new words through context when involved in extensive reading and listening activities (Schmitt & McCarthy, 1997), although research has focused mainly on the benefits of reading. Incidental learning can also occur through problem-solving group work speaking activities such as retelling, role play, ranking, interviews and information transfer activities (Joe, Nation & Newton, 1996).

Explicit learning refers to the conscious application of vocabulary learning strategies by the learner. There have been debates on which is more appropriate for learning new words. Schmitt and McCarthy (1997) believe that the implicit and explicit techniques are complementary and should be combined to attain the best results. They

propose explicit teaching when introducing a new word to provide some initial information about it, especially for the most frequent words of an L2; this provides the basis for the development of further word knowledge. Less frequent words are better suited to learning implicitly through extensive reading as little time is available to learn large numbers of them through conscious study.

Learning vocabulary without intentional focus on learning has been investigated in the L2 context. In a study of EFL students by Day, Omura and Hiramatsu (1991), high school and university EFL students in Japan were divided into experimental and control groups. The experimental groups silently read a short story in class for about 30 minutes. A multiple-choice vocabulary test of 17 items that occurred in the story was administered immediately after the reading exercise. Both the high school and the university experimental groups significantly outperformed the control groups who had not read the story. The authors concluded that "exposure to previously unknown or difficult words through sustained silent reading for entertainment by Japanese EFL students has a positive effect on their ability to recognize these words in a vocabulary test" (p. 545).

However, the number of exposures related to learning a new word varies. Nation (1990) stipulated that 5-16 exposures are needed in order to learn a word from context. A more recent study by Horst, Cobb, and Meara (1998) featured low intermediate EFL learners reading a 109-page book over a ten-day period. They found that only about one in five of the unknown words were learned. They also noticed that words which appeared over eight times in text were much more likely to be learned than words that were repeated less often.

According to Schmitt and McCarthy (1997), no single encounter with a word, either through direct instruction or in reading or listening is likely to lead to great depth of word knowledge. To date, results on exposure and vocabulary learning vary. However, a main conclusion shared by researchers is that the number of exposures needed for the mastery of a new word depends on other factors such as the salience of the word in context (Brown, 1993). In other words, what makes a word stand out from the others is what draws the learner's attention. The richness of contextual clues, the learner's interest and the size and quality of his/her existing repertoire of vocabulary are also important factors to be considered when learning new words (Nation & Hwang, 1995).

As we have seen, studies show that incidental vocabulary learning is not always effective. The problems cited are that many encounters are needed, only a few words are learned per reading event, most students do not read enough to get multiple exposures and word salience is not properly addressed.

With regard to the position that advocates a combined approach, research shows that acquisition can be speeded up by consciousness raising tasks and explicit instruction. In other words, adding explicit vocabulary teaching to learning through exposure is worth the effort. For instance, in a study by Paribakht and Wesche (1997), young adults from various L1 backgrounds at the University of Ottawa's Second Language Institute were exposed to two treatments: one was a reading-only treatment, which entailed doing a series of vocabulary exercises based on target words from readings and then reading a supplementary text which presented the target words from the main text again. The other one was a reading-plus treatment, which entailed a similar initial exercise, but then instead of reading a second text, students completed a second series of vocabulary exercises based

on target words from the readings. All the subjects gained in vocabulary knowledge when tested; however, more words were learned and word knowledge reached higher levels in the reading-plus treatment.

Further support for the combined approach comes from a study by Laufer and Hulstijn (2001) in which short and long-term retention of ten unfamiliar words in three learning tasks (reading comprehension, comprehension plus filling in target words and composition-writing using the target words) were investigated. A cognitive 'involvement load' factor was considered in explaining the retention effects. Results showed that retention was highest when participants completed the most effortful and 'involved' task, that of using target words in a composition; results were lower in a reading plus fill-in-the-blanks task and lowest of all in the condition where participants simply read a passage that contained the target words and completed a reading comprehension exercise. The authors conclude that a greater degree of involvement such as that required in using the words in writing led to a greater retention of the new words.

In a series of longitudinal case studies, Parry (1991, 1993, and 1997) also demonstrated that a combination of incidental exposure and intentional study techniques contributed to learning of L2 academic vocabulary during reading. For instance, in her 1997 study, Parry explored the vocabulary learning of two ESL learners at Hunter College of the City University of New York as they read their anthropology textbook. Both learners encountered new words in context, guessed meanings, looked up some of the new words, and made glosses, in a process that involved intentional as well as incidental learning. Although overall word learning results in this study were low, there was evidence that words that the learners looked up and noted down were retained.

All three studies mentioned above clearly point to the advantages of intentional

techniques in combination with opportunities for incidental learning. Having made the

case for the benefits of adding vocabulary tasks to reading activities, I now turn to studies

of tasks and strategies that can be used in intentional vocabulary learning. These are

explored in the next section with a view to identifying those suited for inclusion in the

proposed notebook study.

Vocabulary Learning Strategies

Vocabulary learning strategies (VLS) make up a subclass of language learning

strategies. A number of researchers have proposed ways of classifying VLS. From a

general language learning perspective, Oxford (1990) has identified two approaches:

direct (memory/cognitive/compensation) and indirect (metacognitive/social/affective)

strategies. This distinction is relevant to classroom vocabulary learning tasks. While

instructors may be able to design word learning tasks that address the direct aspect (i.e.

requiring students to look words up in dictionaries), they may be less able to influence the

indirect aspects such as learners' motivation to learn new words in their L2.

In VLS taxonomy development, Stoffer (1995) and Schmitt (1997) have played a

major role. Stoffer developed a Vocabulary Learning Strategy Inventory (VLSI)

containing 53 items. The 53 VLSI items are grouped into nine categories: strategies

involving authentic language use, those used for self-motivation, word organization,

creation of mental associations, memory strategies, strategies involving creative

activities, strategies involving physical action, strategies used to overcome anxiety, and

auditory strategies. Of these strategies, word organization and creation of mental

associations lend themselves to word learning in a reading context. Schmitt developed a

comprehensive inventory of individual VLS (58 items), and classified them along two dimensions. The first classification dimension was adopted from Oxford (1990), who grouped learning strategies into four categories: social, memory, cognitive, and metacognitive. Schmitt introduced a fifth category, *determination* (DET) strategies which accounted for discovering new word meanings without the aid or expertise of other people. Of these categories, cognitive, metacognitive and determination strategies are most suited to a reading-related notebook study. Another classification dimension was proposed by Nation (1990) and reflects the distinction of initial discovery of word meanings (*discovery strategies* - DISCOV) and remembering (*consolidation strategies* - CONS). Both dimensions are relevant to word learning in a reading context.

Other notable classification schemes have been put forth by Nation (2001, p. 218) and Gu and Johnson (1996). Nation distinguishes strategies relating to the *planning* of vocabulary learning (i.e. choosing words, planning repetition) from strategies involving access to *sources* of vocabulary knowledge (e.g. analyzing word parts, using parallels with other languages), and learning *processes* (noticing, retrieving, and generating). Gu and Johnson (1996) have developed a vocabulary learning questionnaire containing several strategies which are divided into the following major categories: beliefs about vocabulary learning, metacognitive regulation, guessing strategies, dictionary strategies, note-taking strategies, memory strategies (rehearsal and encoding) and activation strategies. Of these strategies, metacognitive regulation, guessing strategies, dictionary strategies and note-taking strategies are the most relevant to recording new words in a notebook.

In Schmitt (1997), a survey procedure was conducted with 600 L1 Japanese speakers who were taking EFL classes at four different levels: junior high, high school, university and adult students. The respondents were asked a) if they used a particular strategy, and b) if they found it to be useful. It was found that the most-used strategies in discovering meaning were consulting the dictionary (85%) and guessing from textual context (74%). With regard to consolidating meaning, verbal and written repetition tied at 76%, while studying the spelling was a close second (74%). In looking at most helpful strategies, consulting a bilingual dictionary was very popular (95%), and asking teacher for a synonym or paraphrase came in at 86%. With regard to consolidating meaning, saying a new word aloud and written repetition tied in at 91%, while connecting the word with synonyms and antonyms was 88%. Even though the results were not directly linked to vocabulary notebooks per se, such perceptions by young learners do provide further support for the implementation of certain strategies in note taking. The use of a dictionary, context clues, and synonyms were included in my notebook study.

Gu and Johnson's study (1996) noted that a characteristic of successful learners was that they knew what their vocabulary goals were and chose vocabulary to work on in terms of these goals. They also used a wide variety of vocabulary learning strategies. These authors and others (Lawson & Hogben, 1996) note that successful word learning is consistently linked to using a wide variety of learning strategies. However, Gu and Johnson also found that a majority of learners tend to favor mechanical strategies such as repetition over deeper processing ones such as contextual guessing or metacognitive strategies.

In sum, learning strategies proposed by these researchers that are relevant to reading-related notebooks and are associated with positive learning outcomes include dictionary search, word organization, creation of mental associations, and memory strategies. Finally, it is important to point out that all of these investigators' research was based on surveys, not on what the learners actually did and no connection was made between use and learning. My research will address this shortcoming by exploring the relationship between use of specific strategies and word learning outcomes.

Vocabulary Notebooks

Vocabulary notebooks are assumed to have many advantages for L2 word learning. First, they can be used to implement research-based principles for vocabulary learning. Second, they are practical because they can easily be set up in any L2 learning environment and require few special materials on the part of learner. Third, they can act as an assessment tool and, lastly, they can foster learner independence. Each of these will be discussed in turn in the following paragraphs.

Schmitt and Schmitt (1995) describe eleven principles from memory and language research that are relevant to learning through vocabulary notebooks. First, notebooks help learners to incorporate new words into an already known language repertoire. Second, notebooks promote easier learning through effective material organization; the target words are systematically displayed on the page including such elements as lists of derivatives, mnemonic cues and stylistic information. Nation's (2001) overview of studies shows that learners who organize their vocabulary learning make better progress than those who do not. Third, words which look similar but have different meanings (e.g. *contact* and *contract*) should not be learned at the same time to avoid confusion. Teachers

can help students organize notebooks to avoid this. Fourth, word pairs (native word/English word) listed in a notebook can be used to study many words in a short period of time. Fifth, knowing a word entails more than just knowing its meaning. It involves knowing its spelling, derivatives, pronunciation, morphosyntax, collocations and connotation; notebooks can be designed to facilitate knowledge of these aspects. Sixth, learners can use notebooks to explore word meaning in-depth by using deep mental processing activities such as inferencing and semantic mapping; this can facilitate rapid word recall. Seventh, recalling a word makes it more likely that a learner will recall it again later. Notebooks can be easily set up for recall practice, for example, by listing words on one side of a page and definitions on the other. Eighth, learners must pay close attention to the vocabulary exercise by looking at context. Ninth, words need to be recycled to be learned. The words in a notebook can be easily incorporated in future written work or oral assignments. Tenth, an efficient recycling method involves 'expanded rehearsal'. In order to learn something, it is important to revise soon after the first learning experience, one hour later, then 24, then a few days, then a week and so on. This distributed learning schedule is easy to implement using notebooks. Finally, learners are individuals and have different learning styles. They may learn better with one vocabulary learning strategy than another. Notebooks allow for the flexibility of choosing one strategy over another.

The second set of advantages pertains to practicality. First, the set-up of vocabulary notebooks is relatively easy and can vary from one learning environment to another, such as the different content areas. Learners can easily review what they have done over the course of the week and can take their notebook anywhere with them for review. Second,

this tool is not dependent on technology or expensive resources and any language teacher can utilize it. Third, the nature of vocabulary notebooks is non-threatening for both learners and teachers. They can easily be implemented in schools and language departments (Fowle, 2002).

As for format, vocabulary notebooks can range from a loose-leaf binder to cards in a box. The latter has advantages: it is portable, convenient to carry around, easy to study during free time and can be moved around (i.e. learnt words are placed in back of the pile). Loose-leaf binders can be used to allow more entries over time. Pages with better-known words can be moved to the back of the binder, whereas those with lesser-known words moved to the front; this would facilitate the expanded rehearsal principle. The principle suggests that words at the front be given more attention since they are not yet memorized at the basic L2-L1 translation level, while the words in the back (for which translation equivalents have been learned) would need to be enriched. Enrichment exercises include drawing semantic maps, tallying the word every time it is heard, analyzing word parts such as roots and derivatives, using keyword illustrations and so on (Schmitt & Schmitt, 1995).

The third set of advantages is in the area of assessment. The learner can monitor and assess his/her learning and take responsibility for his/her learning. Learners who keep personal vocabulary notebooks often use retrieval strategies. They cover up part of the entry, so as to retrieve the word during study/review (Schmitt & Schmitt, 1995). The teacher can also collect vocabulary notebooks on a regular basis to see if the vocabulary learning strategies are appropriately implemented by the students and whether vocabulary retention is directly linked to this systematic approach of learning target words.

Finally, using vocabulary notebooks on a regular basis can easily foster learner independence. Although resource materials such as a dictionary, textbook, teacher or classmates may be consulted to predict, verify and evaluate new word meanings (which can also be done through small-group and class discussions), the learner must be able to eventually discover and develop word meanings on his own through the use of various vocabulary learning strategies. Sokmen (1997) argues that learners need to acquire vocabulary on their own; vocabulary notebooks model a method for doing this. The teacher shows, suggests and models ways to learn new words and learners choose which ones are best for them (Schmitt & McCarthy, 1997). Oxford (1990) also states that self-direction is directly linked to successful learning. If the learner is spoon-fed by the teacher and not encouraged to take responsibility for his/her own learning and potential, then just teaching new strategies is useless in her view. Oxford notes that training is pivotal in interesting and motivating learners to keep and use notebooks.

Implementing Notebooks

As argued above, effective usage of vocabulary notebooks needs to be modeled by the teacher. Fowle (2002) states that although vocabulary notebooks are considered to be personal dictionaries, it is essential that teachers model one to introduce the new concept and initially guide the students in notebook organization and in the selection and recording of words. In his study, it was stressed that the students decided which words to include in their notebooks, depending on whether the word was new, useful or interesting to them. He points out that the tasks and strategies involved in using vocabulary notebooks helped learners become more self-confident as language learners in supported and structured ways since they realized that there were alternatives to teacher-dependent learning and they had

an active role in the learning process. They apparently became more aware of their own responsibility and ability to evaluate their learning needs.

Haggard (1982) proposes the vocabulary self-selection strategy (VSS) which can easily be implemented in any second language classroom. It consists of students bringing new words found in reading or listening excerpts to class, sharing words in groups and selecting a few to be learned for the week, having the teacher clarify, elaborate and extend word meanings in class discussion, entering words in vocabulary notebooks and creating writing assignments, activities, games and tests for practice, all on a regular basis.

Schmitt and Schmitt (1995) believe it is a good idea to take vocabulary notebooks in to be checked and commented on by the teacher. The students set goals for their learning of new vocabulary and teacher's feedback can provide them with information on their progress, as was seen in the study by Fowle (2002). They also suggest that the entries can change as the learner's understanding of the lexis changes over time (Schmitt & Schmitt, 1995). Various modes of recording vocabulary exist, such as translation, parts of speech, pronunciation information, English definitions, collocations, synonyms and antonyms, pictures, mnemonic devices such as keyword, and semantic mapping. Initially, the learner may opt for a simple definition or translation and later add more complex information as word knowledge develops. Gairns and Redman (1986) believe that the more techniques or systems a learner uses to record word knowledge and the more exposed he or she is to target items, the easier it becomes to retrieve words and their meanings efficiently.

The Effectiveness of Vocabulary Notebooks

The study by Fowle (2002) is backed by qualitative evidence such as the teacher's and students' comments, as well as the researcher's observations of effectiveness and usefulness of vocabulary notebooks. Fowle observed that notebooks promoted learner independence since the students decided which words to include based on what was new, useful or interesting to them. In his study, the students realized that vocabulary learning was not necessarily dependent on explicit classroom instruction and that they took on an active role in the learning process as they became more responsible and accountable for new word learning. They also realized that language learning is personal because the notebooks address their individual needs and interests.

Sanaoui (1995) conducted a series of longitudinal case studies that investigated approaches to vocabulary learning taken by learners of French as a second language. The ones who kept notebooks reviewed what they had done several times during the week and even took their vocabulary notebooks to review during free time. They also tried to use the items they learned by listening to the radio, speaking with friends, reading, and self-study. It was a planned approach in which vocabulary learning was organized around a certain schedule. These students made better progress in learning vocabulary generally than those who followed an unstructured approach and who did not review their lists. However neither this study nor Fowle's investigated learners' retention of the specific items they had recorded in their notebooks.

Notebooks in vocabulary acquisition are argued to have many advantages related to L2 learning. They promote deep mental processing, expansion and recycling of knowledge. They are also practical because they require little material for set-up and are

easily accessible and affordable. Vocabulary notebooks also serve as a convenient assessment tool for both the learner and the instructor. Learners can use retrieval strategies as they review the new words and the teacher can collect the notebooks to observe if the new words are well organized and if entries are accurate. Finally, notebooks are seen as a planned and systematic approach to vocabulary learning in which students choose new words they find interesting or useful. This helps them to develop autonomy which is directly linked to increased motivation due to the active involvement factor. With regard to implementation, studies suggest that the teacher should model appropriate ways to select, record and organize new words. As for effectiveness of vocabulary notebooks for the learning and use of new words, there seems to be little empirical evidence. However, researchers' and teachers' observations, as well as teachers' and students' comments from surveys, do provide qualitative support for their usefulness and helpfulness.

Four vocabulary learning strategies: inferencing, sentence writing, dictionary use and semantic mapping/webbing

This section looks at four ways of learning new words and their meanings: inferencing, sentence writing, dictionary use and semantic mapping/webbing. The choice of these four reflects their efficacy as established in experimental research. Unlike keyword and other methods that rely on a word being imageable, these methods can be applied to any word. Research that explores the relationship between each method and its usefulness in learning and retaining new vocabulary is explored in the next sections. I believe that a selection of various vocabulary learning strategies allows more flexibility on the part of the learner in using them and adapting them to their individual learning styles.

Inferencing

Inferencing (guessing word meanings from context) is a compensation strategy essential for skilled L1 as well as L2 reading comprehension (Bialystok, 1983). In fact, lexical guessing is seen as a popular approach to text processing in L2 reading (Bensoussan & Laufer, 1984; Fan, 2003; Harley & Hart, 2000). Several researchers have identified the vocabulary learning benefits of involving students in activities that require them to guess the meaning of new words from context. In a study by Horst, Cobb and Meara (1998), using a long text in a graded reader and two kinds of vocabulary tests, one in five new words were learned to a certain degree. Since the learners had no access to dictionaries, the learning can be assumed to have occurred through inferring from context. The length of the text, and the simplified language were seen as facilitating factors.

The usefulness of learning through inferring word meanings from context is confirmed in a study by Fischer (1994). This study investigated the effects of both contextual and definitional information on vocabulary learning. Ninety-four 11th grade German high school students, all advanced learners of English, received either a text with unfamiliar English words or the same unfamiliar words and their monolingual English dictionary entries. A third group of participants were given both text and dictionary entries to study. To test their knowledge of the words, participants used each target word in an English sentence; they then translated the sentences into German. The translations showed whether students had understood the target word meaning and allowed for the specification of comprehension strategies. The participants who had received both the text and the dictionary entries performed worse than students in the other experimental groups. Interestingly, subjects who had access to words in context replaced the unfamiliar words

with familiar words conforming to contextual constraints that were largely correct. But subjects in the dictionary group tended to ignore the context and simply substitute a relevant part of the definition of the target item. The study provides support for the idea that the contexts in which words are used are helpful in acquiring an adequate understanding of their meanings.

Haastrup's arguments (1989, as cited in Nation, 2001) provide an explanation for the positive effect of guessing from context: words are remembered better if it is difficult to interpret them. This hypothesis is based on studies by Cairns, Cowart and Jablon (1981, as cited in Nation, 2001) and Jacoby, Craik and Begg (1979, as cited in Nation, 2001), who point out that making difficult decisions about a new word results in better retention. According to the latter, highly predictable words are easily processed but have low saliency in memory.

Further confirmation comes from a study by Fraser (1999). Introspective data from eight Francophone university students was collected over a five-month period. She found that more vocabulary was retained from inferencing when the inferring was followed up by consulting a dictionary; this verification phase almost doubled the retention of new words. The participants felt more certain about the word meaning than if they just ignored the word and continued reading, or consulted a dictionary without inferencing.

In conclusion, inferencing has been shown to be important in acquiring adequate understanding of word meanings. Learning through contextual encounters was also found to be effective for word retention. In addition, research indicates that if new words are difficult to interpret, they are likely to be remembered better; lower predictability results in higher saliency in memory. More vocabulary is retained when followed by consulting a

dictionary. This sequence of guessing and verifying word meanings can be easily

implemented as a teacher-guided notebook-making task.

Sentence Production

Another vocabulary learning strategy that promotes target word retention is writing

sentences. Writing a new word in a sentence demands that the learner use both semantic

elaboration and output. Semantic elaboration is used because a learner must retrieve the

word meaning and the contexts in which it can be used. Researchers have argued that the

use of semantic elaboration in sentence writing should promote the learning of new words

(e.g. Coomber, Ramstad & Sheets, 1986). Swain (1985) posited that output can help

learners because it requires them not to rely too much on top-down processing strategies

and contextual clues used during comprehension, and instead, requires them to rely more

on the specific means of expression and syntax needed to produce language. This is

consistent with the views of researchers such as Laufer (1997, as cited in Barcroft, 2004),

who have argued that the output involved in sentence writing can facilitate lexical

learning.

Experimental support for sentence writing and new word learning comes from an

L2 lexical learning study by Brown and Perry (1991). Arabic students learning English

vocabulary were evaluated in three study conditions. There was a keyword condition

which consisted of studying the new word, definition and its keyword (an L1 sound

associate that functions as a mnemonic). There was also a semantic condition, which

involved studying two examples of the word in sentences and answering a question using

the new word. The third keyword + semantic condition included study using both the

keyword and semantic resources of the other two conditions. One week later in delayed

testing, the highest retention was found in the keyword-semantic strategy. This shows that semantic elaboration (i.e. sentence writing) in combination with mnemonic cues such as keyword can result in greater retention of new words.

Further support for using words in sentences comes from a study by Bower and Winzenz (1970, as cited in Ellis, 1997). Subjects completed a vocabulary learning task which involved associating fifteen pairs of words using sentence generation. They were asked to make and say aloud a sentence that related the two words. This semantic mnemonic strategy resulted in effective long-term paired-associate learning.

More recent support for sentence writing comes from investigation of the *Involvement Load Hypothesis* (Laufer & Hulstijn, 2001). The hypothesis states that higher involvement with a word induced by a task will result in better retention, whether it be an input or output task. The three factors that contribute to involvement are: need, which is a motivational, non-cognitive dimension, and search and evaluation, which are the two cognitive dimensions. Need is primarily concerned with achievement. In other words, it is based on the drive to carry out task requirements. Search is the attempt to find the meaning of an unknown L2 word. Evaluation implies that the learners examine the given words with other words and the multiple meanings a word may have to determine the meaning that best fits a particular context. Since using new words in original sentences entails a great deal of evaluation, this task was assigned a high involvement load. Results confirmed the hypothesis; that is, learners who used new words in sentences retained more words than students who performed less demanding tasks.

Newton (1995) found that words that are negotiated for meaning (i.e. used in sentences) are retained better than those that are not negotiated. Negotiating a word

involves a "need" generated by the learner and also a search for meaning. In Joe's case study (1995) of an L2 adult learner of English, it was also found that higher levels of sentence generation led to more receptive and productive vocabulary knowledge increases. In other words, when words are used in a learner-generated, original context, they are remembered better than if used in a non-original context or not at all.

To summarize, studies consistently confirm the idea that semantic elaboration in sentence writing fosters new word learning and retention; they also show that a variety of production tasks (oral and written) can facilitate lexical learning. Sentence writing is a task that can be easily integrated into a vocabulary notebook and the research reviewed above attests to its potential usefulness.

Dictionary Use

Next I turn to the third vocabulary learning strategy, dictionary use. This is a popular strategy with language learners everywhere. In a study by Harley and Hart (2000), it was discovered that L2 vocabulary strategies popular with 35 secondary school learners of French in Canada included guessing word meanings from contexts, using bilingual dictionaries and asking the teacher or friends for help. In his survey of about 600 Japanese learners of English, Schmitt (1997) found that dictionary use was the most popular strategy used by the participants.

In addition to being popular with learners, dictionary use also aids learning. Hulstijn, Hollander and Greidanus (1996) compared the amount of vocabulary learning in three reading conditions: one where participants had access to marginal glosses, another where they used bilingual dictionaries, and a third control or no aid group; the 78 Dutch students were advanced students of French. After reading a short story in French, they

were tested on recall (recognition and cued recall of meanings of 16 target words). Results indicated the dictionary group seldom looked up the words (only 12% of words). But when they looked up the words, the retention rate was higher than the overall retention rate of the marginal gloss group (25% compared to 18% on words that appeared once and 63% to 35% on words that appeared three times).

Further support for dictionary use comes from a study of college level ESL students in which results show that dictionary use promoted L2 vocabulary learning (Luppescu & Day, 1993). They found that this was especially true for students who were at lower levels of proficiency. Additional evidence comes from Knight's study (1994), which analyzed the relationship between vocabulary learning and the use of bilingual dictionaries. The participants, 293 Japanese university students studying English as a foreign language, read a story that contained 17 unknown words whose meaning could be inferred. The results show that the students who used a dictionary scored significantly higher on a multiple-choice vocabulary test than students who did not use a dictionary.

Scholfield (1982) argued that using a dictionary should not be seen as a technical and passive activity, but rather as a complex process of hypothesis testing that involves the active participation of the learner. In other words, he sees dictionary use as an activity that involves learners in deep processing, and there is reason to think that this promotes retention. The studies mentioned above consistently point to the learning effects of dictionary use. Dictionary definitions also are an obvious choice for inclusion in vocabulary notebooks.

Next I turn to the last vocabulary learning strategy to be discussed here: semantic mapping. Semantic mapping was originally developed as a cognitive tool for identifying and organizing levels of meaning and for categorizing knowledge, especially in the scientific domain (Novak, 1990). Also used in second language and content-area instruction, it allows students to group semantically and syntagmatically related vocabulary items that often co-occur in discourse. An example of a semantic map is provided in Figure 1. Johnson and Pearson (1984) state that semantic mapping consists of a categorical structuring of information in graphic form. It is an individualized content approach because new words are linked to students' own experiences and prior knowledge.
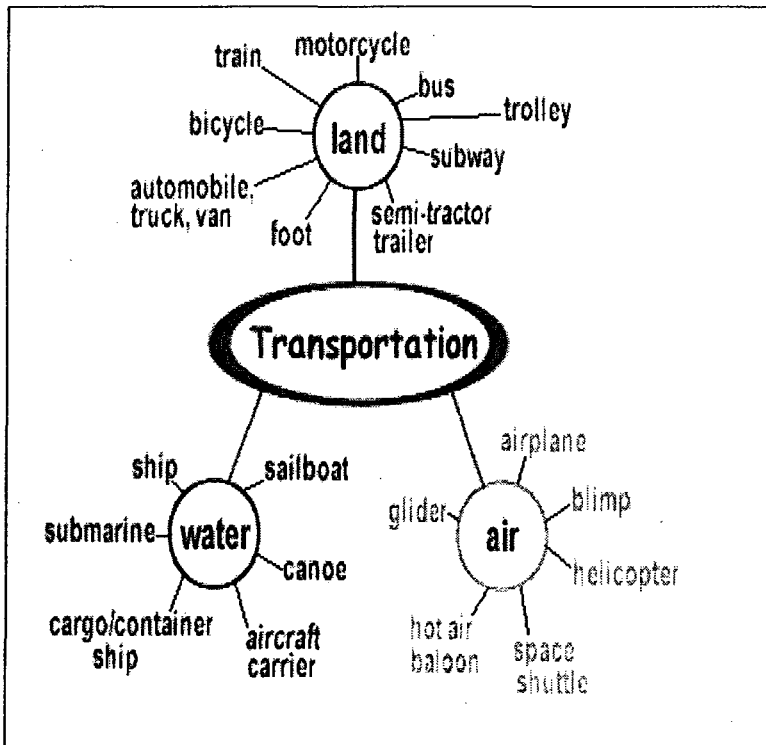
Figure 1. Sample of a semantic map for the word transportation.

Four main benefits are generally cited for using semantic mapping: (1) it aids in visualizing the association among words or concepts (contextual and linguistic information); (2) it involves thinking about relationships; (3) it helps processing and remembering information about vocabulary over time and (4) it allows adding additional information to the map over time; there is a dynamic process involved here as word meanings grow and/or change.

Experimental support for learning L2 words through semantic mapping comes from a study by Morin and Goebel (2001) in which one group of first-semester University Spanish students were encouraged to acquire new vocabulary words through small- and large-group oral activities plus semantic mapping. Another group participated in similar oral activities but did not use semantic mapping. The subjects who were exposed to semantic mapping and got engaged in communicative activities did not appear to have an immediate advantage in terms of number of L2 vocabulary words learned, as compared to those that did not use semantic mapping. However, learners in the semantic mapping group ranked their familiarity with L2 vocabulary more highly and were able to group more L2 vocabulary by thematic heading (12 % more) than learners in the oral activities group.

In another study involving semantic mapping by Harley, Howard, and Roberge (1996), the role of direct vocabulary teaching among English-speaking secondary school students learning French as a second language was explored. The open-ended mapping activity was designed to be used as a pre-reading brainstorming activity done as a whole class with the aid of the teacher, as an independent pre-reading and/or post-reading activity in small groups, or as an individual homework assignment. In their initial questionnaire responses, students opted for learning words in lists with English translations, but in the

post-treatment interviews, some students indicated that semantic mapping was a valuable and more interesting alternative. This was due to the discussion involved and the fact that there was more mental effort or cognitive processing involved in the individual creation of a network. The experience with semantic mapping in these classes of two different age groups (grade 9 and 11) and proficiency levels (extended and French immersion) was positive. However, retention of knowledge of specific vocabulary used in the mapping activities was not tested.

In a study by Margosein, Pascarella and Pflaum (1982), 44 seventh and eighth grade students in a Mexican-American community were randomly given two ESL vocabulary instruction treatments. One consisted of context-rich, three-sentence passages as sources for target word definition. The other consisted of semantic mapping which had students study 71 new words through the identification of similarities and differences with related, known words. The semantic mapping group subjects studied each word with three words that had similar meanings, but were simpler and more familiar. The context clues group studied the same words with the teacher, but in this condition, the students were given short simple explanatory paragraphs and clues were provided to assist in word meaning. The semantic mapping group scored significantly higher than the context clue group on two tests during and after the treatment.

Several studies in a research series were conducted between 1980 and 1985 by researchers such as Johnson and Pittelman. These L1 studies confirm the usefulness of semantic mapping in learning and retaining new word knowledge. For instance, in 1982, a study by Johnson, Toms-Bronowski and Pittelman compared semantic mapping and semantic features analysis to contextual analysis as instructional strategies for general

vocabulary acquisition. About 1000 children from 36 fourth, fifth and sixth grade classrooms were taught three vocabulary lessons per week for three weeks. The participants who were taught vocabulary words through semantic mapping and semantic features analysis significantly outperformed those who learned through contextual analysis. A delayed post-test was given four months later and word retention was greater in the semantic group than for those in the contextual analysis group.

However, there is also counter evidence: In a study of L1 learners, Stahl and Vancil (1986) investigated the effectiveness of semantic mapping and semantic feature analysis. To determine if it was an effective treatment for teaching word meanings, the semantic mapping treatment was divided into its component parts: (1) teaching word meanings using extensive classroom discussion and (2) developing a map showing the relations between new words and already known words. A group of sixth graders were given a full semantic mapping treatment and compared to other similar groups who were given partial treatments: discussion of word meanings in relation to the words used on the map but without the physical map or only studying the map without discussion. Three post-tests were used to gauge the treatment effects: a multiple-choice synonym test, a sentence cloze test and a sentence anomaly test. On the first two measures, both the full and discussion-only groups scored significantly higher than the map-only group. No differences were noted between the groups on the sentence anomaly test. The results suggest that discussion, not the presence or absence of a physical map, is essential in semantic mapping.

The evidence for the usefulness of semantic mapping is mixed, but the majority of the studies outlined above found that users became more familiar with new words and

categorized vocabulary better than those who did not use the strategy. This is clearly also an activity that can be easily implemented in a vocabulary notebooks project; it is one of the activities specifically recommended by Schmitt and Schmitt in their discussion of notebooks.

Strategies Learners Use and Believe to be Useful

Finally, I turn to the learner's perspective on the usefulness of vocabulary learning strategies. The latter are supposed to be beneficial to the learner, and so one must consider what he/she thinks of the various strategies (Schmitt, 1997). The emphasis in this kind of research should be on asking what students *are* doing rather than on what they think they *should be* doing, according to Hosenfeld (1976, as cited in Schmitt, 1997).

In his study of learner preferences, Fan (2003) reported that lexical guessing was among the most frequently used strategies by his participants, a total of 1067 ESL learners in Hong Kong. Gu and Johnson (1996) also found that contextual guessing of unknown words was a popular strategy and its frequent use correlated highly with increased proficiency.

In Schmitt's (1997) study of EFL learners, 600 subjects who spoke Japanese as an L1 and ranged from junior high to university and adult students, were surveyed on strategy use and perceptions of strategy helpfulness. Word discovery and knowledge consolidation strategies were investigated. The most helpful strategies were the following: in meaning discovery, the use of a bilingual dictionary ranked highest (95%), followed by asking the teacher for paraphrase/synonym (86%), and analyzing pictures/gestures (84%). In meaning consolidation, saying a word out loud and written repetition tied for first place (91%),

followed by connecting the word with synonyms/antonyms (88%), and studying spelling (87%). Taking notes in class was also high at 84%.

However, if one looks at the results of the most *used* strategies in meaning discovery by the same learners, the use of bilingual dictionaries (85%) followed by guessing from textual context (74%) and asking classmates for meaning (73%) were the most common. In meaning consolidation, studying spelling (74%) and saying the word aloud (69%) were the most common.

In conclusion, these studies showed that lexical guessing, the first of the four strategies reviewed in detail above, was generally popular. In meaning discovery, the use of a bilingual dictionary received the highest number of votes; this strategy was also discussed above. In meaning consolidation, saying a word out loud and written repetition tied for first place. The two other strategies that I reviewed in detail, sentence writing and semantic mapping, were not mentioned and perhaps not used extensively.

Conclusions Drawn from the Review of Literature

In summary, the research I have reviewed suggests that a combination of the incidental and intentional approaches to vocabulary learning is likely to be effective. Incidental learning has its limitations in that many encounters are needed, few words are learnt per reading and most students do not read enough for this method to be effective. Research shows that when reading is supplemented by consciousness-raising tasks and direct vocabulary instruction, word learning increases. Intentional techniques lead to greater number of words learnt, higher word level knowledge attained, and higher levels of retention due to more active cognitive engagement.

Four intentional vocabulary learning strategies (inferencing, sentence writing, dictionary use, and semantic mapping) lend themselves to inclusion in a notebook project and have been consistently proven to be effective ways of learning and retaining new words in empirical studies. Surveys of learners showed that lexical guessing and consulting a bilingual dictionary were the most often used while the latter was considered the most helpful. Semantic mapping can also lead to positive results in terms of learning new words, especially when combined with discussion.

The four learning strategies discussed above will be incorporated in different ways in two distinct vocabulary notebook formats, the PAVE (Prediction, Association, Verification and Evaluation) and CAIV (Contextualization, Association, Individualization and Verification) templates. Samples of these graphic organizers appear in Appendix B and Appendix C respectively. The extent to which new words recorded using the two formats are learned and retained will be tested with secondary learners of English in an experiment that involves them in noting new words encountered in reading class and completing measures of word knowledge.

I am not aware of other L2 notebook studies that explore learners' use of this combination of vocabulary learning strategies in relation to their effectiveness in promoting learning and retention. Both teacher- and student-selected vocabulary during-reading or post-reading exercises need to be investigated in order to be consistent with the true philosophy behind notebook keeping. That is, since notebooks are expected to encourage the development of autonomous learning through personal selection and exploration of new words, the study is designed to allow students to select the new words they will enter in the notebooks and linking word meaning, context clues, word association

and sentence writing. Therefore, I am convinced that the experiment is well positioned to shed new light on the usefulness of vocabulary notebooks.

Based on the previous literature review, the following are my research questions and hypotheses.

(1) Are the target words recorded in the vocabulary notebook better retained and used more accurately than the control words that do not undergo this treatment?

(2) Which method is more effective in vocabulary retention and use: the definitions-based graphic organizer (PAVE template), or the associations-based graphic organizer (CAIV template)?

(3) Is teacher-selected vocabulary better retained than student-selected vocabulary?

(4) Which graphic organizer is perceived to be more useful by students and the teacher: PAVE or CAIV?

The hypothesis for Question 1 is that the target words recorded in the vocabulary notebook will be better retained than control words that do not undergo a treatment. The act of looking at a word, making associations with prior knowledge, consulting a dictionary and making inferences are linked to deeper mental processing and active involvement factors, whereas in the control group, there is no such process. The CAIV template designed by the researcher consists of a unique and multifaceted approach to word questioning. Inferencing or looking at context clues (contextualization), associating the target word with synonyms and similar examples (association), personalizing these responses (individualization), and verifying word meaning with the use of a dictionary (verification) are the four components of this graphic organizer. I believe it will engage the learner in a deep processing of the word. The utilization of the PAVE template also

engages the learner in demanding tasks that can be expected to promote more learning than the control treatment. Predicting word meaning (prediction), associating the new word with a symbol or picture (association), verifying word meaning with a dictionary (verification) and evaluating the definition with a second verification (evaluation) play a role in this graphic organizer.

The hypothesis for Question 2 is that the associations-based graphic organizer (CAIV) will be more effective in vocabulary learning than the definitions-based PAVE because the learner needs to analyze word meanings in a variety of ways using both inferencing and description through webbing to gather information. The learner is focused on rich associations that are personalized, and not simply on meaning.

The hypothesis for Question 3 is that student-selected vocabulary will be better retained than teacher-selected vocabulary because there are elements of choice, accountability and autonomy involved in the process. The learner chooses the new words he/she deems to be important and useful to the general understanding of a reading text. He/she is accountable for the selection of the target words as the exercise serves as a during-reading activity and is essential in order to accomplish such tasks as getting the gist and/or details of the story. The learner develops autonomy in choice of target words and assumes an active role in his/her learning.

The hypothesis for Question 4 is that the learners and the teacher will perceive the CAIV graphic organizer to yield better results simply because of the combination of vocabulary learning strategies, the appealing visual presentation (different shapes) and personalized content (activation of background knowledge and personal examples). The

preference for one graphic organizer over the other is difficult to predict since previous

research has not addressed this comparison.

CHAPTER 3: METHOD

A study of grade 10 students was conducted to assess the three different treatments for remembering new word meanings and using the new vocabulary appropriately. The vocabulary was both researcher/teacher-selected and student-selected.

Participants

Three groups of about 30 grade 10 students from a high school in northeast Montreal participated in this study. Each group consisted of a roughly equal number of female and male students. All participants took the regular stream ESL course; i.e. they were not in advanced ESL classes where language arts are the focus. They all obtained a passing grade of at least 60% in grade 9. The average age of students was approximately 16 and the ethnic composition was roughly as follows: 50% francophone and 50% other (mostly Latino, Arab, Haitian, and Asian). The latter group consisted predominantly of first generation immigrants and their average stay in Montreal was estimated at approximately 10 years; all had studied in French medium secondary schools and had a relatively high level of proficiency in French.

The grade 10 teacher who taught the three groups had 25 years of ESL teaching experience at the time and was involved in teaching the various vocabulary strategies as well as explaining the notebook-making exercise. Both the teacher and the researcher observed the students' knowledge and use of the new vocabulary words as they filled out the notebook templates.

Materials

The definitions-based organizer used in the vocabulary notebook was adapted from the PAVE procedure, developed by Bannon et al. (1990). The second graphic organizer consisted of the CAIV procedure and was devised by the researcher. Both graphic organizers include predicted definitions and verified definitions. However, the fundamental difference is that in PAVE, sentences and associated pictures or symbols are required, whereas in CAIV, there is semantic webbing, and no sentences or pictures.

The two templates share three out of four cognitive elements: predicting meanings from context (i.e. inferencing), associating target words to known words/concepts or image(s), and verification of target words in a monolingual dictionary. However, the templates differ in the following ways: PAVE has less inferencing and requires an association to a picture or symbol. CAIV has greater inferencing (in that specific context clues are required to back up the predicted definitions), a semantic map, and no sentence writing.

The templates incorporated four intentional vocabulary learning strategies incorporated in the graphic organizes (inferencing, sentence writing, dictionary use, and semantic mapping). These strategies proved to be effective ways of learning and retaining new words in previous empirical studies. The templates were handed out to every student in binders. Modeling techniques and various vocabulary strategies implementation directives were provided for the instructor. The students were familiar with inferencing techniques as they had used them previously in class.

The reading material used during the first three weeks of the experiment consisted of four short stories from the Internet on urban legends (see Appendix D).

Procedures

This study is quasi-experimental and used a pre-post design. A mixed methods approach for data collection and analysis was used. The data collection, including the testing, was carried out over roughly a six-week period, in the spring of 2006, that is, from April 18th to June 7th. This term represented the last school semester. As outlined above, the study was both qualitative and quantitative in nature.

There were two notebook conditions in the study and a no-treatment control condition. In the first week of the treatment, Group 1 participants used the PAVE template to record 10 target words in their binders; in Week 2, they used the CAIV template for 10 words and in Week 3 the teacher presented new words by writing them on the board and gave a short definition in English or a synonym (no-treatment control condition). The treatments were also administered in the other two groups following the counterbalanced design shown in Table 1. In the following two weeks (Weeks 4-5), the procedure was repeated but with vocabulary that students selected themselves from reading passages in *Scope* magazine; these readings varied in theme and length. Specific pages were to be read to increase the probability of students choosing the same words for entry in the vocabulary notebooks.

It is important to note that the students were allowed to bring the stencils with the graphic organizers home, whereas in the first part of the experiment, most of the work was completed in the classroom.

Table 1.

Counterbalanced Design of Three Treatments (PAVE, CAIV, No Treatment).

	Week	words	Group 1	Group 2	Group 3
Teacher-selected	Week 1	1-10	PAVE	CAIV	No treatment
Teacher-selected	Week 2	11-20	CAIV	No treatment	PAVE
Teacher-selected	Week 3	21-30	No treatment	PAVE	CAIV
Student-selected	Week 4	31-40	PAVE	CAIV	PAVE
Student-selected	Week 5	41-50	CAIV	PAVE	CAIV

In Week 1, the students were guided by the researcher and the teacher in using the PAVE and CAIV templates; this allowed the learners to cross-check a word's meaning in context as well as look for contextual information clues in various sorts of reading passages. Inferencing guidelines appear in Appendix E.

All groups worked on 5 new words per class period (two classes per week = 10 words per week) over a five-week period.

The experimental procedure can be summarized as follows:

Weeks 1-3

1- Each class period, the teacher writes the five target words from the reading material (e.g. abridged novel or Internet text) on the board.

2- Teacher models how to use the vocabulary notebook as a reading strategy. In Week 1, she uses the PAVE template in Group 1. The teacher fills out the template for the first word on a transparency in consultation with the students to model predicting meaning from context, selecting the most appropriate dictionary definition, as well as writing appropriate sentence contexts. When finished doing the exercise,

students are told to copy the information in their vocabulary notebooks. The procedure is repeated with another two new words.

3- The other two new words are done by students individually. The students then share their ideas with a classmate. They discuss the similarities and differences between their answers and their partners' answers.

4- The class discusses possible ideas, such as examples of the verified definition, and suitable sentences, and decides with the teacher which information is most appropriate. The students then add this information to their templates in another color to better visualize the differences.

5- Week 2 involves the use of the CAIV template in Group 1 following a similar procedure.

6- In Week 3, there is no treatment in Group 1. The teacher introduces the new words in the traditional way of providing synonyms and/or definitions and writes them on the board. The students simply write them in their copybooks. Groups 2 and 3 work with the words in the three conditions following the sequence laid out in Table 1. It is important to note that although the students are encouraged to work together during the process, it is not obligatory and they may work on their own, especially after Week 2 since by then, they have practiced the strategies and feel more capable of completing the task individually.

Weeks 4-5

Rather than working with teacher-selected words, the students select five words they think are important and useful in the understanding of a reading text and complete the PAVE template and the CAIV template.

The teacher/researcher collected the notebooks twice (once after Week 3 and once after Week 5) and provided feedback (wrote comments on the pertinence of the students' responses). In Week 5, it also allowed the researcher to determine which words students had selected for recording in their notebooks. Words selected often in the groups as a whole were targeted in the post-testing. During the entire process, students were encouraged to add to the vocabulary recording activity by providing other examples of the target words or adding new associates.

The Experimental Treatments

As mentioned above, two distinct graphic organizers were used alternatively, depending on the group and the time period in which it was used. The PAVE treatment consisted of identifying the target word, locating it in the text and writing down the sentence that contains the target word. Then, the student had to predict its definition and write it down. Following that, he or she had to write one new original sentence using it; sentences of a minimum of five words were encouraged, as well as providing extra information such as adjectives and adverbs. Then, the student verified the definition in the dictionary and wrote another good sentence using the new information he obtained from the resource. Finally, he or she drew a picture or symbol that somehow related to the new word.

The CAIV treatment differed from the PAVE treatment in that it referred to providing context clues as well as synonyms and examples of the new word. After writing the target word in the text sentence, students had to provide two context clues that would help them understand the meaning of the word before looking it up in the dictionary. They

followed up with giving three synonyms and three examples of the target word. The examples consisted of words or phrases.

As previously mentioned, in the control activity, there was no graphic organizer to fill out, and students simply wrote the new words in their copybooks.

The students worked in strict collaboration with the teacher as she quickly guided them through the exercise. The whole activity of working with the five new words took about 25 minutes, depending on the aptitude and motivation of the students. They also had the possibility of working in pairs; however, most students chose to do the work alone.

Quantitative Measures

The Pretest

The pretest, administered during the first class, assessed prior knowledge of target words that occurred in the course readings. As described above, these included short stories from the Internet, and *Scope* magazine articles. Prior to the beginning of the experiment, the teacher and researcher selected words from the readings that were likely to be new to the participants. The words related to the topic of urban legends. They came largely from the 1001-2000 most frequent and "off-list" categories (according to the *Vocaprofile* text analysis tool available at Cobb's *LexTutor* website, 2000). The pretest required students to read a list of 90 words, consisting of 30 target words embedded among 60 non-target items.

The students simply had to indicate whether they knew, did not know, or were unsure of the word meaning. Sample items are shown in Figure 2. The entire test can be found in Appendix F. Scores indicated that all the targets could be considered unknown words; that is, each was rated unknown or 'not sure' by at least 75% of the participants.

Instructions: Circle YES if you are <u>sure</u> you know the meaning of the word. Circle NS if you have an idea about the meaning but you are <u>not sure</u>. Circle NO if you <u>do not know</u> the word.

Target word			
Ex. 1. rotten	(YES)	NS	NO
1- nasty	YES	NS	NO
2- mellow	YES	NS	NO
3- boxer	YES	NS	NO
4- sleepy	YES	NS	NO
5- runner	YES	NS	NO
6- rattle	YES	NS	NO
7- pills	YES	NS	NO
8- eliminate	YES	NS	NO
9- bookshelf	YES	NS	NO
10- involved	YES	NS	NO

Figure 2. Sample pretest items

Immediate Posttest (T1)

At the end of three weeks, a cloze and sentence stem completion exercise assessing target word knowledge was administered (see Figure 3). The entire two-part test can be found in Appendix G. On the 20-item cloze test, each correct answer was awarded 1 point and incorrect answers received a score of 0. Sentence stem responses were rated by two experienced ESL teachers following the procedure outlined in the Analysis section below.

Posttest (T2)

The second posttest (T2) took place three weeks (Week 6) after the immediate posttest (T1). The entire two-part test, including the cloze and sentence stem completion exercise can be found in Appendix H. As mentioned, during the weeks after Posttest 1, students read and recorded words on their own. The objective of the second test was to determine whether the students who selected their own words and recorded them in their vocabulary notebook would perform better in terms of retention and elaborate use of such target words as compared to the teacher-selected words tested earlier. The fact that not all

students opted to record same words in their notebooks made selecting items for the test problematic. With careful analysis of the notebooks, the researcher was able to identify a set of 10 items that had been entered by 79% of the students. Some examples include *downward, drawer, midair, notorious, sidelines, skeptical,* and *vanish.*

Cloze Exercise

Part 1. Choose the best word from the word bank below to fit the context. The first one is done for you.

1- Tom Bradshaw was a successful and smart ___*businessman*___ in the corporate world. He (1)_____ ever made poor business decisions. He had a lovely and educated wife and one intelligent child who was learning to play the piano. However, he was losing a lot of money every day as his investments were doing poorly because of the slow economy. Consequently, he lost his patience and (2)_____ at his employees constantly. These problems and loss of control had an effect on his physical appearance: he was (3)_____ , becoming pale and looked sick. It seemed he could not (4)_____ the stressful situation. Maybe if he wins the lottery, his looks will improve.
Word bank
argue   cyanide   ~~businessman~~   panting   balding   target   ditch   accountable issues
handle   ordeal   brands   damp   noticed   wreck   yelled loudly   hardly   spokesperson
mean   gathered   staff   implement   panties   traces

Sentence Stems

Part 2. Complete the sentence stems using the appropriate word in the parentheses.
Example: My sister exercises every day...(healthy)_____

> *My sister exercises every day, eats nutritious foods, walks to work and leads a healthy lifestyle.*

1. The student asked his English teacher...

(available)_____

2. The old man slipped on the ice in front of the

bank...(sue)_____

Figure 3. Sample of sentence stem and cloze items on the posttest.

Qualitative Measures

A student pre-questionnaire was administered at the beginning of the experiment. It consisted of a student profile and general questions on reading and vocabulary. The entire questionnaire appears in Appendix I.

Student questionnaires were also administered at the end of the experiment to assess their perceptions of the usefulness and effectiveness of vocabulary notebooks. Questions included, "How well did you like making the vocabulary notebook?" and "How useful was the vocabulary notebook for learning new words?" Possible responses included, "I did not like it all", "I like it a little", "It was OK", and "I liked it a lot". The entire questionnaire appears in Appendix J.

There was also a teacher questionnaire to address the instructor's views on administering the different treatments in the classroom. Sample questions included, "Do you prefer one graphic organizer over the other? Why or why not?" and "How do you think that your students have reacted to the use of vocabulary notebooks? Please explain." The entire questionnaire appears in Appendix K.

Data Analysis

Quantitative Measures

Answers on the cloze component of Posttests 1 and 2 were scored objectively; each correct answer was awarded 1 point and incorrect answers received a score of 0. Each participant was given three cloze-test scores, one for words studied in the PAVE condition, another for words studied using CAIV, and another for control items. Means scores were compared using ANOVA to answer the questions about the relative effectiveness of the study conditions (research questions 1 and 2).

The sentence stem completion measures on Posttests 1 and 2 were initially marked using a three-part scheme. Sentence-stem completions (underlined) such as "Car accidents are ugly because…(injuries) they can cause injuries to the body." and "Some teenagers think that they are invincible and perform…(stunts) stunts that are easy, but it is not true; in gymnastics, we need training." were considered to show evidence of accurate semantic use of the target word and awarded a score of 2. Responses that showed some understanding such as "Tommy finished doing his homework and put….(drawer) it in is drawer for tomorrow," and "There was a collision between two planes…(midair) when they was in the midair of the sky," received a score of 1. Responses that showed poor understanding such as "Many celebrities such as Madonna and Angelina Jolie are…(notorious) unpredictable and notorious," and "Detectives like to solve mysteries but are…(skeptical) very skeptical in the mysteries," received a score of 0; non-responses were also scored 0. The complete rating scale is available in Appendix L.

The ratings focused on meaningful use of the target words; grammar and spelling errors were ignored. The completions were rated twice, once by the researcher and again by an experienced ESL teacher with a Master of Arts degree in Applied Linguistics. Eventually, in order to arrive at an acceptable level of inter-rater reliability, the three-way scheme was abandoned in favor of a two-way scheme such that the responses were rated either acceptable (previously rated 1 or 2) and given 1 point, or unacceptable (previously rated 0) and given a score of 0. With this intervention, the level of inter-rater reliability was acceptable, with the two raters agreeing 80% of the time. Cases of disagreement were resolved by assigning half points. Following a procedure similar to that used with the cloze-test measure, each participant was assigned three mean ratings scores, one for each

of the three study conditions. These scores were also tested using ANOVA to identify possible differences between notebook and control gains (question 1) and differences in gains between the PAVE and CAIV study conditions (question 2). To answer the third question about student and teacher selected words, a *t*-test was used to compare Posttest 1 means (teacher-selected items) to Posttest 2 means (student-selected items).

Student pre- and post- questionnaire

The student pre-questionnaire, which consisted of two parts, was distributed at the beginning of the experiment to gather background information about each student. The first part consisted of questions in relation to gender, mother tongue, languages spoken at home, and reading and studying in English. The second part consisted of general questions about reading and learning vocabulary. The latter were not part of the research questions but were taken into consideration in the discussion of the teaching implications.

Student post-questionnaires were analyzed to assess their perceptions of the usefulness and effectiveness of vocabulary notebooks. The number of responses in each category was tallied and these figures were converted into percentages. These data were used to answer Question 4 about learner preferences.

CHAPTER 4: RESULTS

In the following chapter, the four research questions will be answered. The first research question addresses the retention and accurate usage of target words recorded in vocabulary notebooks, as measured by the cloze test and the sentence-stem test respectively. The second research question looks at the effectiveness of the two treatments (CAIV and PAVE). The third research question considers the retention of teacher-selected versus student-selected vocabulary. The fourth research question deals with the perceived usefulness of the graphic organizers by both the students and the teacher; this is qualitative in nature and based on a post-questionnaire.

Quantitative Results

RQ 1: Vocabulary Notebooks vs. Control Treatment

To answer the first question about whether using the vocabulary notebook is more effective than not using one, I began by calculating the percentages of correct cloze-text responses. 30 words had been identified as not fully known (not rated YES) by approximately 75% of the participants at the beginning of the experiment. The means are shown in Table 2.

Table 2.
PAVE, CAIV and Control (No-Treatment) Group Means for New Words on Cloze Test

	Mean (M) in %	Standard Deviation (SD)
PAVE	59.80	18.72
CAIV	53.75	20.78
No Treatment	52.20	16.26

Although the means for both of the notebook conditions were higher than the no-treatment mean, the ANOVA indicated that there were no significant differences in the data (see Table 3). These cloze test findings indicate that the use of notebooks using graphic organizers was not more effective for the retention of new words than the no-treatment condition. I also looked at sentence stem performance in notebook and no-treatment conditions to investigate this question further. Results are shown in Table 4. The findings do not confirm an advantage for the use of vocabulary notebooks incorporating the various vocabulary learning strategies. In fact, the difference noted between one notebook condition and the no-treatment condition is negligible and the other difference points to an advantage for the no-treatment condition. The ANOVA test suggested that that was a significant difference in the data but a post-hoc Tukey Test did not confirm this (Table 5).

Table 3.
One-way ANOVA Testing the Difference in Cloze Test Means

Source	*SS*	*df*	*MS*	*F*	*p*
Treatment (between groups)	645.10	2	322.55	2.66	0.08

RQ2: The Comparison of Two Graphic Organizers

The cloze test means shown in Table 2 appear to indicate an advantage for the PAVE graphic organizer over the CAIV graphic organizer. However, as explained in the description of the results of the first research question, the apparent advantage for the PAVE treatment over the CAIV treatment is not statistically significant (see Table 3 above).

The results of the sentence-stem test (Posttest 1 – teacher-selected targets) shown in Table 4 are similar. The apparent advantage for the PAVE treatment over the CAIV treatment was not supported statistically. Although the ANOVA suggested that there were significant differences in the data (see Table 5), a post-hoc Tukey Test did not identify significant differences between any of the means. Given the large standard deviations for all three means, this was to be expected.

Table 4.
PAVE, CAIV and Control Group Means for Teacher-Selected Words on Sentence Stem Measure

Treatments	Mean (M)	Standard Deviation (SD)
PAVE	42.31	33.53
CAIV	34.09	33.02
No Treatment	41.21	35.69

Table 5.
One-way ANOVA Testing the Difference in Sentence Stem Means

Source	SS	df	MS	F	p
Treatment (between groups)	3065.88	2	1532.94	3.29	0.04

The findings for the sentence-stem measure of student-selected targets (Posttest 2) are shown in Table 6. It appears that when the students were allowed to choose the words that they wanted to study, the PAVE treatment was slightly more effective. Once again, this advantage did not prove to be statistically significant. A t-test for independent samples ($t = 1.28$; $p = .10$) did not reach statistical significance.

Table 6.

Means for Student-Selected Vocabulary Sentence Stems

Graphic Organizer	Mean (M) in %	Standard Deviation (SD)
PAVE	59.80	18.72
CAIV	53.75	20.78

RQ3: Teacher-Selected Vocabulary vs. Student-Selected Vocabulary

To answer the question regarding the accurate use of teacher-selected vocabulary versus student-selected vocabulary, scores on the sentence-stem responses awarded either 0, 0.5, or 1 point in the PAVE and CAIV conditions were totaled and converted into percentages. The means for the two conditions are shown in Table 7.

Table 7.

Means for Teacher-Selected vs. Student-Selected Vocabulary Sentence Stems

	Mean (M) in %	SD
Teacher selected	37.60	28.92
Student selected	28.87	24.98

The mean score for words selected by the teacher was 37.60% while the mean for student-selected words was 28.87%. A t-test for independent samples showed that this difference was statistically significant ($t = 1.88$, $df = 137$, $p = .03$).

Qualitative Results

RQ4: Student and Teacher Perceptions of the Graphic Organizers

Student responses

Now we turn to the qualitative part of the study and the fourth research question

that pertains to the perceived difficulty level and usefulness of working with the two

graphic organizers (PAVE and CAIV templates). To answer this question, a post-

questionnaire was distributed to the students at the end of week 6. The questionnaire

consisted of multiple-choice questions, with the options indicating the degree of either

difficulty or usefulness of the two different organizers. The questions were stated as

follows: How easy did you find the PAVE activity (definition + sentence + picture) and

CAIV activity (context clues + definition + word map) for learning new words? How

useful did you find the PAVE and CAIV activity for learning new words?

As shown in the Table 8 below, in terms of difficulty, the PAVE template was

perceived as easier to use than the CAIV template: 54 % of the respondents selected the

'not difficult' option and an additional 25 % selected the 'very easy' option for a total of

79 % (54 +25) vs. 58% (42+16) who found the CAIV template either 'not difficult' or

'very easy'. In fact, almost one-third of the students (29%) found the CAIV graphic

organizer to be 'somewhat difficult' as compared to PAVE (14%). Thirteen percent of

students found CAIV 'very difficult' to use and only 7% found PAVE 'very difficult'.

In terms of usefulness, there does not seem to be much difference between the

two organizers, contrary to expectation. Over 30% of students found that both PAVE

and CAIV templates were 'very useful' and about half of them found them to both be

'somewhat useful' as can be seen in Table 9. Only about 20% of students found the

graphic organizers to be 'not useful at all'. The responses to the two templates were very

similar at all four response levels.

Table 8.

Mean Percentages for Difficulty Level of PAVE and CAIV Graphic Organizers

Difficulty level	PAVE	CAIV
Very difficult to use	7 %	13 %
Somewhat difficult	14 %	29 %
Not difficult	54 %	42 %
Very easy	25 %	16 %

Table 9.

Mean Percentages for Usefulness of PAVE and CAIV Graphic Organizers

Usefulness	PAVE	CAIV
Not useful at all	19 %	23 %
Somewhat useful	48 %	46 %
Very useful	30 %	28 %
Extremely useful	3 %	3 %

Answering the fourth research question also involved analyzing students'

responses to open-ended questions on the questionnaire. The first question dealt with the

characteristics that students cited as being the most interesting or beneficial, that is, what

they liked best about the vocabulary notebook. The most consistent observation was that

the experience proved to be a beneficial exercise. Reasons included the learning of many

new words, finding new word meanings and discovering alternative ways of learning

unknown words that did not require using the dictionary all the time. One student commented, "I hope it will serve me for a long time in my English learning and make more easy to find differents words for express myself." Noting new words in the vocabulary notebook led to the compilation of a visual resource complete with cues and pictures to quickly remember any word. As one student put it," This is more easy when you have a picture in your head, when you read a word, you understand more."

Since each template included completing several different steps, the second question focused on characteristics that students might have found tedious or uninteresting about making the vocabulary notebooks. Findings confirmed that this was sometimes the case. One student stated, "It was too long; there were too many questions." Furthermore, writing definitions in the notebook was seen as tedious, and selecting the right definition did not prove to be an easy task: "I don't like search in the dictionary because sometimes you have a lot definitions and I don't know what to choose." Some students did not like to draw (PAVE template), and could not give examples of sentences to write, as seen in the following comment: "It's so long...and I don't enjoy writing example sentences when you don't know the definition." Context clues were also hard to provide. This early step impeded them from proceeding to the next steps in the template, which required them to provide the correct word definition and to write appropriate sentences. A learner responded," It not very good because we don't correct the word we note and we can't know is it the good definition and we have all wrong." Responses also indicated that the time spent filling out the graphic organizers was insufficient for some students. Overall, the exercise was cognitively taxing and demanded a lot of attention for learners who could not necessarily absorb so

much information in a condensed period of time. For each new word, students had about five minutes to complete the template. Finally, some students would have preferred keeping the vocabulary notebook at the end of the experiment so as to not forget the new words. One student remarked, "We did not keep it so if I don't remember some words I can't go check it."

The third question dealt with learning English through using the vocabulary notebook. The students cited that the notebook allowed for self-expression. As stated by one student, "It's make me remember some words and help me use those words when I will have a conversation." This is seen in another comment by one learner, "It helps me to express myself in English with more words." The vocabulary notebook also gave them the opportunity to write more elaborate sentences. The following comment demonstrates this: "It's help me to do good enriching sentences." The collection of so many new words was a definite asset in improving their language skills. "I learn new words that I never think about and now I can use them", said another learner. In addition, participants mentioned that the vocabulary notebook also helped them understand and remember new and difficult words more easily.

The final question dealt with the preference for working with teacher-selected words versus student-selected words. More than half of the students (58%) reported that words chosen by them were more interesting and easier to work with, and that they believed this would lead to better retention. Teacher-selected words were deemed to be already known or too easy by some students (which could explain why the learning results for these words were higher than the results for student-selected words).

Selecting their own words during the two week-period allowed the students to

work at their pace and to learn on their own at home. They chose the words they were interested in and presumably, the exercise required personal investment and became more meaningful. The following comments demonstrate this: "I choose my own words to help me to work on my own mistakes," and "Your own words because it is more interesting. When I read, I choose the words that I don't know and it's nice because after that I know what is the sense of this sentence."

However, the rest of the students (42%) indicated they preferred working with teacher-selected words since the teacher was available to help them in the explanation and comprehension of the new words. The students felt more secure about learning. The following comment illustrates this: "With the teacher, I was more sure about what I was writing."

Overall, after looking at the students' responses with regards to how much they enjoyed the actual making of the vocabulary notebook, the preferences were as follows: 39% of the students 'did not like the activity at all', 31% 'liked it a little', 26% 'liked it alright', and only 4% 'liked it a lot'.

Teacher response

With regards to the effectiveness and usefulness of the notebooks for vocabulary acquisition, the teacher observed that a certain group of students seemed to benefit more than the advanced students. These were low and intermediate students.

In her view, the PAVE graphic organizer was quite tedious for some students to use, which led to disinterest. As she put it:

I found PAVE less interesting, long and easy for the secondary 4 level.

Students lost interest because of the routine work and lack of challenge. This

graphic organizer would better address secondary 1 and 2 students, in both regular and enriched groups.

On the other hand, the CAIV graphic organizer was more interesting and challenging in her view. She felt that providing examples of synonyms and examples allowed students to explore the target word on a deeper level. Furthermore, the organizer allowed the students to learn how to predict the meaning of new words by using context clues.

She added that in her view, the retention of new words was dependant on several factors: the amount of time available to complete the vocabulary exercise, the students' concentration, the seriousness allotted to the vocabulary acquisition exercise, and the complexity of the vocabulary acquisition strategy.

When asked if the vocabulary notebook assisted students in becoming more independent in recording and learning new words, she stated that the strategies used positively reinforced previous teaching. Useful strategies such as looking for context clues, searching the word in the dictionary, as well as providing examples for new words, were already understood by students and further developed by the notebooks. She believes that the students' reading skills would improve in that they would look at contexts using a new approach. She added, "I don't think students will use these strategies for the purpose of vocabulary acquisition only."

CHAPTER 5: DISCUSSION AND LIMITATIONS

Discussion

This study investigated four questions. The first pertained to whether students'

knowledge would benefit from the use of vocabulary notebooks. The study was not able to

identify that this was the case. The study also set out to determine whether two different

kinds of graphic organizers, one that involved mainly definitions and another that involved

students in personalizing the information, would affect learning differentially. This

difference was also not supported by the posttest results. In a third question, I investigated

whether vocabulary that the learner selected themselves would be better retained than

words selected by the teacher. Contrary to expectation, a measure that required students to

use new words in context (completing sentences) showed an advantage for teacher-

selected items. The final question was qualitative in nature and looked into students' and

the teacher's perceptions of the materials and the learning process. Results showed that

over half of the students found the activities relatively easy to use, especially PAVE.

Close to 80% of the students found both graphic organizers to be somewhat, very or

extremely useful. However, approximately 60% of the students did not really appreciate

using the templates, and only a small group reported liking it a lot. Yet is important to note

that the checklist pretest that was re-administered twice during the experiment showed that

the learners did acquire new word knowledge over the course of the six weeks --

regardless of the condition the words were studied in. The percentage of target words

rated YES (I know the meaning of the word) increased from 27% before Week 1 to 66% in

Week 6. An ANOVA indicated that these differences in the means were statistically

significant ($p < .05$)

In contrast to the students, the teacher was generally favorable and expressed preference for CAIV because it brought together useful vocabulary strategies that she had been previously teaching in isolation over the course of the year. Student and teacher attitudes suggest that the experimental activities have potential, but it seems that a number of factors stood in the way of the expected learning benefits. These factors are discussed in the following section.

Limitations

As I conducted the study over a six-week period, it was evident that there were limitations; these were observed on my part during the first three weeks in particular. The limitations include controlled data manipulation, lack of student motivation, limited time allotted to completing graphic organizers, difficulty of target words, complexity of vocabulary learning strategies and test limitations.

Controlled Data Manipulation

Firstly, there is evidence of data manipulation in this study. In the initial part of the experiment, the teacher chose the words in pre-selected readings that she felt were important for the students to learn. This deliberate selection may have contributed to the teacher, in a conscious or unconscious manner, to use the words more often in her explanations or her reinvestment of the new words (i.e. using the words in the following class periods). Furthermore, the students were not allowed to bring the notebooks home for fear of having them lose them or having the students copy from each other. This in turn may have meant that the experiment did not allow for enough exposure to the target words recorded in their vocabulary notebooks. There may also not have been adequate

opportunities for further noticing, retrieval and use of the new words in oral or written productions.

Student Motivation

Secondly, student motivation is an important factor for the success of a pedagogical task. At the beginning of the experiment, the students were enthusiastically cajoled by their teacher into a novel and instructional way of remembering and later using new vocabulary words, that is, using a vocabulary notebook all their own. Most of the students' interest was piqued and they were willing to give it a try. However, as time went on, they found the task to be somewhat tedious and repetitive, and especially time-consuming. Consequently, they opted for quick retrieval of information pertaining to the target word such as copying the first definition in the dictionary without examining its part of speech or understanding its underlying meaning (PAVE). They also omitted certain steps such as predicting the target word meaning or associating it with examples or related concepts (CAIV). This lack of investment may explain the absence of an effect for using the notebooks. The fact that both PAVE and CAIV templates were sometimes not completed may explain why no differences in learning effects were found between the two. Furthermore, lack of interest in the readings may explain the low levels of learning reported in the study. Limited amount of feedback provided to the learners from the researcher and teacher throughout the process could also have played a role. The notebooks were picked up only after three weeks, and a short comment was given by the researcher. If the feedback had been systematic and more frequent, e.g. after every week, the students may have been more encouraged to properly and diligently fill out the templates.

Limited Time

Thirdly, effective time organization is an important factor for students to learn. One of the main reasons why some students did not fully complete the graphic organizers was lack of time. The teacher did not want to spend too much time (more than 5 minutes per word) having the students fill out the templates. The time allotted for the exercise was simply not enough for the weaker students or those who had difficulty transcribing the information. Some students had questions about what they needed to write down. They seemed insecure about guessing the meaning of the word when they could have more easily looked it up in the dictionary and cut down on the time allotted for word meaning prediction.

Target Word Difficulty

Fourthly, infrequent and complex vocabulary words may negatively influence students as they may question the probability of their usage in their everyday life and the relevance to their reality. Some of the teacher's chosen words such as *hardly, accountable, gathered, ordeal,* and *ditch* were very difficult for some students to grasp regardless of the many associations made or drawings drawn. In fact, it is not easy to draw some of the words mentioned above (as required in PAVE) and context clues were hard to find as the word's part of speech needs to be considered (in CAIV). These difficulties stood in the way of the full use of both templates and may explain why learning effects were low overall and undifferentiated in the two notebook conditions.

Complex Vocabulary Learning Strategies

Fifthly, using the experimental vocabulary notebook strategies appropriately requires time and practice. This did not occur in this study, as the teacher did not have

much time to prepare the students adequately by explicitly teaching them the cognitive and metacognitive processes behind the strategies. The students were certainly exposed to guessing word meaning, using context clues, and writing sentences, but not on a regular basis. Furthermore, semantic mapping/webbing was not often used in the past school year to teach new words. When it was, it was used to teach concepts and notions rather than words. Students were often asked to think for themselves but they usually waited for the teacher to give them the correct answer for each step throughout the graphic organizer. This was perhaps due to insecurity and not wanting to make mistakes.

Test Limitations

Finally, with regard to test validity, the test passages on the cloze measure were short and decontextualized and probably not sufficiently reflective of longer texts (e.g. from *Scholastic Scope* magazine) that were normally used in class. Although the researcher (an ESL teacher with over 15 years of teaching experience) prepared test passages that were expected to appeal to the students, they may have been less motivating to read and comprehend than texts prepared by professional writers.

Another testing factor that may have affected results on the student-selected words is the fact that some participants were tested on words they had not selected. The second posttest evaluated a set of 10 words known to have been selected by the majority of the students in the three groups. Students were instructed to respond only to the test items for words they remembered choosing and working on in their vocabulary notebooks. Some students forgot to select only those that they worked on and wrote sentences for all 10 words. The experimenter evaluated all responses; this could have resulted in lower scores.

An additional shortcoming of the study includes test design. Instead of having a counterbalanced design such that the three groups of participants experienced all three treatments (CAIV, PAVE and control), the experimenter could have set it up differently. One group could have worked on one template, such as PAVE, for five weeks. With more exposure to a single template, the learners might have been able to exploit it more fully and its effectiveness (or ineffectiveness) could have become clearer. Similarly, a second group could have worked on the second template, CAIV, for the same number of weeks, while a third group underwent no treatment at all. With students not needing to work with so many different vocabulary learning strategies in a short period of time and working with one template instead of two, an advantage for one of the templates might have emerged.

CHAPTER 6: CONCLUSION

The study was intended to contribute to an area that teachers and researchers need to know more about. Not many studies exist on the use of notebooks in vocabulary learning. Furthermore, the particular combinations of vocabulary learning strategies incorporated in the two distinct graphic organizers used in this investigation have never been studied previously. Despite the unexpected results of the study, a number of implications for teaching practice and future research can be identified.

Implications for Teaching

First, the means for target words recorded in the vocabulary notebooks were slightly higher on tests of retention and accurate use than in the no-treatment condition (however, the difference was not confirmed by the statistical analyses). Even though the benefits were not clearly shown in the experiment, previous research suggests that activities that involve students in analyzing new words, using context clues, exploring definitions, and creating pictures and semantic charts are likely to help learners gain and retain new word knowledge. This study showed that notebooks were a systematic and practical way of getting learners to undertake activities that can be expected to benefit learning. It is interesting to note that in the student pre-questionnaire, over 30% of the respondents replied that writing down a word, and using it either orally or in writing afterwards, helped them to better remember it.

Secondly, students in the study reported that they enjoyed using CAIV over PAVE because they felt more involved in making personal knowledge links to the words being learned. This suggests that teachers should make vocabulary instruction personal and try to relate it to the students' life experiences. The learners should be encouraged to

critically explore word meanings using vocabulary learning strategies that they themselves perceive to be useful. Although the study did not demonstrate a clear link between learner investment (self-selected words) and retention of learnt material, the questionnaire responses showed that the students valued the opportunity to personalize their study.

A third implication relates to motivation. More than half of the students reported in the student pre-questionnaire that they disliked reading. If the students are not interested in class readings because of their content (e.g. lack of humor, no exciting action) or because they are too challenging or long, they are unlikely to be motivated to attend to new words in the material. Teachers need to be sensitive to their learners' interests. For instance, they can survey students to come up with a set of topics for use in selecting and adapting reading materials for their students. They can also design a wider variety of vocabulary learning activities than was used in the experiment. A possible weakness of the experiment is the fact that students were required to complete the same kinds of activities repeatedly. The familiar tasks which consisted of working with various vocabulary learning strategies for each new word to be learned may have increased learner confidence due to the routine and mechanical type of exercise. In the discussion the experimental design in Chapter, even more familiarity with a single template was suggested, since this might have made the learning results more evident. But from the learners' perspective, the repetitive use of the same two templates may not have been very stimulating and could have led to boredom and disinterest. If teachers can use a variety of vocabulary strategies and activities, this is likely to have benefits for motivation.

Finally, the study illustrates learners' reluctance to take on responsibility for their learning. Teachers should continuously pose questions to have students think critically about the possible meanings of new words and not guide them repeatedly through every step. I believe that a vast majority of students do not voluntarily explore the meaning of new words autonomously, using a variety of vocabulary learning strategies. Instead, they turn to an authority and simply use the quickest reference source at hand, the dictionary, or else turn to the teacher. I presume they scored higher on the teacher-selected words that were worked on in class because the vocabulary activity was deemed to be more structured by the students. Reading their responses on the post-questionnaire, it seems that the teacher provoked their curiosity by asking questions as to what they thought the words meant, giving examples along the way which students wrote down in their vocabulary notebooks, and generally guided them throughout the notebook exercise by providing insightful feedback. The students did not have this additional guidance and monitoring when they worked on their own at home with self-selected words. The study suggests that it is important for teachers to push learners to become more autonomous and to encourage them to have confidence in their abilities to discover meanings on their own.

Implications for Future Research

I conducted this study to analyze the effects of explicit vocabulary learning activities using a notebook format in an ESL reading course. It would be interesting to investigate how the PAVE and CAIV templates used in this study would fare in other contexts. For instance, the study could be replicated with students of different ages, L1 backgrounds, and proficiency levels to see how these factors affect accurate usage and

retention of new words. Learners who have a larger language repertoire and who are more proficient in English may fare better in such a study as this one since completing the templates involved being able to provide multiple synonyms for words and rich contextual information. In addition, learners who regularly use vocabulary learning strategies when reading might encounter fewer difficulties in completing the tasks (e.g. filling out templates) and work at a faster pace because of their familiarity with the task. Another point to consider is implementing any future studies at other times in the year, such as at the beginning of the school year, when students seem to be more receptive and enthusiastic to working on complex and/or challenging tasks. I observe that at the end of the year, they tend to be tired and less willing to devote time and effort to new projects.

Another important point to consider is that other notebook formats could be explored. I have incorporated graphic organizers which contain several vocabulary learning strategies that are related to discovering and enriching knowledge of word meanings. However, formats that incorporate other aspects of word knowledge could be used with learners and investigated for their effectiveness. For instance, templates could be created that focus learners' attention on the phonological aspects of new words. Learners could be asked to consider what other words the target words sound like and to look for sound and spelling resemblances between words. Techniques that involve students in writing pronunciations, noting stress patterns and making sound inferences based word-part comparisons and grapheme-to-phoneme associations are likely to be beneficial for learning. It is likely that adding pronunciation-related activities would help students retain more via the visual and sound cues. But to my knowledge, these interesting ideas have not yet been investigated in studies of vocabulary notebooks.

Another possible idea is the use of eOrganizers (i.e. Moodle and ThinkMap Visual Thesaurus + definitions + images + links); these may increase students' motivation. Other ideas for future research include balancing the numbers of vocabulary learning strategies that are investigated so that they are more comparable in number and difficulty level than they were in this study. Finally, it is worth noting that CAIV was expected to be a powerful learning tool in this study because of the importance it assigned to personalizing the word information. In a future study, this idea could be extended to include allowing learners to choose and personalize the word learning strategies they feel most comfortable with. Clearly the investigation of vocabulary notebooks is a fruitful area for future research.

REFERENCES

Allen, V.F. (1983). *Techniques in teaching vocabulary*. Oxford: Oxford University Press.

Bannon, E., Fisher, P. J. L., Pozzi, L., & Wessel, D. (1990). Effective definitions for word learning. *Journal of Reading, 34*, 301-302.Benoussan, M., & Laufer, B. (1984). Lexical guessing in context in EFL reading comprehension. *Journal of Research in Reading, 7*, 15-32.

Bialystok, E. (1983). Inferencing: Testing the "hypothesis-testing" hypothesis. In H. W. Seliger & M. H. Long (Eds.), *Classroom oriented research in second language acquisition* (pp. 104-124). Rowley, MA: Newbury.

Blachowicz, C. L. Z. (2002). *Teaching vocabulary in all classrooms*. New Jersey: Pearson Education Inc.

Brown, T. S., & Perry, F. L. (1991). A comparison of three learning strategies for ESL vocabulary acquisition. *TESOL Quarterly, 25* (4), 655-670.

Brown, C. (1993). Factors affecting the acquisition of vocabulary: Frequency and saliency of words. In T. Huckin & M. Haynes & J. Coady (Eds.), *Second language reading and vocabulary learning*. Norwood, NJ: Ablex.

Coady, J. (1993). Research on ESL/EFL vocabulary acquisition: Putting it in context. In T. Huckin & M. Haynes & J. Coady (Eds.), *Second language reading and vocabulary learning* (pp. 3-23). Norwood, NJ: Ablex.

Coady, J. (1997). L2 vocabulary acquisition: A synthesis of the research. In J. Coady & T. Huckin (Eds.), *Second language vocabulary acquisition,* (pp. 273-290). Cambridge: Cambridge University Press.

Cobb, T. (2000). The compleat lexical tutor [website]. Available: http://www.lextutor.ca

Cohen, A. D. (1990). *Language learning: insights for learners, teachers and researchers*. New York: Newbury House.

Coomber, J. E., Ramstad, D. A., & Sheets, D. R. (1986). Elaboration in vocabulary learning: A comparison of three rehearsal methods. *Research in the Teaching of English, 20*, 281-93.

Coxhead, A. (2000). A new academic word list. *TESOL Quarterly, 34*, 213-238.

Day, R. R., Omura, C., & Hiramatsu, M. (1991). Incidental EFL vocabulary learning and reading. *Reading in a Foreign Language, 7*(2), 541-551.

Ellis, N. (1997). Vocabulary acquisition: word structure, collocation, word-class, and meaning. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary: Description, acquisition and pedagogy*. Cambridge: Cambridge University Press.

Fan, M. Y. (2003). Frequency of use, perceived usefulness, and actual usefulness of second language vocabulary strategies: A study of Hong Kong Learners. *Modern Language Journal, 87*, 222-241.

Fischer, U. (1994). Learning words from context and dictionaries: An experimental comparison. *Applied Linguistics, 15*, 551-574.

Fowle, C. (2002). Vocabulary notebooks: implementation and outcomes. *ELT Journal, 56*, 380-388.

Fraser, C. A. (1999). The role of consulting a dictionary in reading and vocabulary learning. *The Canadian Journal of Applied Linguistics, 2*(1-2), 73-89.

Gairns, R., & Redman, M.(1986). *Working with words*. Cambridge: Cambridge University Press.

Gu, Y. & Johnson, R. K. (1996). Vocabulary learning strategies and language learning outcomes. *Language Learning, 46*, 643-697.

Haggard, M. R. (1982). The vocabulary self-selection strategy: An active approach to word learning. *Journal of Reading, 26*, 203-207.

Harley, B., Howard, J., & Roberge, B. (1996). Teaching vocabulary: An exploratory study of direct techniques. *Canadian Modern Language Review, 53*, 281-304.

Harley, B., & Hart, D., (2000).Vocabulary learning in the content-oriented second language classroom: Student perceptions and proficiency. *Language Awareness, 9*, 78-96.

Harmon, J.M. (1998). Constructing word meanings: Strategies and perceptions of four middle school learners, *Journal of Literacy Research*. Retrieved January 23, 2006, from http://www.findarticles.com/p/articles/mi_qa3785/is_199812/ai_n8808926

Horst, M., Cobb, T., & Meara, P. (1998). Beyond a clockwork orange: Acquiring second language vocabulary through reading. *Reading in a Foreign Language, 11*, 207-223.

Hulstijn, J. H., Hollander, M., & Greidanus, T. (1996). Incidental vocabulary learning by advanced foreign language students: The influence of marginal glosses, dictionary use, and reoccurrence of unknown words. *The Modern Language Review, 80*, 327-339.

Joe, A. (1995). Text-based tasks and incidental vocabulary learning. *Second Language Research, 11*(2), 149-158.

Joe, A., Nation, P., & Newton, J. (1996). Vocabulary learning and speaking activities. *English Teaching Forum, 34*(1), 2-7.

Johnson, D. D., & Pearson, P.D. (1984). *Teaching Reading Vocabulary* (2nd ed.). New York: Holt, Rinehart and Winston.

Johnson, D. D., Toms-Bronowski, S., & Pittelman, S. D. (1982). *An investigation of the effectiveness of semantic mapping and semantic feature analysis with intermediate grade level students.* (Program report 83-3). Madison, Wisconsin: Wisconsin Center for Education Research. (ERIC Document Reproduction Service No. ED224000)

Knight, S. (1994). Dictionary use while reading: The effects on comprehension and vocabulary acquisition for students of different verbal abilities. *Modern Language Journal, 78,* 285-299.

Krashen, S. (1989). We acquire vocabulary and spelling by reading: Additional evidence for the input hypothesis. *The Modern Language Journal, 73*, 440-464.

Laufer, B. (1997). What's in a word that makes it hard or easy: Some intralexical factors that affect the learning of words. In N. Schmitt & M. McCarthy, (Eds.), *Vocabulary: Description, acquisition and pedagogy* (pp. 140-155). Cambridge: Cambridge University Press.

Laufer, B., & Hulstijn, J. (2001). Incidental vocabulary acquisition in a second language: the construct of task-induced involvement. *Applied Linguistics, 22*(1), 1-26.

Lawson, M. J. & Hogben, D. (1996). The vocabulary-learning strategies of foreign-language students. *Language Learning, 46*(1), 101-135.

Luppescu, S., & Day, R. R. (1993). Reading, dictionaries, and vocabulary learning. *Language Learning, 43(2)*, 263-287.

Margosein, C. M., Pascarella, E. T. & Plfaum, S. W. (1982). The effects of instruction using semantic mapping on vocabulary and comprehension. *Journal of Early Adolescence, 2*(2), 185-194.

Morin, R., & Goebel, J. Jr. (2001). Basic vocabulary instruction: Teaching strategies or teaching words? *Foreign Language Annals, 34*(1), 8-17.

Nagy, W., Herman, P., & Anderson, R. (1987). Learning word meanings from context. *Reading Research Quarterly, 20*, 233-253.

Nation, I. S. P. (1990). *Teaching and learning vocabulary*. New York: Newbury House/Harper & Row.

Nation, P., & Hwang, K. (1995). Where would general service vocabulary stop and special purpose vocabulary begin? *System, 23*, 35-41.

Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge: Cambridge University Press.

Newton, J. (1995). Task-based interaction and incidental vocabulary learning: A case study. *Second language Research, 11*, 159-77.

Novak, J. D. (1990). Concept maps and Vee diagrams: Two metacognitive tools to facilitate meaningful learning. *Instructional Science, 19*, 29-52.

Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. Boston: Heinle and Heinle.

Oxford, R. L., & Scarcella, R. C. (1994). Second language vocabulary learning among adults: State of the art in vocabulary instruction. *System, 22*, 231-243.

Paribakht, T. S., & Wesche, M. (1997). Vocabulary enhancement activities and reading for meaning in second language vocabulary acquistion In J. Coady & T. Huckin (Eds.), *Second language vocabulary acquisition: A rationale for pedagogy* (pp. 174-200). Cambridge: Cambridge University Press.

Parry, K. (1991). Building a vocabulary through academic reading. *TESOL Quarterly, 25*, 629-653.

Parry, K. (1993). Too many words: Learning the vocabulary of an academic subject. In T. Huckin, M. Haynes, & J. Coady (Eds.), *Second language reading and vocabulary learning* (pp. 109-126). Norwood, NJ: Ablex.

Parry, K. (1997). Vocabulary and comprehension: Two portraits. In J. Coady & T. Huckin (Eds.), *Second language vocabulary acquisition: A rationale for pedagogy* (pp. 55-68). Cambridge: Cambridge University Press.

Sanaoui, R. (1995). Adult learners' approach to learning vocabulary in second languages, *Modern language Journal, 79*, 15-28.

Schmitt, N., & D. Schmitt. (1995). Vocabulary notebooks: Theoretical underpinnings and practical suggestions. *ELT Journal, 49*(2), 133-43.

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

Scholfield, P. (1982). Using the English dictionary for comprehension. *TESOL Quarterly, 16*, 185-194.

Sökmen, A. (1997). Current trends in teaching second language vocabulary. In N. Schmitt & M. McCarthy, M. (Eds.), *Vocabulary: Description, acquisition and pedagogy.* Cambridge: Cambridge University Press.

Stahl, S. A., & Vancil, S. J. (1986). Discussion in what makes semantic maps work in vocabulary instruction. *The Reading Teacher, 40*, 62-67.

Stoffer, I. (1995). University foreign language students' choice of vocabulary learning strategies as related to individual difference variables. PhD thesis, University of Alabama. Retrieved January 16, 2006 from http://homepages.inf.ed.ac.uk/s9808690/finalpaper2.pdf

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. M. Gass, & C. G. Madden (Eds.), *Input in second language acquisition* (pp. 235-253). Rowley, MA: Newbury House Publishers.

APPENDIX A

Formulaire de consentement à la participation à une recherche

Par la présente, je déclare consentir à participer à un programme de recherche mené par Mme Giuseppina D'Onofrio du département d'éducation de l'Université Concordia.

Courriel : gdon@sympatico.ca
No.tél.: (514) 848-2424, poste 2010

A. BUT DE LA RECHERCHE

On m'a informé-e du but de la recherche, soit l'étude du rôle du carnet dans l'apprentissage de vocabulaire en anglais.

B. PROCÉDURES

On m'a informé-e (1) que l'étude aura lieu pendant mon cours d'anglais à l'école secondaire Calixa-Lavallée; (2) que les tâches qu'on va me demander d'effectuer consistent en un enregistrement de mots de vocabulaire dans un carnet et l'utilisation des stratégies d'apprentissage diverses; (3) que je participerai à un sondage et à des mesures d'évaluation; et (4) que l'expérience durera six semaines.

C. CONDITIONS DE PARTICIPATION

- Je comprends que je peux retirer mon consentement et interrompre ma participation à tout moment, sans conséquences négatives.
- Je comprends que ma participation à cette étude est confidentielle (c.-à-d. que la chercheuse ne révélera pas mon identité)
- Je comprends que les données de cette étude pourraient être publiées ou présentées à un colloque scientifique.
- J'atteste qu'on m'a remis une copie du présent formulaire de consentement.

J'AI LU ATTENTIVEMENT CE QUI PRÉCÈDE ET JE COMPRENDS LA NATURE DE L'ENTENTE. JE CONSENS LIBREMENT ET VOLONTAIREMENT À PARTICIPER À CETTE ETUDE.

NOM : (caractères d'imprimerie) : _____
SIGNATURE : _____
DATE : _____ 2006

Si vous avez des questions en ce qui a trait à vos droits en tant que participants à la présente étude, veuillez communiquer avec Adela Reid, Agente d'éthique en recherche/conformité, Université Concordia, au (514) 848-2424, poste 7481, ou par courriel a l'adresse areid@alcor.concordia.ca
MERCI!

APPENDIX B

Procedure for PAVE Template

The procedure will consist of five stages: (1) students write the sentence or context in which the word appears; (2) they write the word again and predict a meaning; (3) they write a sentence of their own that demonstrates their comprehension of the word; (4) they check the word's meaning in a monolingual dictionary and write a definition; (5) they look at the sentence from step 3 and write a better sentence and (6) the association of the target word to a picture or symbol (Blachowicz, 2002).

A sample of the PAVE template can be seen on the following page.

PAVE TEMPLATE

Target word:

spokesperson

predicted definition:
Somebody to represent the institution

target word in text sentence
A spokeperson from the bank said

One good sentence:
M. Pineiro is the spokeperson for secondary 4 and 5

verified definition:
a person who speaks on behalf of a group

another good sentence:
We had a meeting with a spokeperson of the Liberal party
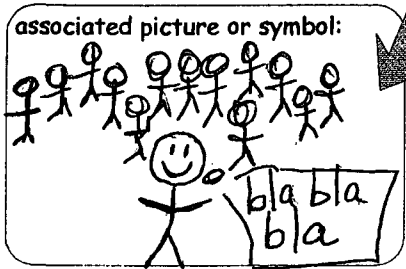
associated picture or symbol:

Bannon, E., Fisher, P.J.L., Pozzi, L. & Wessel, D. (1990). Effective definitions for word learning. *Journal of Reading. 34*, 301-302.

APPENDIX C

Procedure for CAIV Template

The procedure will consist of four stages: (1) students predict the meaning of the new word; (2) they look for two context clues to support their prediction; (3) they check the word's meaning in a monolingual dictionary and write a definition and (4) they give a few synonyms/examples of word.

A sample of the CAIV template can be seen on the following page.

CAIV TEMPLATE

Target word:

Spokesperson

I think this word means:
A person who talk for the company

clue 1

clue 2

target word in text sentence:
A Spokesperson from the bank

Bank's Spokes person

These person is looking for the solution

verified definition:
→ Speaks formally for another person
→ On behalf of a group

Representative

target word
Spokesperson

The Spokes person of the School

It is like...

Examples

The boss

Important person.

David Suzuki is the spokesperson of Susuki

I want to be Spokesman for the english class.

APPENDIX D

The four urban legends chosen from the Internet: High School Confidential, Gloves for My Love, Dial ATM for Murder, and Ghostly Rescue.

High School Confidential

Claim: Pacific Palisades High School placed an unusual message on their school telephone answering system.

This is the answering machine message the Pacific Palisades High School (California) Staff voted to record on their school telephone answering system.
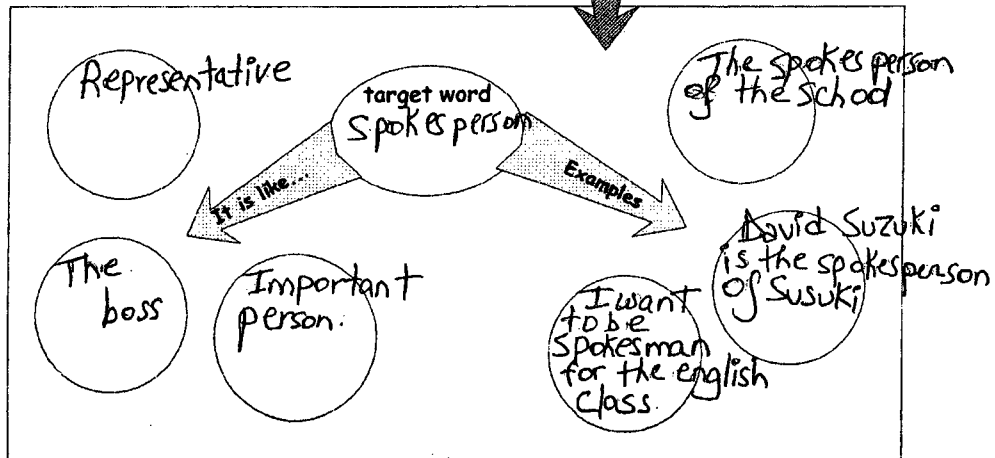*This came about because they implemented a policy requiring students and parents to be responsible for their children's absences and missing homework. The school and teachers are being sued by parents who want their children's failing grades changed to passing grades even though those children were absent 15-30 times during the semester and did not complete enough school work to pass their classes. This was voted unanimously by the office staff as the actual answering machine message for the school:*

"Hello! You have reached the automated answering service of your school. In order to assist you in connecting the right staff member, please listen to all your options before making a selection:

To lie about why your child is absent, press 1
To make excuses for why your child did not do his work, press 2
To complain about what we do, press 3
To swear at staff members, press 4
To ask why you didn't get information that was already enclosed in your newsletter and several flyers mailed to you, press 5
If you want us to raise your child, press 6
If you want to reach out and touch, slap or hit someone, press 7
To request another teacher for the third time this year, press 8
To complain about bus transportation, press 9
To complain about school lunches, press 0
If you realize this is the real world and your child must be accountable and responsible for his/her own behaviour, class work, homework, and that it's not the teachers' fault for your children's lack of effort . . . hang up and have a nice day!"

Gloves for My Love

Legend: A gift of gloves gets switched for a pair of panties, with hilarious results.
A young man wished to purchase a gift for his new sweetheart's birthday, and as they had not been dating very long, after careful consideration he decided a pair of gloves would strike the right note -- romantic, but not too personal.
Accompanied by his sweetheart's younger sister, he bought a pair of white gloves; the younger sister purchased a pair of panties for herself.

During the wrapping, the clerk mixed up the items and the sister got the gloves and the sweetheart got the panties. Without checking the contents first, he sealed his package and mailed it to his sweetheart along with this note:

Darling,

I chose these because I noticed that you are not in the habit of wearing any when we go out in the evening. If it had not been for your sister, I would have chosen the long ones with buttons, but she wears short ones that are easy to remove.

These are a delicate shade, but the lady I bought them from showed me the pair she had been wearing for the past three weeks and they were hardly soiled. I had her try yours on for me and she looked really smart.

I wish I were there to put them on you for the first time, as no doubt other hands will come in contact with them before I have a chance to see you again.

When you take them off, remember to blow in them before putting them away as they will naturally be a little damp from wearing.

Just think how many times I will kiss them during the coming year. I hope you will wear them for me on Friday night.

All my Love,
Hollingsworth

P.S   The latest style is to wear them folded down with a little fur showing.

Dial ATM for Murder

Claim: People have been killed by cyanide-laced ATM deposit envelopes.

Please read:
Whenever you go to an automatic teller machine to make deposits, make sure you don't lick the deposit envelopes. A customer died after licking an envelope at a teller machine at Yonge & Eglinton. According to the police, Dr. Elliot at the Women's college hospital found traces of cyanide in the lady's mouth and digestive system and police traced the fatal poison to the glue on the envelope she deposited that day. They then did an inspection of other envelopes from other teller machines in the area and found six more. The glue is described as colourless and odourless. They suspect some sickco is targeting this particular bank and has been putting the envelopes beside machines at different locations. A spokesperson from the bank said their hands are tied unless they take away the deposit function from all machines. So watch out, and please forward this message to the people you care about . . . Thanks

Kimberly Clarkson
Crime unit, Department for Public Health
416-563-9905

Legend: The ghost of a woman killed in a car crash directs rescuers to the wreck to save her still-living baby, who is trapped within.

One afternoon, a couple was travelling on the road when all of a sudden at a far distance they saw a woman in the middle of the road asking them to stop.

The wife told her husband to keep on driving because it might be too dangerous, but the husband decided to pass by slowly so he wouldn't stay with the doubt on his mind of what might have happened and the chances of anyone being hurt. As they got closer, they noticed a woman with cuts and bruises on her face as well as on her arms. They then decide to stop and see if they could be of any help.

The cut and bruised woman was begging for help telling them that she had been in a car accident and that her husband and son, a new born baby, were still inside the car which was in a deep ditch. She told them that the husband was already dead but that her baby seemed to still be alive.

The husband that was travelling decided to get down and try to rescue the baby and he asked the hurt woman to stay with his wife inside their car. When he got down he noticed two people in the front seats of the car but he didn't pay any importance to it and took out the baby quickly and got up to take the baby to it's mother. When he got up, he didn't see the mother anywhere so he asked his wife where she had gone. She told him that the woman followed him back to the crashed car.

When the man decided to go look for the woman, he noticed that clearly the two people in the front seats were dead; a woman and a man with both their seatbelts on. When he looked closer, he noticed that it was the exact same woman that was begging them for help in the beginning.

Do you think that it was a miracle of God?

The Baby now lives with family members and he will live to tell the story.
If you believe in the Almighty and that miracles like these can truly happen, send this to your friends. If you don't send it, nothing will happen, only that the some people won't be able to know of the greatness of the Lord.

APPENDIX E

Procedure for Inferring from Context based on Hunt (1996)

1- Determine the part of speech.
2- Examine and simplify the context surrounding the unknown word.
3- Analyze the clauses and sentences before and after the sentence containing the unknown word to determine the relationships between them.
4- Guess the unknown word
5- Compare the guess to the part of speech of the unknown word and to the context while being aware of the potential for faulty word analysis. If needed, use a dictionary to check the guess. Reanalyze the context as needed.

Contextual Information Clues (based on Allen, 1999)

1st type: semantic/syntactic

- cause/effect
- sequence
- examples, descriptors, repeated information
- voice/mood
- connected to synonyms
- contrast
- definitions connect new to known
- problem/solution

2nd type: typographic format

- graphs/charts
- bold print
- italics
- glossary
- pictures
- footnotes
- parenthetical definitions

Pre-test

Instructions: Circle **YES** if you are <u>sure</u> you know the meaning of the word. Circle **NS** if you have an idea about the meaning but you are **not sure**. Circle **NO** if you **do not know** the word.

Ex. 1. rotten   (YES)   NS   NO

Word	YES	NS	NO
1- nasty	YES	NS	NO
2- window	YES	NS	NO
3- boxer	YES	NS	NO
4- sleepy	YES	NS	NO
5- runner	YES	NS	NO
6- poor	YES	NS	NO
7- pills	YES	NS	NO
8- eliminate	YES	NS	NO
9- bookshelf	YES	NS	NO
10- involved	YES	NS	NO
11- succeed	YES	NS	NO
12- stand	YES	NS	NO
13- pity	YES	NS	NO
14- death	YES	NS	NO
15- dreams	YES	NS	NO
16- implement	YES	NS	NO
17- panting	YES	NS	NO
18- noticed	YES	NS	NO
19- soiled	YES	NS	NO
20- beg	YES	NS	NO
21- behavior	YES	NS	NO
22- show	YES	NS	NO
23- panties	YES	NS	NO
24- staff	YES	NS	NO
25- warn	YES	NS	NO
26- bet	YES	NS	NO
27- scream	YES	NS	NO
28- librarian	YES	NS	NO
29- donkey	YES	NS	NO
30- argue	YES	NS	NO
31- doorbell	YES	NS	NO
32- mean	YES	NS	NO
33- sick	YES	NS	NO

34- disease	YES	NS	NO
35- lazy	YES	NS	NO
36- sheep	YES	NS	NO
37- feathers	YES	NS	NO
38- basket	YES	NS	NO
39- refusal	YES	NS	NO
40- assailant	YES	NS	NO
41- murdered	YES	NS	NO
42- drugstore	YES	NS	NO
43- worry	YES	NS	NO
44- rights	YES	NS	NO
45- body	YES	NS	NO
52- sue	YES	NS	NO
53- ditch	YES	NS	NO
54- brands	YES	NS	NO
55- traces	YES	NS	NO
56- player	YES	NS	NO
57- pencil	YES	NS	NO
58- waiter	YES	NS	NO
59- slim	YES	NS	NO
60- healthy	YES	NS	NO
61- automated	YES	NS	NO
62- paid	YES	NS	NO
63- loud	YES	NS	NO
64- issues	YES	NS	NO
65- watery	YES	NS	NO
66- speech	YES	NS	NO
67- answer	YES	NS	NO
68- tower	YES	NS	NO
69- survey	YES	NS	NO
70- pressure	YES	NS	NO
71- groceries	YES	NS	NO
72- holiday	YES	NS	NO
73- stationery	YES	NS	NO
74- trip	YES	NS	NO
75- ship	YES	NS	NO
76- spring	YES	NS	NO
77- clearly	YES	NS	NO
78- way	YES	NS	NO
79- confusing	YES	NS	NO
80- net	YES	NS	NO
81- wrapping	YES	NS	NO
82- bruises	YES	NS	NO

83- ordeal	YES	NS	NO
84- complain	YES	NS	NO
85- spokesperson	YES	NS	NO
86- handle	YES	NS	NO
87- balding	YES	NS	NO
88- lick	YES	NS	NO
89- target	YES	NS	NO
90- purchase	YES	NS	NO

APPENDIX G

Immediate Posttest (T1)

<u>Cloze Exercise</u>

Part 1. Choose the best word from the word bank below to fit the context. The first one is done for you.

1- Tom Bradshaw was a successful and smart ___*businessman*___ in the corporate world. He (1)_____ ever made poor business decisions. He had a lovely and educated wife and one intelligent child who was learning to play the piano. However, he was losing a lot of money every day as his investments were doing poorly because of the slow economy. Consequently, he lost his patience and (2)_____ at his employees constantly. These problems and loss of control had an effect on his physical appearance: he was (3)_____ , becoming pale and looked sick. It seemed he could not (4)_____ the stressful situation. Maybe if he wins the lottery, his looks will improve.

2- There was a big car accident on highway 40 last night. It seemed that the driver lost control of his vehicle and hit a truck and landed in a(n) (5)_____. The driver of the car was not seriously hurt; he was (6)_____ and shaking as he got out of the car to run towards the truck to see if the driver was alright. The truck was a total (7)_____. As he was approaching it, he (8)_____ blood below the front door. He then realized he was (9)_____ for the death of an innocent man. No more drinking and driving for him.

3- For Valentine's Day, Marco went to a boutique to buy some delicate underwear for his beautiful wife. He looked at all the (10)_____ hanging in the middle of the store and chose two pink pairs. He did not care about the different (11)_____ of underwear because he always just chose the ones he liked best – in pink if possible. He then (12)_____ three pink tank tops from a nearby table, and brought all the items to the counter and paid with a credit card. Someone should tell him that his wife hates pink.

4- One Sunday morning, Mr. Sims and his son, Paul went deer hunting in Vermont. As they were walking in the woods, they spotted a deer drinking water from a nearby lake. The ground beneath their feet was (13)_____; it had rained all day the day before. Mr. Sims raised his hunting rifle to aim at his (14)_____ and pulled the trigger. He missed! Suddenly, he heard a loud noise behind him. A giant black bear was coming towards him. Mr. Sims screamed at his son to run. He then hid behind a tree. Suddenly, the bear stopped, looked around, and five minutes later, it turned around and left quietly. What a(n) (15)_____ this had been for Mr. Sims and his son, Paul!

5- Imagine writing a news story for the local paper about a mysterious murder in the community! Well, Robert was given the task of discovering who the killer was and his/her motive. The murder took place in Lac St-Louis Hospital where a nurse was poisoned with

(16)_____. Examination of the body revealed (17)_____ of the chemical in her blood. The patients and the hospital (18)_____ were scared and nervous. The director wanted to (19)_____ stricter policies with regard to security. The (20)_____ for an organization representing nurses explained that there was no reason for panic, but Robert didn't believe that for a moment.

Word bank
argue   cyanide   ~~businessman~~   panting balding target   ditch
accountable   issues handle ordeal brands   damp noticed wreck
yelled   loudly hardly spokesperson   mean gathered staff implement panties
traces

<u>Sentence Stems</u>

Part 2. Complete the sentence stems using the appropriate word in the parentheses. You need to include at least 8 words in the sentence stem (i.e. give explanations).

Example: My sister exercises every day…(healthy)_____.

> ➤ *My sister exercises every day, eats nutritious foods, walks to work and leads a **healthy** lifestyle.*

1. The student asked his English teacher…

(available)_____

2. The old man slipped on the ice in front of the

bank…(sue)_____

3. The child fell to the wet ground …

(soiled)_____

4. The students did not manifest proper…

(behavior)_____

5. There is a sign on the gate to…

(warn)_____

6. The Christmas present…

(wrapping)_____

7. The little girl did not have money ... (beg)

_____

8. The ice-cream melted in the summer sun...

(lick)_____

9. The toaster is broken...

(worthwhile)_____

10. Tommy hurt himself...

(bruises)_____

APPENDIX H

Posttest (T2)

Cloze Exercise

Part 1. Choose the best word from the word bank below to fit the context. The first one is done for you.

1. It was October 31st and Karl Soto was *ecstatic* to have the day off from work and go golfing. He was driving to the golf course when he (1)_____ something strange ahead. There was a body lying in a nearby (2) _____. Karl quickly stopped his car, got out and ran to see if everything was alright. The body of a young man was lying in the dirt, not moving, and facing the ground. Karl then heard a noise behind him, turned his head, and from the corner of his eye (3) _____ the figure of a young girl running away. He (4) _____ at her to stop, but she disappeared! He kneeled down next to the man and saw that there were many black and blue (5) _____ on his arms. He got scared, pulled out his cell phone and dialed 9-1-1. The police was on its way. No golfing today for Karl!

2. Maria Sambora knows how to make cool and exotic drinks. Last year, she attended a bartending school and is one of the best bartenders today. She selects and squeezes fresh fruits, (6) _____ in all kinds of different liquids, shakes them et voilà! She works at a popular club on St-Denis and is part of the permanent (7) _____. Her regular clients (8) _____ to the place on Friday and Saturday nights and (9) _____ her to make new drinks and surprise them. They also give her big tips. Maria is pleased with all the attention, but reminds them that they should drink in moderation (10) _____ they can suffer from a hangover the next day. Her clients are happy to know such a lovely and caring bartender.

3. Johnny Pride was scared of storms and today was no exception. In Florida, (11) _____ are quite common. Johnny forgot his umbrella and got all wet as he ran to his car; even his socks were (12) _____! His hat flew away and his (13) _____ head got cold. Johnny was miserable! He hoped nothing would happen to him as he drove home. Unfortunately, after a few kilometers, his car suddenly and unexplainably stopped. Johnny was glad to see a Walmart not too far away, got out of the car and started to run in its direction. However, the store was (14) _____ by hundreds of people who were also looking for refuge. The store manager (15) _____ that the weather conditions were terrible but told everyone at the door that they could not enter because too many people were already inside and this represented a safety hazard.

Word Bank

wreck	otherwise	glimpsed
yelled	ecstatic	bruises
damp	brands	flock
mobbed	ditch	acknowledged

handle	noticed	blends
accountable	panting	bald
whirlwinds	beg	staff

Sentence Stems

Part 2. Complete the sentence stems using the appropriate word in the parentheses. You need to include <u>at least 8 words</u> in the sentence stem (i.e. give explanations). <u>Highlight</u> the words you have personally chosen and put in your vocabulary notebook.

Example: My sister exercises every day…(healthy)_____.

- *My sister exercises every day, eats nutritious foods, walks to work and leads a **healthy** lifestyle.*

1. Tommy finished doing his homework and put … (drawer) _____

_____.

2. Many celebrities such as Madonna and Angelina Jolie are … (notorious) _____

_____.

3. Some teenagers think they are invincible and perform…(stunts) _____

_____.

4. The plane was flying…(downward) _____

_____.

5. Detectives like to solve mysteries but are…(skeptical) _____

_____.

6. Car accidents are ugly because…(injuries) _____

_____.

7. In the Bermuda Triangle, ships mysteriously…(vanish) _____

_____.

8. Poor women with children can …(claim) _____

_____.

9. Mary and Tommy were dancing together but Mario stood …(sidelines) _____

_____.

10. There was a collision between two planes …(midair) _____

APPENDIX I

Student Pre-Questionnaire

Part 1. Student Profile

1- Gender: M   F

2- How old are you? _____ years old

3- What is your ethnic background? (you can check more than one)
        ____French Canadian/Quebecker
        ____Haitian
        ____Middle Eastern (Arabic speaking)
        ____Latino
        ____Italian
        ____Portuguese
        ____Romanian
        ____Russian
        ____Vietnamese
        ____Cambodian
        ____Indian
        ____Other? (Explain) _____

4-a) What language(s) do you speak at home? _____

  b) Which do you consider to be your mother tongue?_____

5- How long have you lived in Montreal? ___ years OR ___ months

6- How long have you studied English? ___ years OR ___ months

7- In your opinion, how well do you read in English (circle one):
    very well   well   not so well   not well at all

Part 2. Questions about Reading and Vocabulary

  1- Do you enjoy reading? Please explain.

    _____

    _____

    _____

2- What kinds of material do you read?

_____

_____

_____

3- How do you think you learn new words?

_____

_____

_____

4- What do you do when you encounter an unfamiliar word in your reading?

_____

_____

_____

5- In your opinion, what can you do to remember new words?

_____

_____

_____

part 2: Harmon, J.M. (1998). Constructing word meanings: Strategies and perceptions of four middle school learners, *Journal of Literacy Research.* Retrieved January 23, 2006, from http://www.findarticles.com/p/articles/mi_qa3785/is_199812/ai_n8808926.

APPENDIX J

Student Post-Questionnaire

What do you think about vocabulary notebooks?

*Part 1: Circle the letter that **best** represents your choice.*
1. How well did you like making the vocabulary notebook?
   A. did not like it at all
   B. liked it a little
   C. liked it OK
   D. liked it a lot

2. How useful was the vocabulary notebook for learning new words?
   A. not useful at all
   B. sometimes useful
   C. very useful
   D. extremely useful

3. How **easy** did you find the PAVE activity (definition + sentence + picture)?
   A. very difficult
   B. a little difficult
   C. not a problem
   D. very easy

4. How **useful** did you find the PAVE activity (definition + sentence + picture) for learning new words?
   A. not useful at all
   B. sometimes useful
   C. very useful
   D. extremely useful

5. How **easy** did you find the CAIV activity (context clues + definition + word map)?
   A. very difficult
   B. a little difficult
   C. not a problem
   D. very easy

6. How **useful** did you find the CAIV activity (context clues + definition + word map) for learning new words?
   A. not useful at all
   B. sometimes useful
   C. very useful
   D. extremely useful

7. How often will you refer to your vocabulary notebook in the future?
   A. never
   B. a few times
   C. fairly often
   D. very often

Part 2: Answer the following questions.

1. What did you like best about your vocabulary notebook?
Example comments: "I can note new words", "It's a dictionary for myself", "When I forget a word, I can look it up."

_____

_____

_____

2. What didn't you like about your vocabulary notebooks?
Example comments: "I don't like writing easy words because...", "I don't enjoy writing example sentences because...." etc.

_____

_____

_____

3. How does your vocabulary notebook help you to learn English?
Example comments: "It helps me understand the meaning of words", "I can collect new words", "It helps me remember difficult words", etc.

_____

_____

_____

4. What did you prefer, working with words the teacher chose, or your own words? Why?

_____

_____

_____

APPENDIX K

Teacher's Reflections

1. How effective do you feel that vocabulary notebooks have been in assisting student's acquisition of vocabulary? Please explain.

_____

_____

_____

_____

2. In your opinion, have vocabulary notebooks assisted students in becoming more independent in recording and learning new words? Please explain.

_____

_____

_____

_____

3. Do you think using the various vocabulary learning strategies incorporated in the notebook help students to retain the information for a longer time? Please explain.

_____

_____

_____

_____

4. What do you think of the PAVE graphic organizer in terms of interest, time and effort level? Please explain.

_____

_____

_____

_____

5. What do you think of the CAIV graphic organizer in terms of interest, time and effort level? Please explain.

_____

_____

6. Do you prefer one graphic organizer over the other? Why or why not?

_____

_____

_____

_____

7. How do you think your students have reacted to the use of vocabulary notebooks? Please explain.

_____

_____

_____

_____

8. What are your suggestions on improving the use of vocabulary notebooks?

_____

_____

_____

_____

9. If you were going to do this again, what would you do differently? Please explain.

_____

_____

_____

_____

10. Any other comment(s)?

_____

_____

_____

APPENDIX L

Sentence Stem Evaluation Scale Created by Researcher

Please note: at least two out of the three criteria in each category have to be met to get the allotted point.

2	1- Complete semantic correctness (i.e. sentence stem makes complete sense to reader) 2- Full elaboration (i.e. reasons, explanations, and examples are provided) 3- Lexical richness (i.e. sophisticated/uncommon words precisely used, appropriate word choice)
1	1- Partial semantic correctness (i.e. sentence stem makes some sense to reader) 2- partial elaboration (i.e. reasons, explanations, and examples given are not fully appropriate) 3- Partial lexical richness (i.e. lacks either precise usage of sophisticated/uncommon words or appropriate word choice)
0	1- No semantic correctness (i.e. sentence makes no sense to reader) 2- No elaboration 3- No lexical richness
NR	Did not write sentence stem