

Understanding How Cognitive Psychology Can Inform and Improve Spanish Vocabulary Acquisition in High School Classrooms

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Educators deal with the many dynamic functions and applications of the human brain on a daily basis. The theoretical research of the biology and functionality of the human brain is on the rise, and educational publishers continue to support books and scholarly articles that promote the notion that "brain research" can and should be applied to classroom teaching. Key terms such as *brain-differentiated learning*, *brain-compatible learning*, *brain-friendly learning*, and *brain-based teaching* have been used to lure educators to adopt these theoretically supported teaching strategies. Much of the literature on brain research deals with explaining the memory systems of the brain, or more specifically how the brain works to retain and retrieve bits of information. The idea that applying this knowledge base to educational psychology to yield positive outcomes in the teaching and learning process sounds promising, however, there is a lack of empirical research conducted in K-12 classrooms to support the positive results of applying brain research to teaching practices. So, the question arises: Have educators and proponents of brain research assumed all too quickly that brain-informed teaching strategies will yield consistent positive results? Our study offers empirical evidence which helps answer this question. This empirical study has investigated how information about human memory from the field of cognitive psychology can be applied specifically to teaching Spanish vocabulary in high school classrooms. Our interdisciplinary study brought together the fields of cognitive and educational psychology along with foreign language teaching in order to understand better how research on human memory can improve teaching vocabulary in high school Spanish classes.

Literature Review

Given the interdisciplinary nature of this study, we reviewed literature from several different fields to gain a comprehensive understanding of the issue at hand. Educational psychology, cognitive psychology, and foreign language teaching all intersect when considering the implications of the knowledge of human memory and its impact upon teaching vocabulary in high school Spanish classrooms.

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In the field of educational psychology, *brain-based*, *brain-friendly*, or *brain-compatible teaching* have become popular terms that are prominently noted in the literature and commonly included in programs of well attended teacher conferences. Understanding how the brain works and applying this information to teaching practices has become a popular phenomenon in education. Best-selling books and curriculum have saturated the book market to attract educators to purchase resources which will teach them how to apply information about the physiological and biological functions of the brain to enhance the teaching and learning process (Jossey-Bass, 2008; Tate, 2003; Sousa, 2003; Sousa, 2006; Jensen, 2000; Caine, et al., 2005). For example, Sprenger (2005) explained brain terms and extracted examples from her own teaching when she found successful learning

outcomes after applying insights from the field of cognitive psychology. Though this type of anecdotal evidence of brain-based teaching methods is common throughout educational psychology texts, empirical studies which highlight particular teaching methods tested in K-12 classrooms are lacking. In fact, Smilkstein (2003, p. 124) asserted, "although educators have an understanding of how the brain learns, that alone is not enough to generate a methodology for developing and delivering curricula that trigger and sustain the brain's innate learning process as well as the learner's motivation and attention". The Commission on Behavioral and Social Sciences Education (1999) also cautioned, "In considering which findings from brain research are relevant to human learning or, by extension, to education, one must be careful to avoid adopting faddish concepts that have not been demonstrated to be of value in classroom practice" (p. 102). Caine and Caine (1991, p. 88) suggested that "we [still] need a way of selecting the methodologies that will maximize learning and make teaching more effective and fulfilling".

The field of cognitive psychology lays an important foundation in teacher preparation because all prospective teachers begin the road to teacher certification with courses that present literature dealing with cognitive development. In schools, teachers interact regularly with students in classrooms where students are continuously receiving, processing, storing, and retrieving information using their brains. It is clear that the brain is capable of receiving and storing information in many different ways. Through numerous sensory rich input mechanisms, the brain receives bits of information and carefully stores it into its short term, working, or long term memory. For the educator, the question lies in how we can use the knowledge gleaned from cognitive psychology to teach our students most effectively. Bruer (1997) believed that through understanding brain structures and cognitive functions, we could connect

our learning capacities with instructional goals and outcomes to bridge the two fields of educational and cognitive psychology. Sylwester (2004) defined many brain terms and explained how the brain functions in an attempt to expose K-12 educators to the biological background of the brain. Though educators have typically been trained in the social sciences, with special attention to behavior theories and modifications, Sylwester has noted an increased need for educators to become knowledgeable about cognitive neuroscience. This connection of educational and cognitive psychology is also evident in texts like Woolfolk (2008) which explained cognitive views of learning. Woolfolk described a model of information processing that involves the brain's capacity to retain and retrieve knowledge using its different memory systems. This perspective offers a scientific explanation of how learning occurs in today's classrooms.

In analyzing the memory functions of the brain, Caine and Caine (1991) have discovered that there are two types of memory that the brain utilizes: taxon memory (memories that consists of lists or categories) and locale memory (a memory system which constructs maps or schema of new information and connects it to our prior knowledge and experiences). Foreign language classes have typically presented declarative knowledge by implementing teaching practices which require students to use heavily their taxon memory, or memorizing lists and categories of information. This limits the opportunities for students to exercise their locale memory, which in turn reduces the possibilities to explore and discover a deeper understanding of the material and inhibits longer term recall. In essence, what Caine and Caine (1991) pointed out is that there are different types of memory functions of the brain that can be utilized more frequently to help students retain and retrieve information learned in a classroom.

Foreign language teaching, particularly

Spanish in this case, is a prime example of the implementation of teaching methodologies which do not take full advantage of the long term memory capacities of the brain. Rote rehearsal (traditional learning method) is typically being implemented in high school foreign language classrooms and is a conventional technique that involves mainly continual repetition (Maximo & Sadoksi, 2000). Elaborative rehearsal (non-traditional method) links new information with familiar material. Through elaborative rehearsal, learners extract the meaning of the new information and then link it to pre-existing material already in memory. The more associations, the more likely one is to remember the new information later. Using this method, we tend to remember meaningful material better than arbitrary facts (Caine & Caine, 1991). The literature dealing with brain-based teaching calls educators to rethink current educational practices of teaching lessons, like new vocabulary in high school foreign language classrooms, and move beyond the conventional methods of rote memorization and rehearsal in order to optimize learning.

Literature dealing with foreign language teaching offers suggestions and activities that are recommended for teaching foreign language. Notable researchers like Krashen & Terrell (1983) have made significant theoretical contributions to the field of second language acquisition, explaining the importance of the natural approach to teaching a second language and the value of providing a comprehensible input to set the stage for successful learner outcomes. For the purposes of our study, we investigated the literature that dealt not only with the theories that underlie second language acquisition but also more specifically with the research completed on the instruction of foreign language vocabulary. Commonly cited strategies of teaching foreign language vocabulary included the keyword approach (Sagarra & Alba, 2006), the use of realia or real life items (Brown, 2001), attaching personal connections to the

semantic structures of words (Lorayne, 1973), rote rehearsal (Maximo & Sadoksi, 2000), using picture-word pairs (de la Fuente, 2006), and rehearsing vocabulary using flashcard images (Liebowitz, 1988; Elliot & Adepoju, 1997). Many articles and texts promoted a variety of creative strategies that could be used to teach foreign language vocabulary, however, empirical research completed in high school classrooms to support positive outcomes after implementing the recommended teaching strategies was scarce. Interestingly, when empirical studies were cited in the literature, they were conducted mainly in college classrooms with small sample sizes. The bridge between research and K-12 teaching is left to be constructed, and the foundations of such a connection stems from carrying out studies like ours in K-12 classrooms and studying their outcomes.

Methodology

Data collection took place in the spring of 2007 at two public high schools in southern California. The schools are located within 30 miles of one another, and both are comprised of approximately 2,000 students. Student populations reflect upper-middle class communities.

Seven Spanish I classes, periods 1, 2, and 4 from School A and periods 1, 2, 5, and 6 from School B, were purposefully selected for this study. The classes were chosen based on teacher permission and class scheduling. Spanish I classes were chosen because the students are at the beginning of their foreign language learning experience, which is an ideal starting point for the building of a foundation for students. The majority of students who participated in these classes were freshmen, and their age mean was 14 years old. Each class consisted of an average of 25 students. The teacher from School A was a female in her mid-50's and was an experienced teacher, whereas the teacher from School B was a male in his mid-20's and was a relatively new teacher.

To be included in the study, all student participants had to complete a pre-survey, be present for both scripted lessons, and take all six post tests. Students' backgrounds and prior exposure to the vocabulary words presented in the lessons were assessed with a pre-survey. The pre-survey allowed the researchers to rule out certain vocabulary words that students previously knew and exclude any students who had prior knowledge of the language. The students included in the data collection spoke English as their first language and were learning Spanish for the first time. The data analyzed for this study included a total of 78 students, 42 students (21 males and 21 females) from School A and 36 students (22 males, 11 females, and 3 unknown) from School B.

Regular classroom teachers followed scripted lessons to control the number of variables in both classrooms. Scripted lessons were used for this experiment to ensure that both teachers followed the same methodology. Regular classroom teachers were recruited to present the lessons rather than a guest teacher, so that the students' typical learning environment was not changed.

Our experiment involved two phases of data collection. For each phase, the regular classroom teacher followed scripted lesson plans for a 'traditional' or 'non-traditional' vocabulary lesson. The objective of each lesson was for the students to learn 15 food vocabulary words (all nouns) in Spanish. For the purposes of our study, we have defined a traditional lesson as one which involves mainly rote repetition. In this case, students were given a list of 15 food vocabulary words in Spanish and English. The teacher began the lesson by having students repeat each Spanish word twice along with its English translation after the teacher. (*Example:* Teacher: "el bocadillo", Students: "el bocadillo", Teacher: "el bocadillo", Students: "el bocadillo", Teacher: "the sandwich", Students: "the sandwich".) Afterwards, the teacher proceeded with an activity where the students orally repeated

each Spanish word again after the teacher modeled the pronunciation of the word, and then students wrote the vocabulary word under its visual image which was provided on a worksheet.

The non-traditional lesson involved deeper processing with the use of realia, or real food items, and an exercise which prompted students to consider whether they liked or disliked the food items. First, students were all given a list of 15 food vocabulary words in Spanish and English. The teacher then held up a real food item of each vocabulary word and asked the students to repeat each word in Spanish. Afterwards, students were given a worksheet with various food images on it. For each item, students followed along with the teacher and after the instructor said the word, the students repeated the word in Spanish, wrote the word below its picture in Spanish, and then marked the box next to "ME GUSTA" (I LIKE) or "NO ME GUSTA" (I DON'T LIKE) which indicated a pleasant or unpleasant connection to a particular vocabulary word. Researchers provided all supplies that were needed for the regular classroom teacher to present each lesson. During Phase I of data collection, School A implemented a traditional lesson, whereas School B used a non-traditional lesson. During Phase II, each teacher used the other strategy, so School A followed the non-traditional lesson while School B used the traditional lesson.

Students were tested three times on the vocabulary words that were presented after each given lesson. The students took a quiz promptly following the lesson to test for immediate recollection of the vocabulary words (quiz 1), then another quiz after 3 days (quiz 2), and again 24 days later to test for long-term retention (quiz 3). Each quiz consisted of 15 fill-in questions which asked students to write out the vocabulary word below its image. To avoid order recognition of the words, each quiz was randomly sequenced.

After all the data were collected, an established rubric was used to grade each quiz

objectively. Barcroft (2002) created a grading system based on the orthographic division of a given word. Students' abilities to retain and retrieve the orthographic representation of the vocabulary word that was taught using the traditional or non-traditional method were analyzed. Students' scores could range from 1 (totally correct response), .75 (3/4 of word), .5 (half of the word), .25 (1/4 of the word), or 0 (no recall of the word). So, if the word was *cereza* (cherry), and the student wrote "cer" as the response, the item was scored .50. Articles (el, la) and any accents for each word were not included in the grading. Three undergraduate researchers served as raters of the students' responses, and all raters were trained and blind to experimental conditions and groups. A high inter-rater reliability was determined with a Pearson product-moment correlation (PMCC) that calculated a r^2 value of 0.92. Microsoft Excel and SPSS were used to conduct statistical analyses, examining the effects of the two teaching methods on the retention and retrieval of Spanish vocabulary words based on the results of the quizzes.

Results

Three different perspectives were considered when interpreting the data. First, we examined the school effect, comparing the results from each of the two schools that participated in the study. Next, we analyzed the memory effect, or the differences found when analyzing the number of words each student could recall after each of the three quizzes and over time (immediate recall, 3 days after the lesson, and 24 days after the

lesson). Last, we took into consideration the lesson type effect, or how each lesson type (traditional or non-traditional lessons) influenced the quiz outcomes.

Significant School Effect

We used statistical analyses (repeated measures design) to determine the similarity of the scores between the two schools. Here we present with a three way interaction (quiz time x school x lesson). Results showed a significant overall multivariate effect ($F=7.3$; Pillai's Trace; $p<.001$) (see Table 1) and significant within-subjects effects ($F=9.2$; $p<.001$). Tests of between-subjects effects revealed a significant school effect ($F=25.5$; $p<.001$). Thus, there was a school effect or a significant difference in the means for specific quiz scores between the two schools. We, therefore, did not combine the traditional or nontraditional groups across schools. The data now will be presented separately per school for each of the three quiz scores within a lesson type.

Memory Effect for School A

The results for School A are shown in Figure 1. Examination of the mean quiz scores for the non-traditional lesson, reveals that quiz 1 scores were higher than both quiz 2 and quiz 3 scores. Thus, memory for these vocabulary words was highest immediately after the non-traditional lesson followed by a loss of memory after 3 days (quiz 2) and 24 days (quiz 3) after the lesson. In contrast, mean quiz scores for the traditional lesson were similar to each other at every time point.

Table 1
Means (SEM) of Vocabulary Quiz Scores after Traditional and Non-Traditional Lessons in two schools (Quiz 1 = immediate, Quiz 2 = 3 days after the lesson, Quiz 3 = 24 days after the lesson)

	Traditional Lesson			Non Traditional Lesson		
	Quiz 1	Quiz 2	Quiz 3	Quiz 1	Quiz 2	Quiz 3
School A	.422 (.035)	.361 (.033)	.362 (.027)	.506 (.035)	.365 (.033)	.281 (.027)
School B	.327 (.040)	.162 (.037)	.122 (.031)	.335 (.040)	.246 (.037)	.195 (.031)

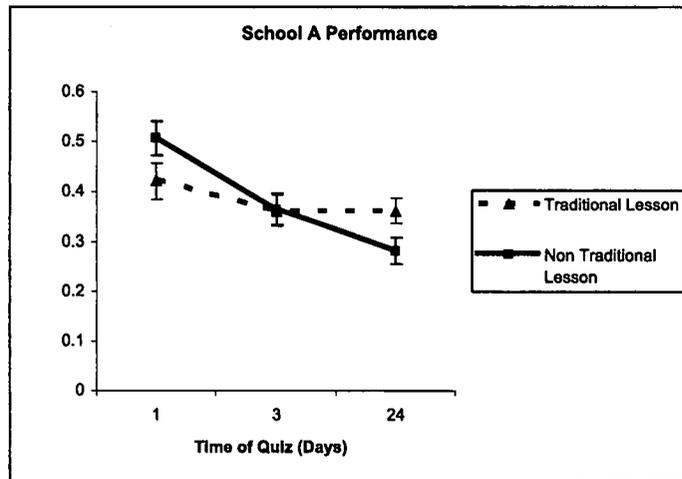


Figure 1.

Memory Effect for School B

The results of vocabulary quiz scores for School B are revealed in Figure 2. Both traditional and non-traditional lesson exposures produced the highest scores when testing was conducted immediately after the lesson (quiz 1). Subsequent testing which occurred 3 days (quiz 2) and 24 days (quiz 3) after the initial learning period revealed progressively lower scores. This set of results showed that memory for these vocabulary words, regardless of lesson type and after a single exposure, decreased over time.

For School B, comparisons of mean quiz scores were also made between traditional and non-traditional lesson exposures (Figure 2). There were no differences found between lesson types when comparing responses which tested immediate recall (quiz 1). However, mean quiz scores for both quiz 2 and quiz 3 were higher in the non-traditional lesson group than in the traditional lesson group. These results indicate that memory for these vocabulary words was higher after a single exposure of the non-traditional (vs. traditional) teaching methods, even 3 days and 24 days later.

Lesson Type Effect

Examination of mean quiz scores be-

tween lesson types for School A (Figure 1), shows that they were higher immediately (quiz 1) after the non-traditional lesson. Mean quiz scores after 3 days (quiz 2) were similar to each other regardless of lesson type. However, 24 days after a lesson (quiz 3), the mean quiz scores were interestingly higher in the traditional lesson.

Discussion

The two most profound results that we found were in the school effect and lesson effect of our study. Both outcomes offer support for the need for more empirical research to be conducted in high school classrooms so that both researchers and educators can uncover what can be learned when theoretical findings are tested out in real classroom settings.

School Effect

After reviewing the data from both schools which participated in the study, it was clear that scores from School B were generally lower than scores from School A. Though the two schools shared many similar demographic features, during our data collection, we noted differences between the classroom management and the students' motivation within the classrooms of the two teachers who had agreed to participate in the

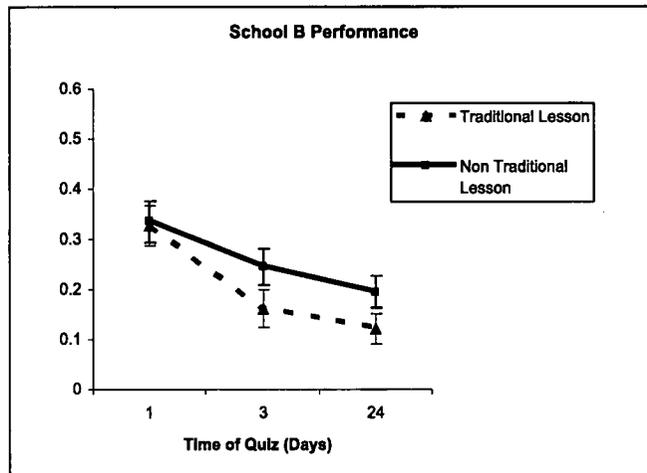


Figure 2

study. As researchers, our intentions were to explore the effects of specific teaching methods by having classroom teachers follow a scripted lesson format. The decision to have a scripted lesson, or more specifically to isolate the effects of a particular type of teaching method, brought forth some challenges after viewing the pre-established conditions of the classrooms used in our study. Factors like teacher quality, classroom management, and student motivation all ultimately contribute to the teaching and learning process and should be included more in the research literature that promotes these brain-based teaching strategies, as well as in similar future studies. In our case, we attempted to isolate the teaching methods to see what effects were produced if high school teachers implemented the teaching strategies that were used. In the end, the school effects noted in our results show that implementing the same teaching strategies in high school classrooms with similar demographic backgrounds can still yield significantly different outcomes due to outlying factors like classroom management and student motivation. Interestingly, when we look back upon studies that have explored the learning methods of beginning foreign language learners, we find that the studies have been conducted largely at the university level where students have been compensated

for volunteering their participation with university course credit (de la Fuente, 2006; Sagarra & Alba, 2006; Shapiro & Waters, 2005). Some participants of previous studies were also not tested in a regular classroom environment (Sagarra & Alba, 2006; Shapiro & Waters, 2005); instead, they were required to show up at particular times to complete the tasks outlined for their studies. Thus, the need to control the regular classroom environment and student motivation was not addressed in the previous studies that were reviewed.

Lesson Effect

The most interesting finding that we discovered when reviewing the quiz scores between schools was that the scores from quiz 3 of the traditional lesson of School A were higher than the scores from quiz 3 of the non-traditional lesson of School A. This outcome seemed most puzzling because the literature states that "the more senses that are used in the rehearsal of information, the probability of long term storage rises dramatically" (Sousa, 2006, p. 118). Sagarra & Alba (2006, p. 228) found that "vocabulary memorization strategies requiring deeper processing have been found to result in better retention of words than strategies involving shallower processing". In our study, the non-traditional methods purposefully employed

more sensory rich teaching methods as opposed to the traditional teaching strategies. "Rote memorization of isolated facts often needs more explicit work to learn and recall the information" (Fogarty, 2002, p. 59), yet the students of School A were able to achieve higher quiz scores after being exposed to a traditional lesson. We could attribute School A's higher scores after the traditional lesson to the fact that students from this school were accustomed to using traditional methods more frequently in their Spanish class. As a result, these students could have excelled more after being exposed to the traditional teaching method, because they had been regulated in learning foreign language using this particular method. This empirical evidence is important as we take steps to bridge the gap found between theory and actual classroom practice and to show that educators cannot simply assume that research from the area of cognitive psychology can be quickly and easily applied to classroom practices to produce positive results. In this case, the results support traditional methods are still effective and can yield scores that are comparable to, if not higher, than non-traditional methods. This outcome supports that assumptions of student achievement outcomes based simply on theory cannot be made; instead, these assumptions should be further explored and tested through empirical research.

Future Research

This interdisciplinary study has presented many interesting findings, challenges, and observations as we seek to understand how information about the memory processes of the human brain from the field cognitive psychology can inform the process of teaching and learning Spanish vocabulary in high school classrooms.

Recognizing that there is a growing trend of brain-based literature in the educational market, our research sought to carry out an empirical study conducted in high school Spanish classrooms that could offer evidence

of the outcomes achieved by students after employing teaching strategies informed by the brain's memory processing functions. Given the fact that methods of rote repetition typically reinforced short term memory recall, and that more elaborate forms of rehearsal like establishing connections to prior knowledge have been noted to establish longer term memory storage, it is understandable that more researchers and theorists have tried to promote "non-traditional" or "brain-compatible" teaching methods through the literature and workshops of those involved in teacher education. However, empirical studies to support these claims are scarce, and more studies, like ours, are needed to offer evidence from K-12 classrooms.

After reviewing the significant differences found when comparing scores from the two schools used in our study, it became apparent that pre-established conditions of the classrooms should be accounted for some way when conducting similar studies in the future. What we have found is that though the literature regarding brain-based teaching promotes the use of strategies like the non-traditional methods employed in our study, the caveat of the successful outcomes gained from using such teaching methods may be that strong classroom management skills and high student motivation must be predetermined to produce optimal results. Our findings prompt teachers and researchers to consider many variables that should be considered in a classroom learning environment (i.e., teacher quality, student motivation, classroom management style) before we quickly accept and assume that applying research from the field of cognitive psychology will produce positive results in the teaching and learning process. These observations may perhaps answer the question of why more empirical studies of this nature are not completed in K-12 classrooms.

Results from the lesson effect comparison of our study prompts educators to re-examine the effect of traditional teaching

methods while still entertaining the integration or addition of non-traditional teaching strategies. As evidenced in our study, students from School A demonstrated higher recall of Spanish vocabulary after being exposed to a traditional lesson rather than the non-traditional lesson. Additionally, students from School B confirmed higher quiz scores over a period of time after exposure to a non-traditional lesson. These findings support that an 'either-or' approach to adopting non-traditional or traditional teaching strategies does not appear advantageous to the learners. Instead, educators should adopt a 'both-and' model for integrating and slowly adding more teaching strategies that are supported by the research found from the field of cognitive psychology.

Classroom teachers should be encouraged to involve themselves more in action research so that they can carry out similar studies in their own classrooms. If universities and school districts partnered together to work collaboratively more so that the gap between research and teaching could be lessened, further empirical studies such as ours could be completed to explore how information about cognitive psychology could inform today's classroom practices.

Appendix A: Vocabulary Words Used in the Study

Traditional Lesson

1. el bocadillo	1. the sandwich
2. la zanahoria	2. the carrot
3. la torta	3. the cake
4. el ajo	4. the garlic
5. el pepino	5. the cucumber
6. la cereza	6. the cherry
7. la crema de cacahuete	7. peanut butter
8. la uva	8. the grape
9. la mantequilla	9. the butter
10. la miel	10. the honey
11. el aceite	11. the oil
12. la harina	12. the flour
13. la salchicha	13. the sausage
14. la aceituna	14. the olive
15. el camarón	15. the shrimp

Non-Traditional Lesson

1. el champiñón	1. mushroom
2. el apio	2. celery
3. el durazno	3. peach
4. la galleta	4. cookie
5. la pimienta	5. pepper
6. el guisante	6. pea
7. el ejote	7. green bean
8. la sandía	8. watermelon
9. la cebolla	9. onion
10. el pavo	10. turkey
11. el azúcar	11. sugar
12. la lechuga	12. lettuce
13. la mostaza	13. mustard
14. la sal	14. salt
15. el bistec	15. steak

Appendix B: Traditional Lesson Script

*All students are given a list of the Spanish words.

Teacher: Today we are going to learn 15 new vocabulary words that deal with food.

- I. Let's start with pronouncing the words correctly and learning their meanings. (10 minutes)

Here, the teacher says each Spanish word two times, and the students repeat after each pronunciation of the word. The teacher then states the English translation of the Spanish word and the students repeat. This step is repeated for each of the 15 words. The students follow along with the vocabulary list in front of them.

(*Example: Teacher-"el bocadillo", Students: "el bocadillo", Teacher- "el bocadillo", Students: "el bocadillo", Teacher: "the sandwich", Students: "the sandwich")

Repitan por favor... (2x's each)	1x each
1. el bocadillo	1. the sandwich
2. la zanahoria	2. the carrot
3. la torta	3. the cake
4. el ajo	4. the garlic
5. el pepino	5. the cucumber
6. la cereza	6. the cherry
7. la crema de cacahuete	7. peanut butter
8. la uva	8. the grape
9. la mantequilla	9. the butter
10. la miel	10. the honey
11. el aceite	11. the oil
12. la harina	12. the flour
13. la salchicha	13. the sausage
14. la aceituna	14. the olive
15. el camarón	15. the shrimp

II. IMAGE WORKSHEET

Now you will all receive a sheet of food images of the vocabulary you are learning. Follow along with me, and for each image, you will look at the image, repeat the word in Spanish after me, and then write the word on the line provided. Here we go. (word list on back)

1. la torta	1. the cake
2. el camarón	2. the shrimp
3. el bocadillo	3. the sandwich
4. la cereza	4. the cherry
5. el pepino	5. the cucumber
6. el ajo	6. the garlic
7. la crema de cacahuete	7. peanut butter
8. la mantequilla	8. the butter
9. la harina	9. the flour
10. la uva	10. the grape
11. la aceituna	11. the olive
12. la miel	12. the honey
13. la zanahoria	13. the carrot
14. la salchicha	14. the sausage
15. el aceite	15. the oil

Appendix C: Non-Traditional Lesson Script

Teacher: Today we are going to learn 15 new vocabulary words that deal with food. (Students will all have a list of the Spanish words along with their English translations on a sheet of paper.) First, let's learn how to pronounce the words and learn their meanings using real object.

I. Realia (10 minutes)

Teacher will hold up an object and then say the word 2 times, having the students repeat the Spanish pronunciation of the word each time.

REALIA
1. Hold up MUSHROOM and say "el champiñón"
2. Hold up CELERY and say "el apio"
3. Hold up PEACH and say "el durazno"
4. Hold up COOKIE and say "la galleta"
5. Hold up PEPPER and say "la pimienta"
6. Hold up PEA and say "el guisante"
7. Hold up GREEN BEAN and say "el ejote"
8. Hold up WATERMELON and say "la sandía"
9. Hold up ONION and say "la cebolla"
10. Hold up TURKEY and say "el pavo"
11. Hold up SUGAR and say "el azúcar"
12. Hold up LETTUCE and say "la lechuga"
13. Hold up MUSTARD and say "la mostaza"
14. Hold up SALT and say "la sal"
15. Hold up STEAK and say "el bistec"

II. Emotion: Me gusta o no me gusta (10 minutes)

Now you will all receive a sheet of food images of the vocabulary you are learning. Follow along with me, and for each image, you will look at the image, repeat the word in Spanish after me, and then write the word on the line provided.

Afterwards, think of an incident or experience from your life that involves that food item, and then check the box ME GUSTA or NO ME GUSTA under the corresponding word. (*Follow script on next page.)

1. "el bistec"	Students repeat the word once orally and then write the Spanish word under the picture.	<i>Teacher:</i> Think of an incident or experience from your life that involves that food item, and then check the box ME GUSTA or NO ME GUSTA under the corresponding word.
2. "la mostaza"		
3. "el ejote"		
4. "el guisante"		
5. "la sandía"		
6. "la cebolla"		
7. "el durazno"		
8. "la lechuga"		
9. "el apio"		
10. "la galleta"		
11. "la sal"		
12. "la pimienta"		
13. "el azúcar"		
14. "el pavo"		
15. "el champiñón"		

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