COMPARING SECOND LANGUAGE VOCABULARY RECALL FOLLOWING
TWO PRESENTATIONAL METHODS: MULTIMEDIA IMAGE BINDING AND
READING WITH ENGLISH GLOSSES

by

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ABSTRACT

Although vocabulary acquisition is necessary for effective communication, the most effective method for improving second language vocabulary knowledge is debated. This study sought to compare the effectiveness of two different methods of teaching vocabulary: multimedia image binding (MIB) and reading with English glosses (RG). The MIB instruction used a PowerPoint slide show to present targeted words in sentences with corresponding images to represent their meanings. The RG method used a short reading with English glosses of the targeted vocabulary. This study was conducted by examining the outcome of these techniques on 26 students’ immediate and delayed vocabulary recall. In order to quantify immediate and delayed recall, students were given a test after each presentation, and a second vocabulary test one week later. The results of this study suggest that both the MIB method and the RG method aid in immediate and delayed vocabulary recall. The success of both methods provides data to support the use of MIB and RG in the classroom, therefore enabling instructors to vary their techniques for vocabulary instruction.
Chapter 1

REVIEW OF RELATED LITERATURE

Vocabulary in Foreign Language

The sheer number of words that make up a language is oftentimes overwhelming for
the learner who is trying to master the lexicon (de Groot, 2006). However, based on the
principle that even native speakers do not know every word in their language, foreign
language learners do not need to attempt to learn every word (Coady, 1997). In fact, the
2,000 most frequently used words “account for at least 85% of the words on any page of any
book no matter what the subject matter. The same words give an even greater coverage of
spoken language” (Nation & Newton, 1997, p. 238). This statistic is encouraging for both
learners and instructors; 2,000 high frequency words is a much more manageable number to
acquire and still be able to effectively communicate (de Groot, 2006). However, the most
effective way to work with vocabulary is still unclear since the debate over how learners best
acquire vocabulary is ongoing (Paribakht & Wesche, 1997).

Learning Foreign Language Vocabulary

In order to discuss how words should be taught, it is important to look first at how
foreign language vocabulary is learned (Carter & McCarthy, 1988). There are two main
methods in which learners acquire vocabulary knowledge: incidentally and intentionally
(Read, 2004). Incidental vocabulary learning is not the main focus of the lesson and instead
takes place as a by-product of another process, such as reading for comprehension (Wode, 2000). Quite often, reading is cited as a main activity where learners incidentally learn vocabulary (Hulstijn et al., 1996; Knight, 1994) however, such learning takes place “incrementally and in small quantities” (Hulstijn et al., 1996). On the other hand, intentional vocabulary learning takes place when the learners’ task is to pay attention to targeted words and attempt to become more knowledgeable about them (Barcroft, 2009). Oftentimes intentional vocabulary learning takes place by studying a list of target words (Thorndike, 1908). Another way that students frequently intentionally learn vocabulary is through activities focused on learning a selected group of words (Barcroft, 2009). However, most often learning does not take place purely incidentally or purely intentionally; frequently these processes are complimentary to one and other (Barcroft, 2009; Schmitt, 2008).

**Teaching Foreign Language Vocabulary**

The complementary nature of learning vocabulary creates ongoing debate about how to best teach vocabulary: implicitly or explicitly (Coady, 1997; Krashen, 1989; Myers & Chang, 2009; Pellicer-Sánchez & Schmitt, 2010; Prince, 1996; Nation, 2001; Sökmen, 1997). This debate dates back all the way to the grammar-translation method of instruction when students were expected to memorize lists of L2 to L1 vocabulary in order to translate classic works (Rivers, 1981; Zimmerman, 1994). As time passed, emphasis shifted from explicit instruction to the implicit learning of vocabulary via input and association (Long, 1999; Rivers, 1981). The emergence of the audiolingual method continued the ongoing debate and shifted focus back to the memorization of materials and explicit instruction (Shrum & Glison, 2005). Today, many researchers continue to investigate how learners acquire vocabulary. Many have documented that it takes place most efficiently implicitly, mostly through reading
(Kweon & Kim, 2008; Coady, 1997; Grabe & Stoller, 1997). However, others have found that implicit learning is not enough and have emphasized that lexicon learning is better with an added treatment or even explicitly in order to increase the awareness of the targeted words by the learners (Broady, 2008; Nassaji, 2003; Paribakht & Wesche, 1997; Verhallen & Bus, 2010).

Implicit Vocabulary Instruction

On one side of the debate is implicit instruction. Implicit instruction does not have an obvious focus on vocabulary but such learning is included into activities like listening to stories, group work, and information gap activities focused on other tasks (Nation and Newton, 1997). A great benefit of implicit vocabulary instruction is that words are taught in context instead of through a laundry list of words (Nation & Newton, 1997; Lee & VanPatten, 2003; Shrum & Glison, 2005), which Prince (1996) suggested is much more effective for learners. To aid students in implicitly learning vocabulary, teachers should spend time focusing on improving “learners’ control of vocabulary learning and coping strategies” (Nation, 2001, p. 21) such as guessing from context, using parts of words to guess their meanings, as well as other vocabulary memorization techniques like mnemonic devices and rote memorization (Atay & Ozbulgan, 2007; Nation & Newton, 1997). Implicit learning strategies like these are especially useful for learners to acquire low-frequency words when they are reading for pleasure (Nation, 2001).

Implicit Vocabulary Instruction with Treatment

In order to make targeted vocabulary more salient to learners, implicit instruction with added treatment can be beneficial (Kim, 2006). This is especially helpful for beginning
learners who do not have a large enough knowledge of the lexicon to use strategies like guessing meaning from context clues (Nation, 2001). Treatment added to implicit instruction can be done in a variety of ways including glossing and additional focused activities involving the targeted words (Cheng & Good, 2009; Paribakht & Weshce, 1997). These are oftentimes very helpful, especially when the context of a word does not reveal its meaning (Frantzen, 2003).

In order to add a gloss treatment to a vocabulary word, instructors provide learners a short synonym or brief definition of the targeted word in their L1 or L2 (Chun & Plass, 1971; Nation, 2001). The instructor also has the option of using a gloss in the form of a picture, or any combination of picture and synonym or definition (Yanguas, 2009). The location of the gloss can be immediately following the targeted word, in the margin of the text, at the foot of the page, or at the end of the text (Nation, 2001). By providing a glossed word, the instructor prevents learners from inferring an incorrect meaning of a targeted word, something that is frequently problematic in implicit instruction without added treatment (Sökmen, 1997). Numerous studies have shown the positive effect glossing has on increasing lexical knowledge of learners (Cheng & Good, 2009; Chun & Plass, 1996; Hultijn et al., 1996; Kim, 2006; Yanguas, 2009; Yoshii, 2006).

A second type of instructional treatment shown to benefit learners’ acquisition of vocabulary is adding activities focusing on the targeted vocabulary (Paribakht & Wescche, 1997). Additional activities following the presentation of vocabulary increases learner exposure to targeted words which aids in new vocabulary acquisition (Myers & Chang, 2009; Nation, 2001). Supplementary communicative activities also encourage learner involvement with the targeted words as well as foster meaningful communication (Laufer & Hulstijn,
2001; Nation & Newton, 1997). Paribakht and Wesche (1996) described five different types of activities that can be used: selective attention, recognition, manipulation, interpretation, and production. Lauger and Hulstijn (2001) suggested that certain tasks are more beneficial than others for vocabulary acquisition based on learner involvement. The benefit can be quantified depending on three factors: the students’ need for the meaning of the word, if students had to search for the meaning of the word, and whether the students needed to evaluate and compare one meaning over another and chose the best one (Laufer & Hulstijn, 2001). Many researchers agree that activities following the presentation of vocabulary will aid in the acquisition of targeted words, even if some are more beneficial than others (Atay & Kurt, 2006; Laufer & Hulstijn, 2001; Min, 2008; Nation, 2001).

**Explicit Vocabulary Instruction**

Explicit vocabulary instruction occurs when specific time is set aside for the study and attention to vocabulary (Nation & Newton, 2001). It may consist of word-building exercises, studying vocabulary in context, semantic mapping, matching words with various types of definitions, role playing, picture descriptions, information-gap activities teacher explanation, and peer teaching, among other things (Morin, 2006; Nation, 2001; Nation & Newton, 1997). Binding “the new word with its meaning and not with a translation” (Terrell, 1986, p. 214) is a beneficial method for teachers to explicitly explain targeted vocabulary. Consequently, an explicit presentation of the pictorial representation of the word has been shown to help students acquire vocabulary (Bush, 2008; Chun & Plass, 1996; Kellogg & Howe, 1971; Lee & VanPatten, 2003). The explicit instruction of vocabulary is encouraged especially for beginner learners since at that stage of their language development, they do not
have sufficient knowledge of L2 vocabulary to use other strategies for vocabulary acquisition (Coady, 1997).

In order to facilitate binding vocabulary items with their pictorial representation, instructors can use pictures and images in their instruction (Bush, 2008). Until recently, when technology transformed the way classroom teachers could present visual aids (Kaplan, 2008), there was very little research published about the pedagogical issues that needed to be taken into account for their appropriate implementation (Bush, 2008). However, the ability to use multimedia presentations (like PowerPoint) to present images emphasizing crucial topics and information has provided great opportunities for instructors teaching vocabulary with images (Kaplan, 2008).

There are clearly multiple approaches to second language vocabulary instruction: implicit, implicit with treatment, and explicit. Each method has its own unique advantages and disadvantages that should be taken into account before choosing which technique to use. This study seeks to shed more light on which method is more effective for vocabulary recall following classroom instruction to help in such decision-making.
Chapter 2

THE PRESENT STUDY

Overview

The present study used quantitative research methods to analyze the effect of mode of presentation on the amount and length of vocabulary recall. This study was conducted with high-beginner learners of Spanish as a foreign language. The independent variable of this study was the method of presentation and the dependent variable measured was the amount of vocabulary recalled by learners.

Methods and Design

The study was conducted with three intermediate level Spanish classes. This intermediate level Spanish course is the second in a sequence of three taken to fulfill the University foreign language requirement. Classes lasted for five weeks and met five days per week for two hours each day. The three classes had a total of 55 students who consented to anonymously participate in this study (see appendix A). In order to protect the students’ anonymity while still allowing for data correlation and analysis, the last four digits of the student identification numbers assigned to students by the university were used.

For this study seven vocabulary words were in two different ways. The first method (multimedia image binding – MIB) presented vocabulary to learners using images to represent the meaning of each word. The vocabulary word was used in a sentence below the picture. Each word in a sentence along with its pictorial representation was presented on a
separate slide as part of a PowerPoint presentation (see appendix B). The second method (reading with glosses - RG) presented targeted vocabulary to learners through a 183-word reading with English glosses (see appendix C). The English glosses in this reading were located immediately following the targeted word. All three instructors were asked to follow the same instructional method for both presentations enabling all students to receive both methods of instruction.

In order to compare the learners’ recall abilities following the two methods of vocabulary presentations, students were given a pre-test before each presentation, a post-test I immediately following each presentation, and a post-test II one week after each presentation. The pre-test and two post-tests for each presentation were identical in format and design. These assessments included the seven vocabulary words listed in the same order on each test. Each word had a space to the left for the students to place a checkmark if they knew the definition of the word as well as a space to the right for students to write the definition of the word in English (see appendices F, G, H, I, J and K). Each test was graded by the researcher and students received one point for each correct definition that they wrote. The minimum score they could receive was 0 and the maximum was 7.

**Presentation and Activities**

Vocabulary words presented were chosen from *Temas: Spanish for the Global Community*, the textbook used in this course. The first set of seven vocabulary words was chosen from the theme “el mundo urbano” (urban life) located on page 220 of *Temas*. The second set of targeted words was chosen from the theme “La vida en el campo” (life in the country) which is on page 232. Following each presentation students completed three activities from their textbook. It should be noted that *Temas: Spanish for the Global*
Community adheres to the principles and guidelines of structured input and output in the activities that follow each vocabulary theme.

For the first presentation, multimedia image binding (MIB), a PowerPoint slide show was used to present a vocabulary item in a sentence along with an image that represented its meaning. To make the words more salient, instructors were asked to read each sentence with the targeted word once, and then have students repeat the word out loud. Following this presentation, students completed three contextualized activities (6-2, 6-4, and 6-6) from pages 221 and 222 of their textbook (see appendix D). These activities involved students working individually as well as in pairs both asking and responding to questions that included targeted vocabulary. Upon completion, they had to write a brief summary of their partner’s answers.

The second presentation of vocabulary used a short reading with English glosses. The reading was contextualized as a letter from a friend describing his life working on a farm. The reading was 183 words long including the English glosses. Students were instructed to read the passage silently. Following the reading, students again completed communicative activities (6-22, 6-23, and 6-24) from page 233 of their textbook (see appendix E).

Research Questions

The two questions that the researcher sought to address with this study were:

1. Does the manner of presenting vocabulary affect recall?
2. Is delayed vocabulary recall affected by the presentation method?
Chapter 3

RESULTS

To explore the effect of method of vocabulary presentation on immediate and delayed recall, outcome data for each presentation method was first analyzed individually. The first method, multimedia image binding (MIB), presented images along with a short sentence to convey the meanings of selected words in a PowerPoint presentation. To begin the analysis, basic descriptive statistics were calculated to identify any preliminary trends. These calculations are presented in Table 1. After the MIB presentation, students recalled on average 5.385 words. The standard deviation of 1.267 words suggests that there was not a large variation in students’ scores. In other words, all the subjects in the study recalled a similar amount of words immediately following the MIB presentation. One week following the MIB, students recalled an average of 6.423 words. This delayed score suggests that after one week, students were able to recall almost one more word than they could immediately following instruction. The standard deviation of 0.703 suggests that scores were similar amongst students. The preliminary trends in these data suggest that there were immediate and delayed vocabulary gains for all subjects following the MIB treatment.
Table 1. Descriptive statistics of immediate and delayed recall following the multimedia image binding presentation of vocabulary.

<table>
<thead>
<tr>
<th>Method</th>
<th>Data Set</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multimedia Image Binding</td>
<td>Immediate recall</td>
<td>5.385</td>
<td>1.267</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>Delayed recall</td>
<td>6.423</td>
<td>0.703</td>
<td>7.0</td>
</tr>
</tbody>
</table>

The second instructional method, reading with glosses (RG), involved students reading a short, contextualized passage with seven targeted vocabulary words glossed in English. Again, basic descriptive statistics were calculated for this data set to see any emerging trends. These statistics are summarized in Table 2. Immediately after students read the passage with English glosses, they were able to recall an average of 5.615 words. The standard deviation of 1.675 suggests that data were clustered relatively closely to the mean. One week after the reading, the students were able to recall an average of 6.423 words, almost a full word more than they could immediately following the presentation. The standard deviation of 1.137 suggests that there was also less variance in scores one-week after the presentation. Overall these results suggest that students gained vocabulary recall knowledge both immediately and one week following the RG presentation.

Table 2. Descriptive statistics of immediate and delayed recall following the reading with glosses presentation of vocabulary.

<table>
<thead>
<tr>
<th>Method</th>
<th>Data Set</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading with glosses</td>
<td>Immediate recall</td>
<td>5.615</td>
<td>1.675</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td>Delayed recall</td>
<td>6.423</td>
<td>1.137</td>
<td>7.0</td>
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</tbody>
</table>
Following individual analysis, the two methods were compared for immediate and delayed recall to determine any effects that presentation method has on vocabulary recall. Immediate recall of vocabulary will be discussed first. A summary of these statistics is shown in Table 3. For the MIB presentation, students immediately recalled an average of 5.385 words. For the RG presentation, students recalled a mean of 5.615 words more than they did before the treatment. Both presentations had relatively similar data distribution with standard deviations of 1.267 for MIB and 1.675 for RG. This comparison suggests that for immediate recall, reading with English glosses is slightly more effective than multimedia image binding.

Table 3. Descriptive statistics of immediate recall for both multimedia image binding instruction and reading with English glosses instruction.

<table>
<thead>
<tr>
<th>Method</th>
<th>Data Set</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multimedia Image Binding</td>
<td>Immediate recall</td>
<td>5.385</td>
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</tr>
<tr>
<td>Reading with English glosses</td>
<td>Immediate recall</td>
<td>5.615</td>
<td>1.675</td>
<td>6.0</td>
</tr>
</tbody>
</table>

A t-test was also conducted to test for statistical significance of this difference. The null hypothesis for this t-test was that the immediate recall scores for the MIB treatment was equal to the immediate recall scores of the RG treatment. The alternate hypothesis was that the two scores were not equal. The t-test was conducted at a 0.05 level of significance. The p-value calculated from this paired t-test of immediate recall was 0.578. Since the calculated p-value was greater than 0.05 the null hypothesis that both scores were equal was accepted and there is no statistical difference between the two methods.
The same statistical calculations were conducted to compare the delayed vocabulary recall for both presentations. Again basic statistics were used to compare the two methods. These statistics are summarized in Table 4. On average, students were able to recall the same number of words after the MIB presentation that they could after the RG presentation. The standard deviation of the MIB instruction was slightly smaller than that of the RG instruction. Therefore, data were clustered somewhat more closely to the mean and with less variation following MIB. The identical means of both methods suggests that there is not an advantage to using one method over another to improve delayed vocabulary recall.

Table 4. Descriptive statistics of delayed recall of both multimedia image binding instruction and reading with English glosses instruction.

<table>
<thead>
<tr>
<th>Method</th>
<th>Data Set</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multimedia Image Binding</td>
<td>Delayed Recall</td>
<td>6.423</td>
<td>0.138</td>
<td>7.0</td>
</tr>
<tr>
<td>Reading with English glosses</td>
<td>Delayed Recall</td>
<td>6.423</td>
<td>0.223</td>
<td>7.0</td>
</tr>
</tbody>
</table>
This study sought to further research the effects of vocabulary presentation on immediate and delayed recall. In order to continue investigate these effects, seven words were presented using two different techniques. The first presentation method, multimedia image binding (MIB), used a PowerPoint slideshow to present vocabulary words in context with corresponding images. The second presentation method, reading with English glosses (RG), instructed students to read a short passage with English glosses for the targeted words. Students completed follow-up activities after each presentation. A first post-test assessed vocabulary recall immediately after each presentation and a second post-test assessed delayed recall one-week following each presentation.

The post-tests found that students’ vocabulary recall improved both immediately and one-week after both presentations. Student recall scores immediately following the RG presentation were slightly higher than those following the MIB presentation, however this difference was not shown to be statistically significant. Interestingly, the mean delayed scores for both methods were identical, and about one word greater than the immediate scores.

It is plausible that the increase in vocabulary knowledge one-week following the presentations was due in part to the recycling of vocabulary that exists in the textbook and online workbook that students used on throughout the course. Such recycling allows students
to experience repeated exposures to targeted words throughout all activities in the chapter, not just in the section focused on presenting vocabulary, something that has been shown to be beneficial for learning vocabulary (Laufer & Hulstijn, 2001; Nation, 2001). Additionally, students had a formal assessment prior to both delayed post-tests. This assessment provided a compelling need for students to study the words outside of the classroom in order to perform well on the exam, suggesting that outside study of targeted words also aids in recall.

The outcome of this study brings to light the need for further research on the presentation of vocabulary in the classroom. Since vocabulary recall gains following the RG method were higher than those after the MIB presentation, but not statistically significant, further research should be conducted to advance or disprove such claims. Future studies should take into account any prior vocabulary knowledge that students had before the presentations in order to differentiate between recall due to the presentation and recall due to other exposures to the targeted words. This could be done using a control group that is instructed to study the targeted vocabulary instead of receiving instruction. All three groups of students could also be given a pre-test prior to instruction to be compared to the post-test results. Additionally, in order to eliminate any effects that the different groups of words had on the results, two presentations should be given to two separate groups of students, each using the same words.

Although neither method was shown to be more significant than the other, both methods suggested benefits for students’ vocabulary recall. Therefore, instructors have greater options for varying vocabulary presentation in the classroom. It would also be beneficial for instructors to survey student responses to each method. These responses could
be factored into how the instructor presents vocabulary to maximize student engagement during the lesson.
References


Teachers of English to Speakers of Other Languages and of Standard English as a Second Dialect, 40(2), 341-373.


New York: Cambridge University Press.
Appendix A

INFORMATION AND CONSENT FORM

Human Subjects Informed Consent

Project Title: Vocabulary Recall Based on Presentation Method

Principle Investigator: Raychel Vasseur

Department: Department of Foreign Languages and Literatures
30 E. Main Street
Jastak-Burgess Hall
Newark, DE 19711
302.831.6882

Explanation of the Study

Purpose/Description of the Research
You are invited to participate in this study in order to determine how vocabulary presentation affects recall. For this study, you will be presented with vocabulary from your textbook, *Temas*, twice during your normal class time. Before each presentation you will take a pre-test to determine prior knowledge. The same day as each presentation you will take a post test, and one week following the presentation you will take a delayed-recall post test.

Procedures
The study and data collection will take place during regular class time of your Spanish 106 class. You will be presented with vocabulary on two different occasions in two different ways. You will take a pre-test, a post-test, and a delayed recall post-test corresponding with each presentation.

Risks
The risks associated with this data collection are minimal as vocabulary presentation is part of your regular Spanish 106 class and the time taken to collect data based on presentation is small.
Benefits
The information gathered from this data collection will not benefit you directly.

Contacts
If you have any questions regarding this study you may contact Raychel Vasseur, Graduate Student, Department of Foreign Languages and Literatures (732.610.4155). If you have any questions regarding your rights as a research subject, then you may contact the Chair of Human Subjects Review Board in the Research Office at the University of Delaware (302-831-2136).

Confidentiality
Information obtained from you during this study will be kept confidential. You will use the last 4 digits of your student ID number to identify yourself. The researcher will not be able to identify you directly with these numbers and will only use them to correlate data from various assessments for this study only. The researcher involved in the study is eligible to view the research records. Data may be used for publication purposes, but a code number will be assigned to our data in order to maintain confidentiality in reporting results. After the study is over, the data will be stored indefinitely for future reference, but confidentiality will be maintained. Results of the study will be made available to you upon request once the study is complete.

Informed Consent
The project in which I have been invited to participate has been explained to me, and all of my questions have been answered to my satisfaction. My participation in the project is voluntary. I understand that I may terminate my participation in this study at any time. No explanation will be required of me, and there will be no penalty for my withdrawal from the study. I have read and understand the explanation of the procedures.

Only key personnel involved with the study are permitted to view the research records. I give my permission for my data to be used for publication purposes. However, I have been informed that a code number will be assigned to my data in order to maintain confidentiality in reporting results. I understand that my data will be stored indefinitely for future reference, and my confidentiality will be maintained.

________________________________  __________________________________
Name of Subject (please print)   Signature of Subject

____________________________
Date
Appendix B

MULTIMEDIA IMAGE BINDING PRESENTATION

El mundo urbano
SPAN106

Quiero mudarme al centro de la ciudad de Nueva York.
Es la ciudad que nunca duerme; siempre hay ruido.

Mis amigos viven en un barrio muy rico en Nueva York.

El costo de vida en la ciudad es muy alto.
No es una ciudad limpia; siempre hay basura en la calle.

Hay mucha delincuencia en la ciudad.

El alcalde (Bloomberg) quiere mejorar los problemas de la ciudad.
Actividades del libro de texto

- 6-2
- 6-4
- 6-6
Appendix C

READING WITH ENGLISH GLOSSES

Recibes una tarjeta postal de tu amigo que vive en la finca de su tío este verano. Lee el postal para entender que hace en la finca.

¡Hola!
Vivo en la finca de mi tío Juan este verano para ayudarle con sus animales y los trabajos de la finca. Su finca tiene muchos tipos de animales y les doy comida a ellos cada día. También, él me dijo que tiene algunos patos (ducks) que pasan mucho tiempo en el lago de su finca, pero no son suyos. Siempre hay algo que necesito hacer en su finca. En las mañanas como el desayuno que mi tía prepara. Normalmente ella cocina algunos huevos de las gallinas de la finca, y tocino (bacon) de los cerdos (pigs). También, bebo la leche de las vacas (cows). Después de comer el desayuno, montar a caballo (horse) y voy al ganado (cattle) que están muy lejos de la casa para checar que todos están vivos. Mi tío también tiene algunos toros (bulls). ¿Sabes que no es la verdad que a ellos no les gustan el color rojo? ¡Tengo que cosechar el cultivo! ¡Nos vemos pronto!
Arturo
Appendix D

TEXTBOOK ACTIVITIES FOLLOWING MULTIMEDIA IMAGE BINDING

6-2 Su nuevo hogar en Managua Un amigo tuyo viajó recientemente a Nicaragua para trabajar. Escucha su mensaje en el contestador.

1. Lo que más le gusta de Managua es...
   a. los museos.     b. el centro.     c. el parque.

2. Encontró en la ciudad...
   a. una casa.        b. un apartamento.   c. una oficina.

3. Ahora necesita instalar...
   a. el teléfono.    b. la luz.         c. el agua.

6-4 La vida en Managua Completa la siguiente carta de Marisa, tu e-mail-pal nicaragüense, sobre la vida en su ciudad.

Managua es una ciudad grande, con muchos lugares bonitos para visitar. El __________ es un poco congestionado, pero los __________ periféricos son tranquilos. El sistema de __________ es eficiente y económico. Hay autobuses y taxis, pero no hay metro. Como aumenta el número de automóviles particulares, el problema de la __________ y la congestión nos preocupa mucho ahora en la ciudad. Pero bueno, ¿y cómo es tu ciudad?
6-6 Entrevista Trabajando en parejas, hagan y respondan a las siguientes preguntas. Al terminar, preparen un breve informe sobre las respuestas del (de la) compañero(a).

1. ¿Tienes suficiente luz natural en tu apartamento o en tu casa?
2. ¿Hay demasiado ruido en tu apartamento o en tu casa?
3. ¿Dónde tiras la basura?
4. ¿Quién saca la basura en tu casa?
5. ¿Hay mucha delincuencia en tu barrio?
6. ¿Hay mucho tráfico donde vives?
7. ¿Es alto el costo de vida en tu comunidad?
Appendix E

TEXTBOOK ACTIVITIES FOLLOWING READING WITH GLOSSES

6-22 El campo en los Estados Unidos Indiquen si las siguientes oraciones son ciertas (C) o falsas (F).

___ 1. Crían mucho ganado en Texas.
___ 2. Todas las fincas están en el centro del país.
___ 4. Los cultivos de cereales en Kansas están muy tecnificados.
___ 5. Las cosechas de naranjas son excelentes en Massachusetts.
___ 6. Muchos inmigrantes hispanos recogen las cosechas en California.

6-23 ¿Adónde fueron? Escucha las descripciones de diferentes vacaciones que ha tomado el Sr. Espinoza e identifica el destino de sus viajes.

1. En 2001, los Espinoza fueron a...
   a. una finca.
   b. una ciudad.
   c. una playa.

2. En 2002 fueron a...
   a. un desierto.
   b. una selva.
   c. un río.

3. En 2004 fueron a...
   a. una finca.
   b. un desierto.
   c. una playa.

4. En 2005 fueron a...
   a. una finca.
   b. una selva.
   c. una ciudad.
6-24 **Tres animales** Mencionen tres animales con cada una de las siguientes características.

1. Tienen pelo.
2. Tienen plumas (*feathers*).
3. Son famosos por las películas.
4. Viven con los humanos en las ciudades.
5. Su nombre empieza con «p».
Appendix F

PRE-TEST: MULTIMEDIA IMAGE BINDING

ID Number _______________________

Pre-Test I

Place a check mark in the box next to words that you know the definitions for. Please define (in English) in one or two words the meaning of the words that you have checked in the third column.

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Appendix G

POST-TEST I: MULTIMEDIA IMAGE BINDING

ID Number _______________________

Post-Test I

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Appendix H

POST-TEST II: MULTIMEDIA IMAGE BINDING

ID Number _______________________

Post-Test II

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Appendix I

PRE-TEST: READING WITH ENGLISH GLOSSES

ID Number _______________________

Pre-Test II

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Appendix J

POST-TEST I: READING WITH ENGLISH GLOSSES

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POST-TEST II: READING WITH ENGLISH GLOSSES

ID Number ________________  

Post-Test II

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Appendix L

RESEARCH OFFICE EXEMPTION LETTER

DATE: January 9, 2011

TO: Raychel Vassaur
FROM: University of Delaware IRB

STUDY TITLE: [209163-1] Vocabulary Recall Based on Presentation Method

SUBMISSION TYPE: New Project

ACTION: DETERMINATION OF EXEMPT STATUS
DECISION DATE: January 9, 2011
REVIEW CATEGORY: Exemption category # 1

Thank you for your submission of New Project materials for this research study. The University of Delaware IRB has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

We will put a copy of this correspondence on file in our office. Please remember to notify us if you make any substantial changes to the project.

If you have any questions, please contact Elizabeth Peluso at 302-831-9619 or epeluso@udel.edu. Please include your study title and reference number in all correspondence with this office.