The Impact of Graphic Organizers

on the

Vocabulary Attainment of Intermediate Spanish Students

by

Brianka Enck

Submitted in Partial Fulfillment of the Requirements for the

Degree of Master of Education

May 2020

Graduate Programs in Education

Goucher College

## Table of Contents

List of Tables	i
Abstract	ii
I. Introduction	1
Overview	1
Statement of Problem	1
Hypothesis	2
Operational Definitions	2
II. Review of the Literature	3
The History of Second Language Learning in the United States	3
Benefits of Learning a Second Language	5
The Importance of Vocabulary for Second Language Learning	6
Graphic Organizers for Improving Vocabulary	8
Repetition for Improving Vocabulary Knowledge	9
Summary	10
III. Methods	11
Design	11
Participants	11
Instrument	12
Procedure	12
IV. Results	14
V. Discussion	16
Threats to Validity	16

Connections to Previous Studies	17
Implications for Future Research	18
Summary and Conclusions	18
References	20
Appendix	22

# List of Figures

1. Measures of Central Tendency	14
2. Statistical Analysis of the Data	14
3. Chart of the Pre & Post Measures by Students	15

#### Abstract

The purpose of this study was to determine whether graphic organizers would have an impact on the vocabulary attainment of intermediate Spanish students. The measurement tool (see Appendix) was an eight question-matching quiz that was created by the researcher and their mentor teacher in order to assess the students' vocabulary attainment. This study involved the use of a pretest/posttest in order to compare the data from the beginning to the end of implementation. With the use of the graphic organizers as well as repetition, the intermediate students were able to improve their vocabulary knowledge. The students answered more than half of the eight questions correctly on the posttest. World Language teachers must continue using graphic organizers to help improve vocabulary attainment, reading, writing, listening, and speaking skills.

#### **CHAPTER I**

#### **INTRODUCTION**

#### Overview

Within the United States, most World Language students are not able to achieve proficiency in a second language after years of learning. This is evident within the researcher's classroom because students are unable to retain vocabulary and use that vocabulary to listen, speak, write, and read in the second language. However, this is not an issue that is only prevalent within the researcher's classroom; this is an issue seen throughout all World Language classrooms in the United States. Levi Altstaedter and Jones (2010) expressed that,

for the past 30 years researchers have consistently found that American students are not obtaining even basic foreign language proficiency. In 1979, the U.S. President's Commission on Foreign Language and International Studies proclaimed that Americans' incompetence in foreign languages is nothing short of scandalous. (p. 559)

This causes fewer students to then take World Languages because they feel as though proficiency is unattainable. As of 2008 "an estimated 4.2 million elementary school students out of 27.5 million (15%) in the United States were enrolled in foreign language classes at school" (Pufahl & Rhodes, 2011, p. 263). This enrollment statistic is why it is essential to improve vocabulary attainment as well as second language attainment in general because it will allow students to become proficient in the language as well as decrease the attrition rate.

#### **Statement of Problem**

The purpose of this study is to see whether graphic organizers like the Frayer Model will help to improve intermediate Spanish students' vocabulary attainment.

#### Hypothesis

The null hypothesis is that the graphic organizers like the Frayer Model will have no impact on the intermediate Spanish students' vocabulary attainment.

### **Operational Definitions**

The independent variable within this study is the graphic organizer. The dependent variable within the study is the students' vocabulary attainment within the second language. One way to operationally define the dependent variable of vocabulary attainment is by giving the participants a pre- and posttest to see whether they were able to attain the vocabulary within the unit. One way to operationally define the independent variable, or the graphic organizer, is by using the Frayer Model as well as the Cornell Note Sheet.

#### **CHAPTER II**

#### **REVIEW OF THE LITERATURE**

This literature review will discuss a variety of research that was done in order to help improve World Language students' vocabulary. However, it is also essential to provide background information on the history and the benefits of learning a second language here in the United States. In order to provide this essential information this literature review will discuss in the first section the history of World Language courses here in the United States. The second section will discuss the benefits of learning a second language. The third section will discuss the importance of vocabulary for learning a second language. The fourth section will discuss how graphic organizers improve vocabulary and lastly, section five will discuss the importance of repetition to improve vocabulary.

#### The History of Second Language Learning in the United States

Within the United States policy makers, educators, and parents have all realized the benefits of teaching and learning a second language. Learning a second language does not simply benefit the child but it also benefits the country as a whole. Having citizens who can speak multiple languages can help national security and make the American economy more competitive. Even though American citizens realize the importance of second language learning it continues to be a subject that gets less and less funds and attention. From 177 schools that volunteered within a study, the research demonstrated that their schools did not offer world languages because of either lack of funding, decision making at the district level, languages not seen as a core subject, or a shortage of World Language teachers (Pufahl & Rhodes, 2011). The lack of importance of World Languages is also shown within our laws, like the No Child Left Behind Act that decreased the amount of funds and time spent on subjects like World Languages.

Americans continue to state the importance of languages but their actions are showing the opposite. Even for the schools that do have World Language courses, these courses provide little effort to make students proficient within the language. This is why many students finish language courses without the ability to speak, listen, or read the language. Levi Altstaedter and Jones (2010) stated that,

well-articulated K-12 foreign language programs aimed at producing students who have high levels of proficiency are still uncommon, that most American students never achieve foreign-language proficiency, and that many schools admit that they do not even have such proficiency as their goal. (p. 559)

This is an issue because World Language courses are the only courses that schools don't consider it a problem having students that don't achieve proficiency. This has been a problem and continues to be a problem today within our education system. The reason for this issue was stated well by Pufahl and Rhodes (2011) when they found that,

the underlying cause is that despite paying lip service to an internationalization of our students' education, many policy makers, as well as educators, do not recognize the vital importance of the ability to communicate in languages other than English, nor do they realize the well-established cognitive, social, and academic benefits for foreign language learning. (p. 272)

Essentially, they are stating that Americans are very self-centered and believe that the world must be accommodating for them rather than making an effort to learn other languages and cultures. Once this ideology within the American people is changed, that is when World Languages will be able to be successful. When World Languages are seen as an essential aspect to the education system and progress of the country there will be more funding, time, and laws

that will promote the prosperity of World Language courses. In an effort to change this mindset, the next section will highlight the advantages of learning a second language for individuals.

#### **Benefits of Learning a Second Language**

There are a variety of benefits of learning a foreign language (FL) inside of a school setting, as well as outside. The first benefit of second language learning is that students' who study a second language do exceedingly better in all academic subjects compared to students who do not study a second language. Taylor and Lafayette (2010) note that, "FL students significantly outperformed their non-FL peers on every test (English language arts, mathematics, science, and social studies) of the Grade 4 LEAP 21"(p. 40). One factor related to why FL students perform better than their non-FL peers is because students who take foreign languages are often in higher courses in general. However, there is proof that FL students preform better not just because they are already academically advanced but they preform better because of these specific FL courses. The information FL students learn in other courses is often reinforced within their foreign language courses. For example, in FL students' social studies courses they learn about the history and culture of many countries around the world. Within their FL courses they then also discuss this material, which then provides FL students with multiple exposures of the material they are learning. Multiple exposures is a well-known teaching method that allows students to deeply understand the material they are learning. Another benefit of learning a foreign language is that students are exposed to and learn different cultures and perspectives. This is beneficial especially in a very diverse society like the United States where you need to understand different people and cultures to be able to function. Solodkova, Grigorieva, Ismagilova, and Polyakova's (2017) note that, "It is said to stimulate specialists' engagement

into intercultural, inter-ethnic dialogue, to analyze their activities in the context of the practices of the world's leading powers, to widen their mindset, provide personal and professional growth" (p. 97). FL courses provide students with a larger perspective of the world and the people around them. This knowledge of different people and languages leads to the last benefit of FL learning. FL learning provides people with more job opportunities because they are able to reach out to a larger and diverse clientele. This is evident within many jobs in the United States where it is mandatory to be able to speak Spanish because of the large population of Spanish speakers here in the United States. This makes it clear that learning a second language has many advantages that can help students be successful within school as well as in the real world, which makes foreign language learning essential for life.

#### The Importance of Vocabulary for Second Language Learning

As Wang (2015) stated "Virtually every scholar of language recognizes that vocabulary knowledge is the basis and precondition for studies in second language acquisition" (p. 989). This means that vocabulary is the foundation for learning a language. Vocabulary knowledge improves students listening, reading, writing, and speaking skills. This is why it is essential for all language teachers to have a substantial focus on vocabulary when they are teaching their students a second language. However, it is also essential for these teachers to focus on vocabulary breadth and depth when they are teaching this new vocabulary. Vocabulary breadth means the amount of words a learner knows while vocabulary depth means how well the learner knows the words. Vocabulary breadth and depth are important to take into consideration because as Qian (2002) stated,

Although having a larger vocabulary size will give the learner a larger database from which to guess the meaning of unknown words or behavior of newly learned words,

having deeper vocabulary knowledge will very likely improve the results of the guessing work. (p. 517-518)

Having a deep understanding of a word, for example knowing the synonyms and the antonyms of a word, will allow learners to make educated guesses on what another person is trying to communicate in a second language.

As stated previously, vocabulary knowledge greatly improves second language learners' writing skills. Actually, "research has shown that lack of vocabulary contributes to writing difficulty for foreign language learners and that vocabulary is one of the most important features that determine writing quality" (Lee, 2003, p. 538). When a student has a large vocabulary, they are able to use all of the words they know in order to express themselves in an eloquent fashion when they are writing. They are able to use different words rather then constantly repeating the same words over and over to express their ideas or opinions. Logically, then, vocabulary knowledge also improves listening and speaking skills. While a learner is listening to a person speak, they can use their vocabulary knowledge to make educated guesses about what the person is saying even though they may not understand all of the words being said. Vocabulary breadth and depth improve comprehension because learners can use what they know to figure out the information that they do not know. Just like writing, having a large vocabulary allows a second language learner to use an array of words to express what they want to get across while they are speaking (Wang, 2015). Lastly, David Qian found "high intercorrelations between vocabulary size, depth of vocabulary knowledge, and reading comprehension, in the range of .78-.82" (Qian, 2002, p. 518). These numbers show that there is a large correlation between vocabulary breadth, depth, and reading comprehension, which is similar to having a large vocabulary that allows for guesses when a student is reading a text. Overall, it is evident that vocabulary is the foundation

for speaking, listening, writing, and reading a second language. This is why it is important to teach students an abundance of vocabulary words and not to simply teach the definition of the words, but to teach the words in a deep way. The students must know how to use the word in a sentence and they must also know synonyms and antonyms of the word. This is why graphic organizers like the Frayer Model are essential for second language learners because it allows them to learn a variety of words in a deep way. The next section will discuss more in-depth the benefits of using graphic organizers within a World Language classroom.

#### **Graphic Organizers for Improving Vocabulary**

Graphic organizers have been a very popular method for improving a variety of aspects of learning. For example, graphic organizers have improved students reading, writing, and overall success within school. However, this section will show how graphic organizers can also improve vocabulary learning and knowledge. Kansizoglu (2017) stated, "Graphic organizers are tools which combine linguistic forms like words and phrases with non-linguistic forms like symbols and arrows which show relationships" (p.139). In essence, graphic organizers create a visual representation of an idea or concept making it not only easier to learn the concept but also easier to remember it. Students are able to make real connections with their prior knowledge and new learning in a deep way. Students are no longer simply memorizing the definition of words; they now understand the complexities of these words. Estacio and Martinez (2017) express this idea when they state,

Consequently, students exposed to the Frayer model tend to go far beyond learning mere definitions of words; instead, they develop a far deeper understanding of concepts. As a result the use of the Frayer model increases the students' understanding of new vocabulary, and they show a deeper and more complex understanding of concepts. (p. 38)

Graphic organizers like the Frayer Model allow students to be active rather than passive learners, which is something that is not common within schools today. Teachers often lecture information that students are required to memorize and eventually regurgitate. Graphic organizers reduce the cognitive load that a student has and allows them to learn these complex ideas in a simpler fashion (Kansizoglu, 2017). From previous sections, it has been evident how important vocabulary learning is to learning a second language. It has also been shown that graphic organizers like the Frayer Model have improved learners' vocabulary knowledge. These studies show why language teachers would be well advised to use graphic organizers within their classrooms because it is one of very few effective ways for learners' to actually remember vocabulary concepts in a meaningful way (Shoari & Farrokhi, 2014).

#### **Repetition for Improving Vocabulary Knowledge**

In order for students to learn and retain information, it is essential that new learning be presented multiple times. The amount of times information is presented to students will dictate whether they are able to remember the information. However, the information must not simply be presented multiple times to students but instead it must be presented multiple times in context. Webb (2007) stated, "They found that vocabulary gains increased as the number of times learners met words in context increased" (p. 47). This means that if students are seeing vocabulary words multiple times within readings and assignments, they will then be able to remember the words. The reason for this is they are able to connect the word to a real situation. Repeating words multiple times within context helps students learn new vocabulary words but it also allows them to remember the information for a longer period of time (Chen & Truscott, 2010). Repetition can take many forms but it is essential for the learning process. In order for students to remember the information they learn they must be given multiple exposures of the

material in order for it to stay in their long-term memory. This is an essential tool for learning in general but for vocabulary learning in particular.

#### **Summary**

In conclusion, learning a second language is a skill that people within the United States must acquire. This skill will not only help current students but it will also aid the success of the country as a whole. In order to achieve this success lawmakers must create laws for schools with the notion that second language learning is essential. Once this is in place, the United States will then be able to improve second language programs within schools that aid in the proficiency in multiple languages and cultures. These programs will be able to take into consideration the importance of learning vocabulary with regard to learning a second language and they will provide a variety of ways to acquire this vocabulary, for example, through graphic organizers and repetition. With this change, the United States will be able to improve and compete with other powerful countries.

## CHAPTER III

#### **METHODS**

#### Design

This study examines how intermediate level Spanish students can improve vocabulary attainment. The design that was used within this action research project was an experimental design. The independent variable was vocabulary instruction, which included the Frayer Model/graphic organizers and repetition. The dependent variable was the performance of the intermediate level Spanish students. One constraint involved within this research was the ability to find an instrument that assessed the vocabulary knowledge of Spanish language learners. Many instruments were for English language learners, so the researcher created an assessment.

#### **Participants**

The participants within this study were chosen because they answered half or less than half of the questions on the pretest correctly. Most of these eight students are non-native Spanish speakers who have trouble with vocabulary attainment. However, there were a few native speakers who were also included because they were having trouble obtaining the vocabulary within this animal unit, which is vocabulary that they may not use in their everyday conversational Spanish. The majority of the participants were females, from grades nine through eleven. One student had an IEP and needed extended time and for the information to be chunked, while another student had a 504 and needed fewer distractions within the classroom.

According to the Maryland State Report Card, the school in this study received a 52% on their overall achievement. The students receive very low scores on state tests, receiving an overall 11.9 out of 30 points. They also scored low on school quality and student success, which was based on surveys from teachers and students as well as attendance rates. Many students are

chronically absent within this school. However, according to the report, the students are graduating on time and are prepared for life after high school (Maryland State Department of Education, 2019).

#### Instrument

The instrument that was used within the study was an eight-question quiz that included animal names and descriptions of those animals. The students had to know the animal vocabulary in order to match it with its description. For example, students had to know the animal "lagartija" or lizard, in order to match it with the description that it lives in the desert. The researcher's mentor teacher as well as the researcher created this instrument in order to assess vocabulary attainment of intermediate Spanish learners. There were no previously created instruments that assessed vocabulary attainment for Spanish learners. All of the assessments currently available were for English language learners who spoke Spanish as a first language. This instrument was valid because it accurately showed if the students' vocabulary of animals improved from the beginning to the end of the research.

#### Procedure

Before the students began learning they were given a pretest in order to assess their knowledge of animal vocabulary. This included animal names, animal classes, and characteristics of animals. The students were told this was a test that they may not do well on this time but they would take it again in six weeks and, after learning the information, they would do better. They were also informed that this was not a grade but an assessment of how to best teach the information in the next unit. After, looking over the pretest, it was evident that the students had considerable issues with the vocabulary including some native speakers. There were eight students in total that answered half or less of the answers correctly. From previous experiences with these students and with this data, it was decided that they would be included within the study because they would benefit the most from a different way of teaching vocabulary.

The animal unit started with the students exploring the information collectively. They were placed in groups and each group received a class of animals like mammals, reptiles, etc. They then used the data given to them and filled out a Frayer Model to learn about animals that were and were not included in this class as well as characteristics of this class. This gave the students a variety of vocabulary knowledge. The students then presented the information about their specific classification of animals to the rest of the class and filled out a graphic organizer while listening to other groups. This initial learning was mainly student led. The students' vocabulary knowledge continued to grow. Once they had learned the entire unit of vocabulary knowledge, it was then necessary for them to now actually remember it. Fifteen minutes or more everyday were spent practicing some aspect of the vocabulary through games, warm-ups, speaking activities and much more. This repetition proved to be beneficial for all of the students. By the end of the six weeks, the students were able to easily state animal names and classifications, as well as the animal characteristics in Spanish. When the sixth week arrived, the students took the same assessment as a posttest.

#### **CHAPTER IV**

#### RESULTS

This study examines how intermediate level Spanish students can improve vocabulary attainment. The study utilized a pre- and posttest on the same participants. The pre- and posttests were identical. Data was loaded in Excel, edited, and then statistically analyzed in the Statistical Package for the Social Sciences (SPSS). Table 1 displays the Measures of Central Tendency. Table 2 displays the statistical testing using the dependent t analysis. Table 3 graphs the data.

Table 1

Measures of Central Tendency

	N	Mean	Std. Deviation	Std. Error Mean
PreDecimal	8	.42	.093	.033
PostDecimal	8	.88	.189	.067

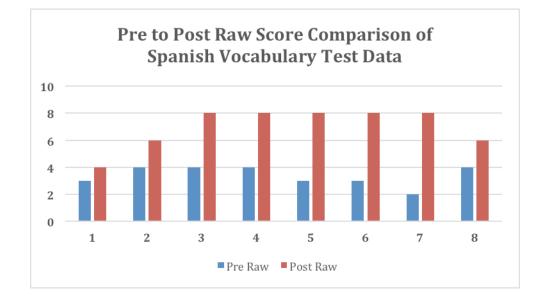
Table 2

Statistical Analysis of the Data

	Test Value = .05					
					95% Confidenc Differ	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
PreDecimal	11.310	7	.000	.372	.29	.45
PostDecimal	12.347	7	.000	.825	.67	.98

p<.05 at .000 thus the data is statistically significant in favor of the treatment group.

## Table 3



## Chart of the Pre and Post Measures by Student

#### **CHAPTER V**

#### DISCUSSION

This study examines how intermediate level Spanish students can improve vocabulary attainment. Data analysis in Chapter IV indicates that the null hypothesis should be rejected. The null hypothesis is that the graphic organizers like the Frayer Model will have no impact on the intermediate Spanish students' vocabulary attainment. The alternative hypothesis that the treatment had an impact should be retained.

#### **Threats to Validity**

There were a few threats to validity that were noted during this study. The students took the same pre- and posttest that was printed on the front and back of a piece of paper. Many students then knew that the posttest would be exactly the same without any changes. They could have then simply studied the information that they remembered from the pretest to do well on the posttest. This may have caused the students to do well even though their vocabulary attainment did not improve through the graphic organizers. This is known as the learning effect. The researcher tried to avoid threats to validity by not correcting the pretest on the students' papers. They would then be unaware of the information they got right or wrong on the pretest. This then forced them to still learn the vocabulary necessary within the test. In addition, many students secretly used their phones during the pre- and posttest and looked up the vocabulary words. Most of the students who did this especially in the pretest were excluded from the study however, it was a little more difficult to identify students who cheated during the posttest especially if the researcher did not see them cheating. Another threat to validity is selection bias. The students chosen for this study were students who were struggling with vocabulary attainment and some students with learning disabilities. This means that graphic organizers may not be beneficial for all students, but may simply be beneficial for these types of students.

#### **Connections to Previous Studies**

Taking into consideration the studies found in chapter two, all of the findings agree with the findings from this study. The studies proved that using graphic organizers like the Frayer Model where students are categorizing information, drawing pictures, and connecting to their prior knowledge has proved to be beneficial for their vocabulary attainment but also their learning in general. Graphic organizers avoid the common learning methods within World Language classrooms, which is rote memorization. By using graphic organizers students are able to create a meaning of the vocabulary word, which makes it easier to recall the information. The studies in Chapter two also mentioned the importance of vocabulary breadth and depth to learning vocabulary. Within these studies the researchers found that knowing a lot of vocabulary words as well as knowing a deep meaning of the vocabulary words had large benefits for second language reading, listening, and writing. However, it was proven that students were able to read, listen, and write in a second language better, if they knew the vocabulary in a deep way. This can include being able to use the word in a sentence, knowing synonyms, antonyms, etc. This shows that the graphic organizers like the Frayer Model do not simply help students remember vocabulary and allow them to retain this vocabulary in their memory; it also improves their second language reading, writing, and listening. These studies, including the current study, prove that the aspects of graphic organizers aid in the attainment of second language vocabulary and language skills.

It was very evident that the participants benefited from the graphic organizers used to remember the animal vocabulary because the students who often had to be reminded of the

definitions of words would often go back to their graphic organizers to see pictures and categorizations of words to remember the vocabulary. The graphic organizer was a good resource for students to look back on. The information was also organized in an easy way that allowed them to understand the information without direct translations of the vocabulary words. The students benefited from exploring and searching for the vocabulary words themselves within short readings and presentations from their peers. The researcher avoided direct instruction of the vocabulary words and instead, the students learned in a more independent fashion, which proved to allow the information to become more permanent within their memory.

#### **Implications for Future Research**

After this study, it is evident that graphic organizers aid World Language learners in vocabulary attainment. The graphic organizers used in this study were the Frayer Model as well as the Cornell Note Sheet. However, there are a variety of other graphic organizers that have been used by World Language teachers that have also been helpful in improving vocabulary attainment and language acquisition in general. Researchers should then study which graphic organizers are best for specific skills. They must now narrow down which graphic organizers are best suited for learning vocabulary, reading, and much more. In addition, researchers should study the benefits of having students learn independently and from their peers. This was apart of the research but the benefits of learning independently or by peers was not tested. This would be an interesting topic to research for all content areas, not just World Languages.

#### **Summary and Conclusions**

It was observed that through graphic organizers like the Frayer Model and the Cornell Note Sheet, World Language students were able to improve their vocabulary knowledge. In addition, through constant review of the information for ten to fifteen minutes each class, it

allowed the students to not only retain the vocabulary words but also deeply understand and apply the words to a variety of activities. Through graphic organizers and review, World Language students are able to improve their vocabulary, which then directly correlates to their success within the language as a whole. As seen within the literature review, being able to know a variety of vocabulary words in a deep way can improve students' listening, reading, and writing skills.

#### References

- Chen, C., & Truscott, J. (2010). The effects of repetition and L1 lexicalization on incidental vocabulary acquisition. *Applied Linguistics*, 31(5), 693-713. doi: 10.1093/applin/amq031
- Estacio, R.D., & Martinez, D.O. (2017). The use of modified Frayer model in developing science vocabulary of senior high school students. *New Trends and Issues Proceedings on Humanities and Social Sciences*, 4(1), 36-42.
- Kansizoglu, H. (2017). The effect of graphic organizers on language teaching and learning areas: A meta-analysis study. *Education and Science*, 42(191), 139-164.
- Lee, S. H. (2003). ESL learners' vocabulary use in writing and the effects of explicit vocabulary instruction. *Elsevier*, *537-561. doi*: 10.1016/j.system.2003.02.004
- Levi Altstaedter, L., & Jones, B. (2010). The national standards for foreign language learning: Where's the beef? A response to "motivating students" foreign language and culture acquisition through web-based inquiry. *Foreign Language Annals*, 43(4), 559-565.
- Maryland State Department of Education. (2019). *Maryland public schools report card*. Baltimore, MD: Maryland State Department of Education.
- Pufahl, I., & Rhodes, N.C. (2011). Foreign language instruction in U.S. schools: Results of a national survey of elementary and secondary schools. *Foreign Language Annals*, 44(2), 258-288.
- Qian, D. D. (2002). Investigating the relationship between vocabulary knowledge and academic reading performance: An assessment perspective. *Language Learning*, 52(3), 513-536.

Shoari, E., & Farrokhi, F. (2014). The effects of graphic organizer strategy on improving Iranian EFL

learners' vocabulary learning. IJRELT, 2(1), 71-82.

- Solodkova, I. M., Grigorieva, E. V., Ismagilova, L. R., & Polyakova, O. V. (2017). What drives students of vocational training program? An investigation on the significance of foreign language acquisition. *Journal of History, Culture & Art Research / Tarih Kültür Ve Sanat Arastirmalari Dergisi, 6*(6), 96-103. doi:10.7596/taksad.v6i6.1325
- Taylor C., & Lafayette, R. (2010). Academic achievement through FLES: A case for promoting greater access to foreign language study among young learners. *Modern Language Journal*, 94(1), 22-42. doi:10.1111/j.1540-4781.2009.00981.x
- Wang, S. (2015). An empirical study on the role of vocabulary knowledge in EFL listening comprehension. *Theory and Practice in Language Studies*, 5(5),989-995. doi: <u>http://dx.doi.org/10.17507/tpls.0505.14</u>
- Webb, S. (2007). The effects of repetition on vocabulary knowledge. *Applied Linguistics*, 28(1), 46-65. doi: 10.1093/applin/aml048

# Appendix

¿Qué animal es? Emparejen el animal con la descripción correcta.

ANIM	IAL	<b>DESCRIPCIÓN</b>
1.	Pingüino	a. un invertebrado
2.	Lagartija	b. vive en un lago
3.	Gaviota	c. un pez
4.	Oveja	d. vive en el ártico
5.	Medusa	e. un mamífero que vive en el bosque
6.	Mapache	f. vuela cerca del mar
7.	Rana	g. vive en el desierto
8.	Carpa dorada	h. Un mamífero que vive en la granja

## What animal is it?

Pair the animal with the description.

ANIMAL	<b>DESCRIPCIÓN</b>
1. Penguin	a. An invertebrate
2. Lizard	b. Lives in a lake
3. Seagull	c. A fish
4. Sheep	d. Lives in the arctic
5. Jellyfish	e. A mammal that lives in the forest
6. Raccoon	f. Flies near the ocean
7. Frog	g. Lives in the desert
8. Gold Fish	h. A mammal that lives on a farm