

THE PERCEIVED EFFECTIVENESS OF MORPHOLOGY AS A
STRATEGY FOR LEARNING VOCABULARY

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CERTIFICATION OF APPROVAL

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DEDICATION

I dedicate this thesis to my wife, Yesenia Sicairos, and my son Liam Sicairos. Yesenia, thank you for your continued love and support throughout my education and career. Liam, you are the hardest-working toddler I know. I continue to strive to make you as proud of me as I am of you. May you continue to inspire me as you grow. I love you both.

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ABSTRACT

Morphology is an effective way of teaching vocabulary to students. Using morphemic analysis gives students tools that allow them to learn vocabulary on their own, when resources are unavailable. This study sought to understand students' perceptions of and experience with morphology as a vocabulary instruction strategy. Data collection for the study included pre and post treatment surveys. Themes that emerged from the data included: limited prior experience, a generally positive attitude toward morphology, and little shift in opinion occurred pre-post treatment. Such findings are useful for both students and teachers who wish to find engaging strategies for vocabulary building.

CHAPTER I

INTRODUCTION

The movement of people has been a reality throughout human history. Since the beginning of time, people have moved around the earth for different reasons and motives. In early human history, nomadic tribes would typically move around in search of food and resources, which was a requirement for survival. In modern history, movement of people has continued, but as a result of technological advancements, the motives for this movement and migration have changed.

Although civilizations are no longer solely reliant on obtaining resources directly from the land, families and individuals sometimes must relocate to have basic needs met. This need to relocate in modern times leads to the issue of migration, and in the political context of our nation, immigration (Kivisto & Faist, 2010). Immigration to the United States from other countries, and regions of the world brings unique challenges to all parties involved. As some families migrate in search of resources and a better life, some personal needs of their children are met, while others are created (Igoa, 1995).

Along with starting a life in a new country comes the need to be able to communicate with peers and other inhabitants of the region. This is especially critical for younger members of these families, due to the fact that the educational system will require competency in a specific language. Schools will have to facilitate the child's attainment of the language used in the educational system (Igoa, 1995).

Vocabulary instruction is important for language acquisition, but it is also necessary for students who must learn academic language. Despite social proficiency with the English language, virtually all students must be taught academic language, especially when it is specific to an academic topic or subject they are not familiar with. Students from all backgrounds will struggle with academics at some point. Understanding of discipline-specific terms provides a foundation to begin to understand any academic topic. For these reasons, instructional strategies that include the teaching of words, including subject specific, and non-specific terms are essential in education.

One similarity between many California students of different linguistic backgrounds, is the origin of their respective languages (Solodow, 2010). All languages share a pattern of development that grows through a need to communicate. Because languages are living and changing entities, in most cases, they sometimes become more distinct, but often stem from similar origins. Many western languages for example, share similarities because they were built upon the same foundation, the now deceased Latin language (Solodow, 2010). Language is often borrowed and exchanged between cultures which causes growth and expansion of each language (Fitch, 2010). Because this cultural exchange, and common foundation between some languages results in connections and similarities where other obvious connections may not exist, the use of such foundational linguistic elements in vocabulary instruction will be explored (Fitch, 2010). In addition, the fact that more students can likely relate to the linguistic elements used in morphology because of

how they impact multiple languages, makes it more meaningful to a wider range of students.

Statement of Problem

All areas of study contain vocabulary terms that are specific to them. These content specific terms were coined by Beck, McKeown, and Kukan (2002) as tier 3 terms. Such words are not typically used in conversation and are limited to use in their specific domains. Tier 1 words by contrast, are the most basic words that are used in conversational and social contexts (Beck et al., 2002). Tier 2 words are more formal and are used by more mature or proficient speakers, but are used across a variety of domains and contexts (Beck et al., 2002). Because they are so rarely used, tier 3 terms require more teaching, and are less likely to be familiar to students.

Social studies is a subject that relies heavily on text, and contains a great amount of content specific tier 3 words. Students often struggle with social studies text because of the content specific words within it (Palumbo, Kramer-Vida, & Hunt, 2015). More effective methods of teaching must be explored in order to teach students essential vocabulary in the subject of social studies. This is especially true for students who lack English proficiency.

Although language and vocabulary acquisition strategies are often used in classrooms, it is inaccurate to assume that all strategies are created equal. Some language acquisition strategies are more effective than others, while others force students to memorize pieces of information, while failing to give them tools, and skills to continue to be successful further down the line (Milligan & Ruff, 1990).

With such tools, the hope is that students would feel empowered and more confident in their learning. Unfortunately, students do not always feel empowered when presented with strategies that researchers have deemed to be most effective. Our top strategies are only effective if students are willing to “buy in” and utilize them. For this to occur, individuals need to be comfortable with using such strategies, and must be confident that the strategies will yield some benefit. Since educational experts have already done the work of determining that morphemic analysis is an effective tool for learning vocabulary (Harris, Schumaker & Deshler, 2011), the next logical step would be to determine whether students would be willing to use the strategy. To do this, research questions will be explored.

Research Questions

This study seeks to better understand, two main questions:

1. What do high school history students think about the effectiveness of using morphology as a strategy to learn vocabulary in social studies?
2. Will learning to use a morphological strategy for vocabulary impact high school history students’ opinions on the effectiveness of the strategy?

Significance of Study

This study is significant for education in social studies because research has consistently shown the importance of vocabulary in education and its impact on reading achievement (Alexander-Shea , 2011). Since social studies is a discipline that relies heavily on text and literacy, it is logical that reading achievement would impact performance in social studies as well. This would suggest that vocabulary

knowledge, as well as vocabulary instruction is important and could lead to achievement in all social science courses.

Definitions of Terms

Affix: A word part placed at the beginning or end of a root word or word stem, which impacts the word's meaning.

Morphology: This is the study of word structure and how word segments are put together to form other words.

Roots: A morpheme or word part, that can be connected to an affix to create a word.

Tier III Words: Terms that are specific to a subject area, or area of study.

Summary

This chapter highlighted the importance of vocabulary as an important part of literacy and learning. Given vocabulary's importance, it may be worthwhile for teachers in all content areas, but especially social science, to use vocabulary instruction in their daily practices.

In the next chapter, literature on the impact of vocabulary instruction will be reviewed. Current research on the effectiveness of vocabulary instruction, including its effectiveness in assisting the subgroup of ELL students will be discussed. Chapter III will outline the methods for the study. Chapter IV will overview the key findings of the study. Chapter V will conclude the study.

CHAPTER II

LITERATURE REVIEW

Vocabulary is an important part of learning any content. Since all subject areas have vocabulary that is specific to its content area, there is a great need for effective methods of teaching and learning content vocabulary. There are several strategies that have been developed and tested for the purpose of teaching vocabulary in a way that is effective, not only for learning words themselves, but in ways that allow students to be successful in relating those words to the subject areas they are specific to.

This literature review will discuss existing research regarding the types of vocabulary building strategies that exist. First, the review will present the different categories of vocabulary learning strategies along with perceptions of the effectiveness of vocabulary instruction by teachers, overall. Next, the review will discuss the specific strategy of linguistics in vocabulary building. Lastly, the review will highlight the importance and effectiveness of vocabulary building and in social studies, for English Language Learners (ELLs) and in general.

Types of Vocabulary Instruction

The current research on vocabulary instruction indicates that two categories of such instruction exist: indirect and direct vocabulary instruction. There is a great deal of research on the effectiveness of both. In addition, a number of qualitative studies have looked at teacher perceptions of these strategies as well as their reported use of each type of strategy.

Direct Vocabulary Instruction

There are many vocabulary-building strategies that fall under the umbrella of direct vocabulary instruction. These are strategies that allow students to learn words through deliberate teaching of the vocabulary, with the purpose of learning the terms. Although there are studies supporting direct and indirect vocabulary instruction, direct seems to be the most consistently praised. Weisman and Hansen (2007) for example believe that vocabulary is best taught directly, especially for those who need extra assistance, such as English Language Learners (ELLs). Many Tier 3 terms, or words that are specific to certain content area, are learned through direct vocabulary instruction (Palumbo et al, 2015). In fact, Sibold (2011) states that technical and tier 3 words should be taught through direct instruction. This is because tier 3 words are tied to specific areas of study, and are not used in conversational language. Students do not typically have any background or experience with these content specific terms and cannot use context or indirect strategies to learn them. Instead, direct strategies include exercises that allow students to draw connections between words in a deliberate way (Sibold 2011). According to research, actively and cognitively engaging in vocabulary building through strategies specifically like graphic organizers and Venn diagrams build conceptual word knowledge (Ilter, 2016). In addition, it is suggested that such strategies help students build true comprehension of vocabulary words (Alexander-Shea, 2011). While other direct strategies fall under the same umbrella, not all are equally effective. Though memorization of words and dictionary definitions are not shown to have as much

impact on conceptual knowledge of vocabulary words, this would still be classified as a direct vocabulary instructional strategy, since the terms are deliberately being learned and studied (Alexander-Shea, 2011).

Indirect Vocabulary Instruction

Indirect instruction of vocabulary does not focus directly on vocabulary but ultimately leads to or adds to vocabulary building. This type of indirect instruction includes strategies that force individuals to learn words through reading and context of words (Naeimi & Hoo Foo, 2013). The consensus on indirect vocabulary instruction is that it requires many skills, as well as some proficiency in the language of the vocabulary being studied, but can nonetheless be effective (Naeimi & Hoo Foo, 2013). Though direct and indirect strategies for learning vocabulary are in separate categories, it is important to note that research on the topic of vocabulary have found correlation between vocabulary retention and multi-component instructional strategies, that may encompass both direct and indirect instructional strategies for vocabulary (Graham, Graham, & West, 2015).

Perceptions of Vocabulary Strategies by Teachers

Despite what the research says regarding vocabulary strategies teachers may have their own perception of what works and what does not work. According to Hedrick, Harmon, and Linerode (2004), many teachers believe that the best practices for teaching vocabulary include those that ask students to use the word and explain the meaning rather than memorize definitions. Hedrick et al. found that based on the data reported to them by these teachers, almost all report being aware of research

indicating the effectiveness of such strategies (2004). In fact, many teachers believe that practices such as writing analogies for words, and creating concept maps to demonstrate relationships, as noted in direct vocabulary instruction strategies, are most effective (Ilter, 2017) In fact, in one study 100 percent of teachers reported agreeing that using strategies requiring students to make inferences about the definitions of vocabulary words, and thinking critically about them, was much more effective than rote memorization of actual definitions (Elyas & Alfaki, 2014).

Linguistic and Morphological Approaches to Vocabulary

In this section the idea of linguistics and morphology in the development of vocabulary, in the educational setting will be discussed. First, linguistics and morphology will be defined, in the context of this study. Next, strategies associated with learning vocabulary through the use of linguistics and morphology will be discussed. Lastly, the effectiveness of such strategies in building academic (tier 3) vocabulary will be explored.

Linguistics and Morphology

Linguistics is the study of language, which includes morphology within it. Morphology is the study of words, specifically how they are formed and structured. Morphology can include the examination of roots, suffixes, prefixes, or any part of words (Milligan & Ruff, 1990). Many of these roots, or word segments have meanings that can then help people make inferences about word meanings, or give a clearer idea of what a word might mean (Milligan & Ruff, 1990).

Morphology as a Strategy

Vocabulary words in most subjects can often be broken down into Greek or Latin stems, which can give great insight into many word meanings once they are learned (Baumann, et al., 2002). In fact, 14 common Greek and Latin stems combined with 20 common suffixes have been found to generate thousands of English words (Palumbo et al., 2015). Using these morphemes, units of language, to determine the meaning of a word is called morphemic analysis (Bauman, et al., 2002). The idea is that as students learn more roots and are able to combine them more effectively, they will automatically strengthen their vocabulary (Wall, 2016). This strategy has been found to be highly effective in building vocabulary in all students, and they benefit from such instruction (Bauman, et al., 2002). Morphology, and specifically linguistics has even been used as an intervention for students with difficulties or limitations within the English language, such as ELLs and students with special needs. Numerous studies have been conducted to explore the overall effectiveness of this strategy in literacy achievement, vocabulary building, and overall academic achievement (Harris et al., 2011).

Effectiveness of Morphology as a Strategy

The use of morphology as a strategy for building vocabulary has proven to be effective. Focusing on word parts such as prefixes and roots allow students to find connections between words, especially words that share similar word parts (Misulis, 2011). The reason words share so many connections due to the fact that many are cognates, or words that share a similar origin. There are many cognates between

languages that can help ELL's or bilingual students connect new terms to their primary language, due to the common root they share. For example, the word "Education" could be connected to the Spanish word "Educación" because of its common root and meaning. Cognates are not usually difficult to connect because they tend to be similar across multiple languages.

In addition to building such skills as the ability to find connections between words, state that knowledge of morphology helps students unlock meaning of words, while teaching word structure (Palumbo et al., 2015). Word structure knowledge, in turn, serves as a tool for inferring the meanings of words with similar structure. Morphology also allows students to come up with more precise meanings of words, since roots have very fixed and specific meanings, allowing students to focus on actual meaning for words that have meanings that are misunderstood or overly generalized in social contexts (Milligan & Ruff, 1990). Furthermore, Milligan and Ruff (1990) explain that teaching students to understand word parts provides them with transferable skills that allow them to determine meanings of words they have never seen before. This idea of giving students tools to unlock even more words without having to explicitly teach the word is known as a generative approach to teaching vocabulary (Harris et al., 2011). For example, teaching a specific root, will allow students to unlock the meaning of multiple words within that word family, that utilizes the root (Harris et al., 2011). Allowing students to use morphological knowledge of words to determine its meaning can be referred to as morphological problem solving (Anglin, Miller, and Wakefield, 1993). It is important to note

however that such morphological problem-solving skills require familiarity with root words and affixes, and cannot be used without background knowledge of both (Anglin et al., 1993).

Evidence in the form of a research study also supports the effectiveness of morphological approaches to learning. A study conducted by Goodwin and Ahn (2010) demonstrated significant achievement in many areas of literacy as a result of morphological instruction. A study by Wall (2016) also resulted in significant improvement in vocabulary post test scores for students who were taught using explicit direct vocabulary instruction utilizing the teaching of Greek and Latin roots. Such scholarship highlights the important and effectiveness of morphological approaches to learning

Vocabulary in Social Studies

In this section the importance of vocabulary instruction in the content area of social studies will be discussed. First, findings regarding the impact of vocabulary instruction on reading comprehension, and how this relates to overall achievement in social studies will be presented. Finally, I will discuss the added importance of focusing on vocabulary as a language acquisition strategy to support English Language Learners (ELLs) in the content area of social studies. This will cover both the building of academic language connected to the area of social studies as well as overall achievement of ELLs in the subject.

Vocabulary to Improve Achievement in Social Studies

Vocabulary knowledge has been linked to many of the difficulties that students encounter when trying to access content (Harmon, Hedrick, & Wood, 2005). Much of the way students learn in the classroom is through the use of textbooks. These textbooks are full discipline specific vocabulary terms. This difficulty with vocabulary leads to teachers needing to find effective strategies for vocabulary instruction (Harmon et al., 2005). According to Palumbo et al. (2015), vocabulary instruction that is effective can lead to increased comprehension of expository and informational texts. Comprehension of such texts is critical in social studies, since the majority of texts read in the content area are primary and secondary source documents, which are expository in nature. Increased comprehension skills in turn, help students comprehend not only the text, but overall content related to the text (Palumbo et al., 2015). This correlation between deeper understanding and word knowledge is further supported by Sedita's (2005) idea that vocabulary encompasses all words that are necessary to build background knowledge, express what we know, and learn concepts in the subject area related to the vocabulary being used. Furthermore, Alexander-Shea (2011) states that the discipline of social studies relies heavily on text which suggests that vocabulary instruction should go hand-in-hand with the subject.

Vocabulary instruction has the potential to increase comprehension of text. The improvement in student performance does not stop at reading comprehension however. In one study conducted by Falk-Ross and Evans (2014), it was found that

the overall achievement of students increased after strategies focusing on vocabulary development were implemented. This increase in overall achievement may partially be related to the fact that those in charge of naming, in most disciplines rely heavily on morphology. In history for example, disciplinary nomenclature is greatly influenced by morphology and its rules (Hérubel, 2007). Understanding morphology and the names and/or terms associated with a discipline allows for participation in scholarly communication within the subject (Hérubel, 2007). Participation in such scholarly discourse will facilitate deeper learning of the content.

Vocabulary and ELLs in Social Studies

With vocabulary building being a part of any ELL student's learning, it is logical that vocabulary strategies would be useful in assisting ELLs in social studies achievement. Once vocabulary is obtained, especially academic vocabulary, lesson adaptations or strategies teachers use to assist ELLs are much more effective. This is because many students already have the background knowledge they need to understand a topic, lacking only vocabulary (Weisman & Hansen, 2007).

Adaptations, in this context refers to strategies teachers use to assist English learners or struggling students with learning. According to Falk-Ross and Evans (2014), teaching or even scaffolding the use of vocabulary, such as in sentence frames are helpful because ELLs tend to not have a strong enough vocabulary to start speaking or writing an idea. In addition to this, increased vocabulary, or language will increase exposure and access to background knowledge, and discussion about material in any content area, impacting achievement (Falk-Ross & Evans, 2014). Weisman, and

Hansen (2007) also agree that vocabulary, especially academic language, is essential for the achievement of ELLs. Focusing on language development in the classroom, and making this a priority improves the performance of all students, but is more significant for those who are still acquiring language (Falk-Ross & Evans, 2014). In fact, Goodwin and Ahn (2010) specifically found morphological instruction, which can be used as a vocabulary building strategy, to be especially effective for students with limited language and challenges in reading, including ELLs.

Summary

The research and findings discussed illustrate the effectiveness of vocabulary building in addition to overall achievement of students. Research indicating the impact of vocabulary strategies on improvement in social studies was also discussed. Definitions of the existing categories of vocabulary instruction are given, including direct and indirect vocabulary instruction, where this literature review focuses on direct linguistic strategies to improve vocabulary. Research regarding the effectiveness of these linguistic strategies, specifically the learning of morphology and word parts were explored. Evidence suggests that morphological approaches to teaching vocabulary are highly effective in teaching students the skills used for determining the meaning of words. Finally, scholarship demonstrating the impact of strong vocabulary development on reading comprehension and skills necessary for social studies and overall achievement were reviewed.

CHAPTER III

METHODS AND PROCEDURES

The purpose of this study was to determine students' perceptions of and experience with a morphological approach to teaching vocabulary in a high school social studies class. In this chapter the methods that were used in the research study will be discussed, including: information about the participants, research design, and information on how data were analyzed.

Sample

Inclusive High School is a continuation high school located in the Central Valley of California. The majority of Inclusive High students have failed multiple courses, and have fallen behind on too many course credits to graduate at the traditional high school. As such, Inclusive High consists of students who for one reason or another have needs that cannot be met in the traditional high school setting. These needs range from medical issues to behavioral concerns that make it challenging for students to thrive at a traditional high school. The small setting at Inclusive, averaging around 33 students, is sometimes beneficial for students at the site.

For this study, a convenience sample, consisting of two social studies classes were studied. These classes were specifically chosen because they are the only two classes that house social science courses at Inclusive High School. The two classes had 11 and 14 students, totaling 25. In addition, the grade and skill level for these classes are varied, with a mixture of tenth and eleventh graders. This mixture

provided a wider variety of perceptions and opinions, while controlling for questions of age-based maturity and the impact of this age on perceptions.

The study began with a total of 8 participants resulting in 8 respondents to the pretreatment survey. The post treatment survey, by contrast, has only 7 participants, leaving only 7 responses. This discrepancy is the result of one participant moving to another school district prior to the conclusion of the study. This sample constituted approximately 44 percent of the students for these two classes.

Research Design and Instrumentation

Qualitative methods were chosen for this study given the nature of the research questions. Qualitative studies center on understanding perspectives of individuals or small groups of people. This study wanted to understand students' perception of and experience with morphology as a strategy to learn vocabulary. The study was approved by Stan State's University Institutional Review Board, application 1819-88.

Data were collected through the use of two surveys. The Qualtrics program was used to create and collect survey data. The pre-study survey served three purposes. First, the pre-survey was used to gather demographic data from my participants, to allow for grouping. Second, the questions on the survey helped to determine if there was any past experience with the strategies to be used on the treatment that may contribute to the participants evaluation. Finally, the pre-survey helped to measure any possible change in perception after the treatment was given.

After the collection of the pre-survey, the treatment was administered. Prior to actually using the strategy, students were given direct explicit instruction on morphology and how morphology can be used to learn the meaning of words. Once the lesson was given and practiced, students were given graphic organizers containing the vocabulary words for the unit section they were working on (see Appendix E). Each organizer contained four boxes beside each vocabulary term. The box to the right of the term asked students to separate the word into morphemes, or word parts. In the next box, students were to write the meanings of each morpheme, including any affixes, and roots. In the third box, students were instructed to come up with their own definition of the term, using the morpheme meanings. This personal definition was constructed by the student, using the charts of common root and affix meanings, as a reference. Once personal meanings were determined by students, dictionary definitions of the words were copied by the student, into the final box. Upon completing the organizer, students engaged in a small group discussion, comparing their own personal definitions to the dictionary definition for each word. Students were also instructed to discuss the accuracy of their personal definitions, and why it was either accurate or inaccurate. It was observed that many students had guessed correctly, based on the meaning of the morphemes, with dictionary definitions being very similar to their own definitions. This was observed weekly, each time new terms were given. The treatment lasted for 4 weeks.

Once the treatment was completed, a post treatment survey was completed by participants. The post survey included questions geared toward understanding the

perceptions and opinions that students had towards morphemic analysis, and whether opinions had changed or not.

Some biases that might be present within the study are the fact that the researcher is also the individual who is teaching the unit that achievement and perception is being reported on by students. Not only will the instructor collect the data, but they will be administering the treatment being evaluated, as well as the instruction. This instructor-student relationship may impact perceptions, or create some bias on the students' part resulting from the primary evaluator of the students being the researcher, when he assumes the capacity of the day-to-day classroom teacher. In addition, the relationship the instructor has developed with the students may also motivate them to rate the effectiveness of the tested strategies either more, or less desirable than their actual perceptions may be. With these possibilities in mind, the researcher has kept all surveys and survey responses anonymous with no names or unique identifiers being collected.

In the collection of data, care will need to be taken in maintaining confidentiality, since student responses, thoughts, and reported personal traits may be collected. Therefore, identities have been preserved, and unreported during the survey.

Data Analysis

The data were collected and coded to look for overall themes in the perceptions reported by students on the effectiveness of the strategy, and their perceived usefulness of morphologic vocabulary activities. Survey responses were

categorized and grouped with similar responses to get a sense of the class perspective. Finally, data was organized in a spreadsheet, electronically. Written survey responses were completed on Qualtrics and kept in a password protected drive account.

Summary

This chapter presented the structure of the study including an explanation for how the sample was attained as well as an explanation of what kind of data was collected. The survey method which was used to collect student perceptions and opinions was also discussed. The next chapter will present the findings from the study.

CHAPTER IV

FINDINGS

The purpose of this study was to determine students' perception of and experience with morphemic analysis. More specifically, the effectiveness of morphemic analysis in regards to aiding in social studies achievement was explored. In this section, the data collected from the distributed surveys will be discussed. The results of the surveys, indicating student perception of the treatment utilized in this study, will also be presented. Over the course of analyzing the survey data; three themes resulted. First, participants had limited prior experience with morphology as a strategy. Second, participants shared an overall positive attitude toward morphology after the treatment. Finally, little shift in opinion occurred pre-post treatment.

Limited Prior Experience

Participants in the study expressed limited knowledge of morphology prior to the treatment. Most participants claimed to not know the meaning of "morphology," while one participant failed to respond to this question. Of the seven who responded, one did express having heard the word before, but not knowing its meaning. Such findings seem to suggest that morphology was a new concept to the majority of the class.

Apart from the term morphology, most participants had some experience with the strategy. Seven participants reported having used word parts as a strategy, while one had never used this technique before. Aside from self-use of a morphological

strategy, six participants said that their past teachers had used, or demonstrated use of some type of word part strategy for learning vocabulary.

Participants who indicated that they had some experience with a strategy that utilized word parts for vocabulary instruction, were asked to describe the strategy they had experienced (either self-used, or observed). Only two described using morphology in a way that was consistent with the intended strategy. For example, one participant described using prefixes and connecting them to other words. The other participant, whose description was relevant to morphology, described their understanding as using “word parts to help understand bigger words in medical tech class.” Such findings seem to suggest that though participants were not familiar with the formal definition of the term “morphology”, they had some idea or experience with the concept of using morphemes to determine word meaning.

Positive Attitude Toward Morphological Strategies

Participants indicated an overall positive attitude toward morphology. One participant reported that the use of root words was interesting to them, while two others described morphology as an easier way to learn new words. Another participant responded by simply stating, “its great”. In addition to seeking their general perspective of morphological strategies, students were also asked to rate the strategy: Extremely ineffective, ineffective, effective, and extremely effective. Two participants rated the strategy as Extremely effective, while all other respondents failed to rate its effectiveness directly. The overall sentiment of the group towards the strategy of morphology seemed to be positive.

In addition to general attitude towards morphological strategies, participants also indicated a general tendency toward wanting to use the strategy in the future. All participants indicated some promise of using the strategy in the future. One participant reported that they were extremely likely to use the strategy on their own, one reported that they are very likely to do so, and four reported that they were moderately likely to use the strategy on their own. One participant did not respond to whether they would use the strategy in the future or not. Such findings seem to suggest that students may plan use the strategy in other subject areas, without being required to by a teacher.

Participants also shared thoughts about contexts within which they thought morphological strategies would be useful. Five participants stated that the strategy was effective in specific courses and situations, such as when learning “big words”, “studying”, or in a “history class”. Participants also commented on actually utilizing morphological strategies in other contexts. For example, four students reported that they had used morphological strategies elsewhere. One participant stated that they had used morphological strategies in English class. Another participant had used it in a medical technologies class. Such findings seem to suggest that students find morphemic analysis to be effective across content areas, further supporting the idea that there is a positive perception of the strategy overall.

Mixed Shift in Perception

Participants’ views on whether their perception of morphology changed over the course of the treatment resulted in mixed responses. Three participants stated that

their opinion of morphology had changed as a result of using the strategy in class. Of those who indicated a change in perception, two indicated positive attitudes toward the strategy, but only one of the two had an answer relevant to the question asked. The aforementioned respondent stated “it has helped” which can be interpreted as the student reporting that using the strategy has helped in influencing his opinion on the strategy. The final respondent who indicated a change in perception answered, “didn’t” which likely means that using the strategy did not impact their opinion of the strategy.

Since the post treatment survey was conducted independently from the pretreatment survey, and both data sets were compiled in aggregate, it cannot be determined what this respondent’s opinion on the strategy was prior to the study. Based on this data, it seems that there is no clear indication that opinions on the morphological strategy tested was impacted by its use in class. There did seem to be at least two examples of an improved attitude toward the strategy, by two individual students.

Summary

This chapter has outlined the three themes found within the data from the study. These themes included: limited prior experience, a generally positive attitude toward morphological strategies, and mixed changes in perception regarding morphological strategies. The next chapter will outline limitations of the study, recommendations for further study on the topic of morphemic analysis, and the conclusion to the study.

CHAPTER V

SUMMARY, RECOMMENDATIONS, AND CONCLUSION

Summary

This study sought to better understand two questions: What do high school History students at Inclusive High School think about the effectiveness of using Morphology as a strategy to learn vocabulary in social studies & will learning to use a morphological strategy for vocabulary impact their opinion on the effectiveness of the strategy?

Regarding the first question, students at Inclusive High School believe the use of morphology to be effective in social studies. Respondents also indicated that they viewed the strategy to be effective across the board, and reported using it in other content areas.

Regarding the second research question, students reported mixed results. While some participants reported a shift in their perception after learning to use the strategy, others reported that their opinion was unaffected.

Discussion of Results

In this study, it was shown that the students in this class had a generally positive view of morphology overall, as well as its effectiveness. As discussed in the previous chapter, the majority of students reported that they found the strategy helpful, and effective when learning vocabulary in social science, while also finding it useful in other subject areas. These findings connect to other scholarship in the field in that vocabulary instruction has been found effective in promoting achievement

across multiple subject areas (Falk-Ross & Evans, 2014). More specifically, the findings are consistent with other studies suggesting Morphological strategies are effective tools across many disciplines in helping students build knowledge of academic content (Goodwin & Ahn , 2010).

When examining data pertaining to change in opinions about the effectiveness of the tested strategy, there was not much evidence of change. Though a few students reported that their opinion had changed, the number of respondents who thought the strategy was effective in the pre-treatment and post-treatment surveys, are almost identical. This may suggest an increase in the confidence of the effectiveness of the strategy, but no shift from opinion of ineffective to effective.

The findings of this study are of use to high school students because they demonstrate how their peers perceive the strategy of morphemic analysis. Students of the same age tend to have similar preferences. Knowing that other high school-aged teens have a positive view of this strategy may give students a reason to try learning how to use it. Also, knowing that other students of the same age have found the strategy effective in helping them learn acts as somewhat of a testimonial to other students of how effective the strategy might be for others. Finally, the results give students the awareness of a strategy they may not have otherwise known about.

The findings of this study are also important for teachers for a few reasons. First, teachers often spend great amounts of time searching for learning strategies that are not only effective, but that students will also buy into. Knowing that students have a positive perception of morphemic analysis as a strategy to learn vocabulary

seems to suggest that other students will engage in it. Student engagement and “buy in” are crucial for teachers because students will not willingly use a strategy that they do not like. Students often ask the question “why do we have to learn this?” or “when am I ever going to use this?” This is often done in an attempt to avoid instruction, but can also be a genuine concern. Since the findings indicate that students perceived morphemic analysis as effective, less instructional time will need to be spent on strategies that students are not likely to use.

Study Limitations

Though useful data was collected during the study, there were a few limitations that could not be completely remedied. The first, and most impactful challenge was the sample size. Over 25 students were invited to take part in the study, but only eight actually had parent consent, and went ahead with participation. Though the data reflect the sentiment of those who participated, a much larger sample size would have given a more accurate representation of the opinions of Inclusive High School students.

Another limitation was the level of participation from those who took the surveys. Many participants left questions unanswered and answered with very little detail. Such circumstances skewed the data in that the general class opinion does not take every single participant into account. Questions were not all required to be answered in an attempt to allow students to skip questions that they were not comfortable answering. It is the belief of the researcher that requiring every question to be answered prior to submission would have resulted in fewer overall submissions.

In retrospect, adding additional data collection tools, such as an interview, would have allowed for confirmation of findings and perhaps more detailed response from participants.

Recommendation of Further Study

Further study of this topic should focus on the actual as opposed to perceived effectiveness of morphology as a strategy for building vocabulary in social studies classrooms. Such research could employ quantitative methods, measuring actual vocabulary knowledge growth following an instructional unit. In addition to collecting data for measuring participant growth, demographic data can be collected to verify ELL status. Confirming the language of origin of the participant, and actual ELL status, will result in more accurate findings.

Conclusion

Language acquisition and vocabulary building are fundamentals when it comes to literacy and learning in general. Finding an effective strategy to promote such skills is of the utmost importance in education. In addition to being effective in the practical sense, strategies need to engage students, as well as give them confidence if they are to be positive. Morphology has shown to have a positive reputation among the Inclusive High School students participating in this study. Knowing that students believe in the strategy, feel like it helps them learn, and that they are willing to use it, will help in making it effective.

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APPENDICES

APPENDIX A

PARENT CONSENT FORM

California State University, Stanislaus
Parental/Guardian Consent for a Minor to Participate in Research *Student*
Perceptions of Morphological Strategies for Learning Vocabulary

Purpose of the Research

The Principal Investigator, Ruben Sicairos, is a student at California State University, Stanislaus conducting research for a master's degree thesis in Education.

The purpose of this research is to learn about how effective students perceive morphological strategies to be in helping them learn content-specific vocabulary. I am inviting your child to take part in this research because he/she is part of the Social Studies and/or English classes the study will be conducted in.

Procedures

If you agree to let your child participate in this research, the following will occur:

- A. All research will take place in your child's English and/or History class in Room 1.
- B. Students will take a pre-study survey to learn about past educational experiences and experience with vocabulary building.
- C. After the four weeks of morphology instruction (normal classroom instruction), students will take post-research survey to determine their perceptions of learning vocabulary using the tested strategy.
- D. Each survey will take about 10-15 minutes and will be conducted during regular class time. Students not participating in the study will be given an alternative assignment to be completed during this time.

Potential Risks or Discomforts

The risks/discomfort in this research will be minimal. Given the nature of the survey questions, including Before each survey, students will be reminded they may skip any question or cease participation in the study at any time for any reason.

Social and Psychological risk may also be presented in the form of anxiety, or stress caused by the mishandling of personal data collected. To minimize this risk, all data and artifacts will be stored in a secure online drive, accessible from a password secured device. These data and artifacts will not be shared with unauthorized individuals.

Potential Benefits of the Research

Participants will not receive direct benefits from the study. The findings of this research will be used to further drive the researcher's instruction. As a result, participants and future students may benefit from the implementation of effective teaching practices as a result of this study.

Confidentiality

Personal identifiers will not be shared with anyone, nor will they be included on any of the report. Identifiers will only be used in the researcher's personal analysis of the data, to identify certain demographic information. Collected data will be stored in a secured drive. Access to this drive is granted through the use of a password that is only known by the researcher. Furthermore, the district has secured this drive through the use of firewalls and other encryption technology.

The researcher **will not** keep your child's research data to use for future research or other purpose.

Costs

There is no cost to your child beyond the time and effort required to complete the procedure(s) listed above.

Compensation

There will be no compensation for participating in this research.
There is no anticipated commercial profit related to this research.

Participation and Withdrawal

Your child's participation is voluntary. He/she may refuse to participate or stop participation at any time without penalty or loss of benefits.

Questions

If you have any questions about this research, you may contact me, **Ruben Sicairos**, at #-xxx-xxx-xxxx or my faculty sponsor, **Dr. Steven Drouin** at #-xxx-xxx-xxxx

If you have any questions regarding your child's rights and participation as a research subject, please contact the IRB Administrator by phone (209) 667-3493 or email IRBadmin@csustan.edu.

Consent

I have read and understand the information provided above. All of my questions, if any, have been answered to my satisfaction. I consent to allow my child to participate in this research. I have been given a copy of this form.

Parent/Guardian Signature _____ Date _____

Child's Name (printed) _____

Signature of person obtaining consent _____ Date _____

Printed name of person obtaining consent _____

APPENDIX B

STUDENT ASSENT FORM

California State University, Stanislaus
Student Assent in Research
Student Perceptions of Morphological Strategies for Learning Vocabulary

Purpose of the Research

I, Ruben Sicairos, am a student at California State University, Stanislaus.
I am conducting research in Education.

The purpose of this research is to better understand students' thoughts about vocabulary strategies.

Procedures

If you and your parent/guardian agree to let you participate the following will occur:

- E. You will answer a set of written questions in class about your background and your thoughts about vocabulary.
- F. A few weeks later, you will complete a second set of questions about vocabulary.
- G. Each set of written questions will take about 10-15 minutes and will be done during regular class time.
- H. If you do not want to be in the study, you will be given a different assignment to complete.

Potential Risks or Discomforts

There is a small chance you may feel uncomfortable by some of the written questions.
You can skip any question for any reason.
You can stop being part of the study at any time for any reason.
I will not be mad if you skip questions or stop being in the study.

Potential Benefits of the Research

I might become a better teacher because of the study.

Confidentiality

I will change your name when I write about what I find.
I will keep all materials in a locked and safe place.
I will not use any of the information for future research.

Costs

There is no cost besides answering the written questions.

Compensation

There will be no compensation for participating in this research.
There is no anticipated commercial profit related to this research.

Participation and Withdrawal

Choosing it be in the study is option/up to you.
It is ok to not be in the study.
If you are in the study and want to stop, you can at any time for any reason.

Assent

I have read and understand what was written above.
All of my questions, if any, have been answered.
I want to be part of the study, if my parents say it is ok.
I have been given a copy of this form.

Child's Name (printed) _____ Date _____

Signature of person obtaining consent _____ Date _____

Printed name of person obtaining consent

APPENDIX C

PRE-STUDY SURVEY

1. What is your current grade level?
2. What do you consider to be your primary language?
3. Which language did you learn first?
4. Are you currently classified as an English Language Learner by the school?
5. Have you ever been classified as an English Language Learner?
6. What does the word “morphology” mean to you?
7. Have any of your past teachers used a strategy, requiring you to use word parts to learn the meaning of new vocabulary words?
8. Describe the strategy that was used.
9. How often did you use this strategy in class?
10. How do you feel about how well this strategy works in helping you learn vocabulary?
11. How do you feel about the effectiveness of this strategy in helping your achievement overall?
12. How do you feel about using word parts (roots and affixes) to determine the meaning of words?
13. How effective (or ineffective) do you predict using word parts (roots and affixes) to learn vocabulary to be?

APPENDIX D

POST-STUDY SURVEY

1. What is your current grade level?
2. What do you consider to be your primary language?
3. Which language did you learn first?
4. Are you currently classified as an English Language Learner by the school?
5. Have you ever been classified as an English Language Learner?
6. What, if anything, have you learned about morphology?
7. What if anything, did you learn about using word parts to learn vocabulary?
8. What is your opinion about using morphology to learn new words?
9. How effective do you believe morphological strategies to be in helping you learn vocabulary?
10. Has using morphology as a vocabulary learning strategy in this class changed or influenced your opinion of this strategy? Please explain.
11. How has using this strategy impacted your opinion?
12. How likely will you be to use this strategy on your own?
13. Which class or classes (list subjects) did you use Morphology in this quarter?
14. Is Morphology effective in specific courses or situations?
15. In which situations/classes is Morphology effective?
16. Did you use Morphological strategies on your own to learn vocabulary in any other classes (other than those you have with me)?
17. Which subjects/classes did you use Morphological strategies (other than those you have with me)?

GRAPHIC ORGANIZER

<u>Word</u>	<u>Morphemes</u>	<u>Meanings of Morphemes</u>	<u>Inferred Definition</u>	<u>Dictionary Definition</u>
Communism				
Democracy				
Defect				
Arms Race				
Credibility				