

Teaching Affixes and Cognates to Enhance Spanish
ELL's Lexical Competence

By
Jana Schultz

*A Master's Paper
Submitted in Partial Fulfillment of
The Requirements for the Degree of*

Masters of Arts - Teaching English to Speakers of
Other Languages



Vladimir Pavlov, Ph.D.

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Abstract

This paper discusses the current strategies for vocabulary instruction in the United States K-12 system. It introduces a new method for Spanish-speaking students to use cognates as root morphemes within affix instruction. This method will offer Spanish-speaking English Language Learners tools for lexical confidence that can transfer across languages. In addition, this method teaches learners to recognize words that are similar or borrowed from first language and how affixes may change those words to better isolate the learning of morphological parts and how they can change words. This knowledge will benefit the learner throughout their reading and content-based classes.

Introduction

“Language learning fundamentally relies on the learner’s ability to find patterns in the input and to generalize these patterns to new vocabulary.”

Brooks, Kempe, & Donachie (2011) P. 1143.

Vocabulary development for English language learners is an immediate challenge for educators because students need to utilize vocabulary quickly to access the content. Native English speakers often start kindergarten at age five with enormous vocabularies, having around 1,300 words by age seven (Kipfer, 2007). English language learners may have similar vocabularies within their first language but require guidance on transferring those words into English. Helping learners to recognize the value of what they already know will assist the learner in the cross-linguistic transfer of vocabulary. This study describes the benefits of using morphological instruction, precisely affix instruction, with cognates (cognates are words that look or sound the same in two languages and carry the same meaning in both languages) as root morphemes.

Teaching affixes with cognates aids comprehension. This strategy provides teachers the additional advantages of helping learners focus on specific morphological units instead of learning a new word, its meaning, and finally, how it can acquire affixes.

Vocabulary instruction in language learning is essential to language mastery. Vocabulary learning occurs in conditions of repetition, retrieval, creative use, and deliberate attention (Nation, 2014). Nation also asserts that language learners need only know a sampling of words to successfully negotiate the additional language learning experience (Nation, 2014). Vocabulary learning in the United States K-5 system has elements of repetition and retrieval. Morphological instruction, by default, requires deliberate attention in order to recognize word parts and their meanings. Creative use of vocabulary is an essential aspect of vocabulary instruction; however, it can be difficult for educators to create authentic opportunities for students to utilize new vocabulary. The teaching of cognates empowers language learners to decode words with the same root structure and therefore build their vocabulary quickly. Using cognates in morphological instruction, teachers can provide students with access to unknown vocabulary through morphological decoding strategies, illustrated in the lessons included in the unit plan. These morphological decoding strategies will be accessible to students through isolating the skill of morphological discrimination of affixes by using cognates in instruction—lessons in vocabulary development help students to recognize word parts. Content area teachers invest in helping students be able to grow their vocabularies in school exponentially.

Importance of Vocabulary Development for Literacy and Language Acquisition

Vocabulary acquisition is an essential skill in developing literacy. Reading rate and comprehension are two areas teachers focus on as primary routes to literacy. *Reading rate* is the

speed at which a reader reads the words in a text. Reading rate is assessed through timed readings of texts. However, assessing learners through timed readings does not address the importance of the texts' comprehensibility. Comprehension is the degree to which a reader understands the text they read. Teachers may ask comprehension questions after students read texts to gauge understanding and recognize the areas that need clarification. Graded readers can be used to improve the comprehensibility of information and provide students at lower reading levels with the same information as those at the higher reading levels. A *graded reader* is a text provided at multiple levels by publishers to provide accessible materials to all readers.

Comprehension is the ultimate goal of literacy instruction. However, the road to acquiring this competency is not always distinct (Uchikoshi, 2013). Comprehension in itself is the understanding and interpretation of a written text. Comprehension in literacy is a particular challenge for English language learners because students must first achieve mastery of the majority of vocabulary within texts. In addition, students from diverse language backgrounds have the challenge of decoding unfamiliar words while simultaneously comprehending new meanings. Teachers often use visual aids and highly visual techniques due to this challenge. Mancilla and Lesaux (2011) speculate that within the educational system that students must be able to decode words (i.e., word reading) while simultaneously interpreting word meanings (i.e., vocabulary knowledge). This concept is common in primary grades, where oral reading accuracy and fluency are often considered strong predictors of comprehension (Mancilla & Lesaux, 2011).

Creating an environment for vocabulary development to overcome the obstacles students face in achieving reading comprehension can be a challenge for educators unfamiliar with working with students with limited vocabulary. A strategy that may be helpful to learners is to create a personal glossary based on their reading actively. This strategy will activate the deliberate attention

area of vocabulary development and the retrieval aspect of developing new vocabulary. This feature is an essential feature of vocabulary development because until a learner can actively retrieve a word from their vocabulary, they cannot use the word in context and show comprehension.

Reading Rate

Readers must possess a variety of skills to read at a rate that allows comprehension of materials. If a reader is reading too slowly, they will struggle to comprehend the text because they will lose meaning instead of focusing on decoding words. For example, reading individual words that may be challenging for the learner does not allow comprehension of the text as a whole. Reading rate is directly related to fluency and comprehension. Many factors influence reading rate, including student motivation and interest, text level, and instructional tools to increase reading rate. Vocabulary contributes to reading rate because the learner must recognize and quickly read words in context to improve their reading rate.

The ability to recognize familiar words is essential to increasing the students' reading rate. According to specific test standards, literacy growth in the elementary school I am currently teaching is measured in words per minute. Unfortunately, early readers do not know a lot of words and lack confidence in their reading, fearing they might miss something; therefore, they read slower. So, teachers need to focus on vocabulary development in order to increase reader confidence. A portion of the reading rate, of course, is simply getting readers to move their eyes quicker, but without confidence from recognizing words, this task is challenging to achieve.

Increasing reading speed through a variety of methods is essential to maintain student motivation. Variation in methods helps widen the perception of words; subtitles are one such method of increasing the reading rate. Parkhill and Davey (2012) observed the benefit of subtitles

to increase the reading rate. Using this resource, they saw enhanced interest, which helped foster increased comprehension (Parkhill and Davey, 2012). Parkhill and Davey (2012) found that students read for an hour each day paired with another activity from various activities that specifically focus on fluency, vocabulary, or comprehension. Some of the activities they used were surprise subtitles, where they encouraged rapid reading through subtitles, a focused word hunt, and taking a dictionary to the movies where the movie was intentionally paused at a place where students would look up more in-depth meanings of words used within that subtitle. Another bonus of reading subtitles is the highly visual aspect of movies. They could utilize these subtitles to further student comprehension because the students were actively watching the events transpire. This activity enabled readers to visualize as they read the subtitles while the events occurred within the movie. Students could watch the story on screen unfold and synchronously increase understanding through subtitles. Subtitles may also introduce new vocabulary in both a visual and auditory way. They measured the growth of students through pretests and posttests based on the Progressive Achievement test or PAT that were focused on comprehension in used explicitly in New Zealand schools (Parkhill and Davey 2012). PAT tests are specifically designed tests to track progress throughout the school year in New Zealand schools (Parkhill and Davey 2012).

Reading rate is an essential aspect of student comprehension because until students can read at a specific rate, they will be unable to deduce meaning from the text. Therefore, the reading rate can be used to measure student comprehension (Lesaux, 2012). However, the reading rate is one aspect of an exceedingly complicated picture. Students must decode and organize multiple types to recognize word families and retain comprehension while doing so. In fifth grade, the students must read correctly at least 115 words per minute (Lesaux, 2012). This number equates

to almost two words per second, which means that while vocabulary development is essential for reading rate, students need opportunities to practice this skill and cultivate confidence.

Graded Readers

Graded readers provide one method to assure students are being introduced to new vocabulary at their reading level, at a rate at which the new vocabulary is accessible through deliberate attention from the reader. Selecting appropriate texts for learners can be challenging. Texts must be difficult enough to introduce new vocabulary yet easy enough for students to remain interested in the material presented. Similarly, students who are reading beyond their level may find the vocabulary too challenging and quit reading. Graded readers allow student choice in reading materials. Students are allowed to pick subjects from a group of readers within their levels. The variety of materials available for learners may initially seem overwhelming to educators who have not yet been exposed to such texts. Suk (2017) stated graded readers should be used at a rate of one per week. However, using the graded reader at this rate may be challenging for reluctant learners who prefer shorter books with less complicated vocabulary. Initially, educators may choose to use these graded readers at a slower rate in order to accommodate the reluctant readers, who may struggle with the length of graded readers initially. However, over time the added benefit of choice in reading materials should increase reader motivation. Using graded readers at a speed that both encourages motivation to read as well as growing vocabulary can be a delicate line for a teacher to navigate. Graded readers are an excellent source for developing student confidence.

Graded readers are a realistic way to make new information accessible to even new readers. Using graded readers is a common practice in the K-12 system in the United States. Often, students are allowed the freedom to select a subject they enjoy reading. There are many different publishers that offer graded readers that allow teachers the freedom to encourage students to read about a

multitude of subjects (Suk, 2017). Students who are genuinely interested and enjoy reading will continue to pursue additional materials (Suk, 2017). Even reluctant readers may find appealing materials to read because of the variety of subjects available. Using graded readers in order to invite incidental learning of vocabulary can be challenging. It is crucial for teachers to recognize the current vocabulary of students in order to select the correct graded readers and encourage graded reading so that the graded readers can promote vocabulary development.

The use of graded readers helps learners to acquire vocabulary incidentally. Sometimes, learners may find words they do not understand from the context in these graded readers. When they do not understand the context, they may look it up in the dictionary before switching their vocabulary from incidental to deliberate learning. However, if a learner reads a text far beyond their comprehension level, the amount of vocabulary required will inhibit a reader's ability to deduct meaning from the text.

Providing readings at an appropriate level for students is an essential aspect of literacy instruction. Graded readers make information accessible to more readers than generalized texts, which may be too complicated for emerging readers. Another thing to consider with literacy instruction is the role of extensive reading. Extensive reading is reading a significant amount of material, at the reader's level or slightly below that, to build fluency.

Extensive Reading

Learners doing extensive reading are reading texts that are easy and enjoyable. Learners are increasing their reading rate and desire to read. *Extensive reading* is a strategy that has been used with native speakers for many years. It requires reading many materials specifically written or selected at an appropriate vocabulary level and is a challenging strategy for English language learners through which to acquire vocabulary.

Students who read extensively often pursue topics of interest to them, which creates an environment for additional vocabulary learning. Extensive reading increases the meaningful exposure of the target language, which assists in language learning (Suk, 2017). Students who are doing extensive reading are often asked to repeatedly read graded readers in their classes because it is often intertwined with instruction to cultivate reading rate and comprehension strategies for vocabulary development.

Repeated Reading

Repeated reading is a method of extensive reading that is important for beginning and intermediate learners when used to activate vocabulary knowledge later when the student is more experienced. Repeated reading helps increase reader fluency while also helping readers acquire needed vocabulary within the text (Nation, 2014). Nation recommends that learners read books that are interesting to them and contain only 100 running words unfamiliar to the learner, then fill out a form after reading to assess the understanding of the text. The idea of this type of reading is that a learner will do a large amount of enjoyable reading. For more proficient readers, repeated reading plays a vital role in gaining a more profound understanding. Higher-level readers can gain this understanding through silent incidental reading. Students who read for pleasure have an advantage in vocabulary, and therefore assisting readers in finding appropriately leveled materials within their interest area will expedite vocabulary development. An additional facet of vocabulary development is phonics instruction.

Phonics

Phonics instruction is the study of sound-symbol correspondence through directed instruction. English language learners sometimes struggle with decoding due to the differences in

phonological variables between languages. There are many programs for phonics instruction; one such program, Orton-Gillingham (OG), (Gillingham & Stillman, 1936, as cited in Ritchey & Goeke, 2006), is a popular method within the U.S. K-12 instructional system.

Phonics instruction has been highly regarded in the realm of literacy teaching. Phonics programs such as Orton-Gillingham are familiar to many teachers and have been used in schools for years. However, in the research by Ritchey and Goeke (2006), they found learners struggling with the twisting of symbols, which is when a reader sees the letters but then twists them around, so they are no longer perceived as positioned correctly. This information allowed educators to navigate new strategies to help learners. In my personal experience, educator awareness of phonological differences between languages can guide instruction and increase the efficacy of programs such as OG.

The OG approach is comprehensive in a way that benefits native English speakers, and the variety of approaches to literacy are supportive of English language learners. The OG approach is a way to provide a systematic, chronological, multi-sensory, and phonics-based approach to teaching reading and by relation vocabulary (Ritchey & Goeke, 2006). For example, teachers can include multi-sensory practices into word learning by students writing specific “red” words in the sand. This drawing of the words allows students to more concretely cement both the form of commonly found words and the sound of the word (See Image 1).



Image 1 by J.Schultz

Teacher perceptions of intervention strategies are essential to their success. Ritchey and Goeke (2006) hypothesize that OG is used widely due to teacher training availability and perception by

teachers of the curriculum. Unfortunately, there is not much research on the OG program effectiveness, but teachers feel they can see the results of this intervention. Ritchey and Goeke (2006) report a significant gap in research to practice with current teaching strategies. OG requires the teaching of morphological structures while also utilizing phonics instruction. Phonics is an accessible model to teach the form and structure of words. Through phonics instruction, students learn to identify root morphemes and affixes and the many combinations that result in various meanings. OG is a comprehensive program that allows students the essential reading skills to decode and problem-solve known and unknown words, thereby increasing the learner's vocabulary size exponentially. OG can facilitate decoding; as students advance within the program, their reading rate will, as a result, increase. OG allows learners to decode new words in their reading efficiently, and therefore, acquire vocabulary at an enhanced rate.

Effective phonics instruction is essential for learners' phonemic awareness development, which is a skill that is only required to be taught once and is a skill with cross-linguistic transfer (Atwill, Blanchard, Christie, Gorin, & García 2010). This benefit is why phonemic awareness is critically important to young learners and a skill that must be intentionally taught. Students who did not have explicit instruction on phonemic awareness will struggle with curriculum demands until they receive that instruction (Atwill et al., 2010). Thus, phonics is an aspect of language curricula that should be prioritized to provide long-term benefits to the learner. In addition, phonics instruction plays an essential role in the retention and use of new vocabulary, through which students learn to monitor their pronunciation of words intrinsically. Those students are then better able to self-correct when reading out loud. Students, therefore, read new vocabulary words and recognize if they have encountered them before, either in discussions or previous text. If a

learner has not previously encountered a word, they can use deliberate attention to find the meaning of the word and put it into their stored lexicon for use at a later time.

Below is a unit plan that uses Spanish cognates and assumes the class speaks Spanish as the first language. If students speak a different language, then the cognates can be changed for the lessons accordingly. For this discussion, I will focus on Spanish.

It is noteworthy that Spanish vocabulary development significantly impacts the cross-linguistic transfer of phonological awareness. This cross-linguistic transfer plays an essential role in vocabulary acquisition. Spanish vocabulary acquisition appears to be a precursor to English phonological awareness (Gillanders, Castro, & Franco, 2014).

Current Practices in Vocabulary Instruction

Vocabulary development is arguably one of the most critical parts of learning a new language. Strategies like rote memorization or memorizing the word and the definition together are popular among language educators. Vocabulary development is generally prioritized over other essential skills in language learning due to the limiting factor vocabulary has on emerging learners and the importance of words for communicating needs, comprehending instruction, and social use of language. Vocabulary development of native English speakers is essential to educational success, but vocabulary development for English language learners is essential to both that and success in daily life.

The sheer number of approximately 1,300 words that English learners must acquire in any given school year is often seen as an insurmountable challenge (Kipfer, 2007). English language learners have the additional challenge of acquiring the approximately 1,300 words that native English speakers have when they begin school. Some teachers at the elementary level struggle to teach this high number of words. Traditionally, vocabulary is taught through a focused five to ten

words per day for individual students. However, by grade five, English language learners would be behind by over 5,000 words only to lag behind their classmates as they enter middle school further. Elementary school, English language learners, face two unique challenges, first to master a new language and then second to access content taught in this new language before being able to use it. Teachers often use ten focused vocabulary words with appropriate differentiation to each student's level, and ten new words are still too few for linguistically behind students. For teachers, the pacing is also exceptionally challenging in an environment of diverse language learners since some learners may have already acquired specific vocabulary while other learners have not. Home language can also play a substantial role in this, as learners who can recognize patterns are better positioned to acquire vocabulary at an increased rate.

According to Dalle and Young (2003), teaching students to use cognates can encourage learner confidence in vocabulary development. When teaching English vocabulary, recognizing and understanding words in a student's first language can expedite the learning of English. Moreover, morphology, the study of word components, provides useful conceptual tools that can vastly develop word recognition skills for English language learners. Learning to identify word parts and morphological structures is an essential skill to facilitate language acquisition and allow crucial access to the content learners need to optimize their success in other subject areas.

Cognates make up for one-third to one-half of the active vocabulary of an educated person (August, Carlo, Dresser, & Snow, 2005). This active vocabulary could range anywhere from ten thousand to fifteen thousand words (August et al., 2005). Non-native speakers would have to learn 40 lexical units every day for four years to learn 58,400 words, which would still not catch students up with their peers in this regard by adulthood (Mikulecky, 2011). This number of words is a disproportionate number of words to learn for English language learners (Mikulecky, 2011).

The identification of cognates plays an essential role in vocabulary development which has two instructional modes: intentional vocabulary teaching and incidental vocabulary teaching. Recognizing vocabulary instruction today helps develop new techniques for instructional practices for tomorrow. Currently, incidental vocabulary instruction occurs when students are engaged in using language and encountering unfamiliar words. Native English speakers usually have enough background knowledge to guess the meaning from context, which is not always as likely for English language learners. Incidental vocabulary development can be promoted through extensive reading, repeated readings, and pleasure reading.

Incidental Vocabulary Development

This concept refers to words picked up through usage instead of instruction. Students learn vocabulary through interaction and while reading. Two techniques that draw on incidental learning are extensive reading and repeated readings. Incidental learning is the most common form of vocabulary learning for native English speakers (Nation, 2014), which is far more challenging for English language learners due to the number of vocabulary words required to comprehend the text containing new vocabulary. Incidental learning of vocabulary can occur and commonly does for native English speakers through extensive reading.

Educator awareness of background knowledge and current vocabulary size is essential when choosing to promote incidental vocabulary development. In addition, accessibility of vocabulary within texts and appropriate levels can help teachers choose the most valuable resources for incidental learning.

Intentional Vocabulary Instruction

This technique is the direct instruction of individual words and word lists. Intentional vocabulary instruction requires teachers to select specific words to focus their instruction on, and provide activities and guided ways to use those words. It can be inefficient due to the limitation on the number of words per day that a student may acquire, store, and finally use in their own vernacular.

Intentional vocabulary learning implies that the teacher provides specific instruction with a focus on vocabulary strategies and a few targeted vocabulary words. In the past, these strategies have included rote memorization, flashcards, and guided practice. Acquiring vocabulary means recognizing sounds, spelling, and meaning, as well as proper usage (Nation, 2014). In my understanding, *knowing* a word is the ability to use it creatively in different applications. In order to achieve this in-depth knowledge, students must retrieve the word and utilize it within their own vernacular. Intentional instruction focuses on isolated vocabulary words and allows the learner to receive explicit direct instruction on those vocabulary words.

Explicit instruction is also important in phonics instruction, part of learning to use new vocabulary words by recognizing how they should sound and decoding them when encountered. The challenges of prioritizing new vocabulary and the need to expand the number of words acquired per day can be addressed through the use of cognates and morphological instruction, which is the focus of this literature review and the included unit plan. Herein, the cognate approach provides access to both word decoding and morphological analysis, which offers learners a technique for guessing at and acquiring unfamiliar words. The cognate use provides the opportunity for students to learn more words faster too.

Morphological Instruction

In the English language, almost all lengthy words are composed of multiple morphemes. Understanding how words acquire affixes to change their tense, plurality, or overall meaning allows learners to recognize individual morphemic structures that contribute meaning to root morphemes they may already know (Nagy, Berninger, & Abbott, 2006). Teachers generally are explicit in their morphological instruction due to the expectations that young learners will encounter complex vocabulary within their content area classes or assigned texts.

Morphological structure within the English language is characterized by three specific systems: inflectional, derivational, and compound morphology systems (Ramirez et al., 2014). According to Ramirez et al., inflectional suffixes are added to the ends of words to mark tense or number, like *-ed* for past tense or *-s* for plurals. Derivational morphemes can be either prefix (added before a stem word like *dis-*) or suffixes (added after a root word like *-er*), and compound morphology is adding two words together to create a new word, for example, *sunshine*, *sunset*, *sunrise*, *sunburn* (Ramirez et al., 2014). The ability to add words together or change existing words assists the learner in continuously expanding their vocabulary in a meaningful way that allows the learner to access and use those vocabulary words easily.

Morphological awareness is critical to vocabulary development; it offers an essential problem-solving skill when learners encounter new vocabulary. Morphological awareness is the ability to identify and manipulate the smallest segments of meaning existing within words. In the K-5 system, these problem-solving skills are taught from the start; in fact, it is thought by Ramirez, Walton, and Roberts (2014) that when direct instruction of morphology begins at an early age, learners are more likely to capitalize on this skill across content areas. They studied 108 kindergartners from low socioeconomic backgrounds from four elementary schools in British

Columbia, Canada. Teachers involved in this study received explicit instruction on choosing Tier II words (necessary and valuable words across several academic domains) and effectively teaching them using morphological awareness activities, including showing students the relation of words in picture books (Ramirez et al., 2014). The researchers used pretest and posttest data to draw their conclusion. They studied morphological awareness by asking students to combine two or three words in a given scenario (Ramirez et al., 2014). Ramirez et al. (2014) also measured progress using an expressive vocabulary test where students would be asked to provide synonyms or antonyms for a picture. They found that the group as a whole made significant gains in morphological awareness and vocabulary. The group's morphological awareness scores increased from 37.6% to 59.7%, and vocabulary scores increased from 75.8 words to 85.2 words (Ramirez et al., 2014).

Despite the research stating the benefit to learners of early morphological instruction, not all K-5 schools explicitly teach morphology. Morphology teaching highly affects vocabulary development, and students can recognize word parts and recognize known meanings of those word parts. This ability to recognize word parts that carry meaning can lend the learner essential strategies for vocabulary learning.

Morphological awareness can help students recognize and categorize words and create more meaningful definitions of those words. A longitudinal study of morphological awareness in kindergarten through second-grade children in Massachusetts found a relationship between morphological awareness and reading achievement in the early school years (Carlisle, 2003). They used assessments to measure phonological awareness, morphological awareness, and a performance assessment of both word analysis and reading comprehension tasks. Children in this study were assessed in the fall of their kindergarten and first-grade years and the spring of their

second-grade year (Carlisle, 2003). The tasks they used to assess these children were picture vocabulary tests and grammatical completion tests to assess their vocabulary and grammar. In order to assess the student's morphological awareness, the researchers used a morphological production task that involved producing the correct form of a word based on a sentence missing that word. Carlisle (2003) also used a morphological judgment task where students had to focus on the possible structure of words, an example of a question found on this assessment was "Do you think the word *fabulous* comes from the word *fable*?" (Carlisle, 2003). The findings of this research point to the importance of morphological awareness in reading achievement (Carlisle, 2003).

A literature review authored by Chen and Schwartz (2018) describes how morphological awareness can help students recognize semantic relationships between words. English and other languages that rely on the Roman alphabet for orthographic relationships like Spanish tend to be inflectional and derivational, whereas Chinese students would need more instruction on morphological awareness. This realization may lead to the conclusion that Chinese students may recognize different morphological patterns than Spanish students (Chen and Schwartz, 2018).

Teachers need to recognize that their students' struggles in all types of morphology and morphological systems are different cross-linguistically. Becoming aware of morphological structures within your classroom can benefit student growth in reading levels. Students with a high level of morphological awareness should find semantic relationships in their reading to classify new vocabulary meaning. For example, *cavity* looks like the word *cave*, meaning a hole in the earth, so a student might conclude that the semantic relationship is similar between the words (Chen & Schwartz, 2018). Chen and Schwartz argued that cross-linguistic transfer of morphological rules occurs regardless of the intent of the learner to use that information or not.

This automatic activation of first language competency is triggered through input from a second language. According to Chen and Schwartz (2018), learners will automatically transfer if they are competent within their first language, even if they are at a much lower level in their second language. A learner will activate their knowledge of the lexical relationships and patterns they are currently using in their native language regardless of the target language structures.

Chen & Schwartz (2018) in a recent literature review of multiple studies involving multilingual learners from various backgrounds, have shown that cross-language transfer of metalinguistic skills happens regardless of the intent of the learner. Therefore, it is impossible to deactivate this knowledge even when a learner intends to make a fresh start with a new language (Chen & Schwartz, 2018). This study found that linguistic transfer is universal in that it does not matter the target language, and there are morphological contributions across the domains of language.

Interestingly, this study found that the theory of cross-linguistic transfer in morphological awareness directly affects literacy outcomes when applied to alphabetic and logographic languages (Chen & Schwartz, 2018). This conclusion essentially means that the skill of morphological awareness can affect literacy and vocabulary outcomes with no regard for either the target language or the native language. Morphological awareness is, therefore, an essential skill in developing language. Furthermore, explicit morphological instruction can improve accessibility in new vocabulary with learners from all language backgrounds.

English language learners have the unique ability to access vocabulary within their first language to promote vocabulary acquisition in their following language. Cognate use within morphological instruction provides the learner with unparalleled access to new vocabulary and word decoding abilities. However, this skill must be explicitly taught in order for the learner to use

it when learning a new language. Young English language learners, in particular, must be taught the value of their first language and the skills they used to acquire and navigate that language can be used to acquire their next language effectively.

Using Cognates in Morphological Instruction

Utilizing morphological instruction is especially important for second language learners, due to the difficulty English language learners have in the area of vocabulary within the English language. Teaching English language learners to recognize related words, and word parts has added effectiveness when using cognates (Goodwin, 2016). When making choices as to which morphologically related words to teach, the design of this study was based on deliberate consideration of words and word parts that carry significant meaning as well as linking with other morphologically related words. This is based on the scholarship of Goodwin (2016) who presented a strategy allows students to build on root word knowledge that is critical to building understanding of lexical representations between words. In Goodwin's study 203 students that were assigned to interventions were researched in urban schools using a pretest and a posttest by trained researchers. Their focus with these tests was measuring vocabulary, reading comprehension and word reading fluency and morphological awareness(Goodwin, 2016). This study found that all the variables were significantly correlated. This study suggests that active attention from fifth and sixth graders on written orthography through the rules of morphology can help readers with word learning challenges.

Focusing morphological instruction on utility creates the most opportunity for efficient word learning strategies in order to build high quality lexical representations (Goodwin, 2016). Through these word learning strategies students will be able to build their creative use of these words, therefore solidifying their place within the student's active vocabulary and being accessible

for use within that vocabulary. For example, “In *movement*, the root word *move* was familiar to students and *move* and *ment* were combined with no changes in spelling or sound” (Goodwin, 2016, p. 110). The use of root morphemes to teach academic vocabulary could change the number of words needed from 3000 to 1000 root morphemes to be learned per year (Goodwin, 2016). The importance of teaching words that are morphologically related and contain common word parts makes the daunting task of learning vocabulary at an exponential rate significantly more practical and attainable. Advanced students with strong first language background can even access cognates in their first language to assist in vocabulary acquisition of their next language. Even students who are still developing their first language vocabulary can use this cognate approach in both languages. Combining morphological instruction with cognate use is a strategy that will not only benefit learners in the short term but become a long-term strategy for success throughout a learner’s academic career.

Morphological instruction can be a challenge because learners have to navigate comprehension of both the word itself and how it can be modified through affixes. Using familiar words is a strategy utilized by teachers in morphological instruction in programs like earlier mentioned Orton-Gillingham. Another idea for utilizing familiar words is to employ words which are cognates in the students’ first language, thereby allowing the student to recognize the significance of their first language as well as optimize the morphological instruction provided by the educator.

Selection of Morphological Units for Instruction

Teachers often struggle with which morphological structures to teach first, and they must keep in mind that teaching morphological structures in the order in which students will encounter them is essential. Students need to be able to see the value of morphological instruction quickly.

A table similar to the table below was included in Kieffer and Lesaux (2007) and gave a clear explanation of the commonality of prefixes and suffixes to guide instruction effectively.

Prefixes		
Highest Frequency	High Frequency	Medium Frequency
un-(not, opposite of)	over- (too much)	trans- (across)
re-(again)	mis- (wrongly)	super- (above)
in, im, in, il (not)	sub- (under)	semi- (half)
en-,em- (cause to)	pre- (before)	anti- (against)
non- (not)	inter- (between, among)	mid- (middle)
under- (too little)		
in-, im- (in or into)		
Suffixes		
-s (plurals)	-ly (characteristic of)	-al, -ial (having characteristics of)
-ed (past tense)	-er, -or (person)	-y (characterized by)
-ing (present tense)	-ion, -tion (act, process)	-ness (state of, condition of)
	-ible, -able (can be done)	-ity, -ty (state of)
		-ment (action of process)
		-ic (having characteristics of)
		-ous, -eous, -ious (possessing qualities of)
		-en (made of)
		-ive, -ative, -itive (adjective form of a noun)
		-ful (full of)
		-less (without)

Table 1 Adapted from Kieffer & Lesaux in 2007.

Table 1 presents the priority levels for the teaching of morphological endings. This table can help teachers to create appropriate and effective morphological lesson plans. Notice that the number of morphological structures to be taught is workable. The progress of students in understanding morphological structures is hard to track and may not be linear. This difficulty in tracking does not devalue the explicit teaching of morphological structures. Instead, a teacher must know that students may not progress sequentially throughout the school year, and that must also be accommodated to benefit all learners (Nagy, Carlisle, & Goodwin, 2014). This vocabulary

instruction is especially challenging for pacing due to the number of structures that need to be acquired and the rate at which learners from varying language backgrounds will learn those structures.

Strategies for teaching prefixes can be diverse and creative. For example, Graves, August, and Mancilla-Martinez (2013) offer one idea is to use a prefix worksheet to have the students draw a picture of what the root word means and then what the new word means with the adjoining prefix. Another idea is to give students a worksheet with root morphemes and ask them to add suffixes to the words to change the meaning to the opposite of the original meaning demonstrated in the lesson example below.

<p>Instruction 25 minutes</p>	<p>Teacher will project a completed Appendix 6 on the projector screen to allow students to correct their own paper.</p> <p>Teacher will ask students for a rating of how they did and how well they understand. Thumbs up if you could teach it, thumbs to the side if you think you understand and thumbs down if we could do more to understand it.</p> <p>Teacher will explain <i>Appendix 7</i> (table from Appendix shown here).</p> <table border="1" data-bbox="462 1203 1040 1528"> <thead> <tr> <th>Affix</th> <th>Definition</th> <th>Sentence</th> <th>Draw</th> </tr> </thead> <tbody> <tr> <td>Pro-</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Anti-</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Re-</td> <td></td> <td></td> <td></td> </tr> <tr> <td>-able</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Teacher will project this on the screen, and explain each suffix and prefix (see <i>Appendix 7 teacher key</i>)</p> <p>Students will pair up to write sentences using the affixes.</p>	Affix	Definition	Sentence	Draw	Pro-				Anti-				Re-				-able			
Affix	Definition	Sentence	Draw																		
Pro-																					
Anti-																					
Re-																					
-able																					

Figure 1--Day 3 Lesson plan.

A prefix log is another helpful idea offered by Graves, August, and Mancilla-Martinez (2013) on page 83; in a prefix log, the student would add a prefixed word, the meaning in English, the

meaning in their first language, use it in a sentence in English and a sentence in their first language (L1) as well as draw a picture. This visual display may be a helpful way to understand and recognize prefixes, though this method may take considerably more time than other methods mentioned. In Green (2015), a few additional strategies were recommended, including word sorts where the word is on a card and is physically sorted into categories. Word webs where the word itself is placed in the middle, and all words associated or with similar meaning then surround the word in a web-like structure, or where a large poster paper can be posted around the room with a single prefix/suffix and students can add words, playing with language (like Dr. Seuss, or Shakespeare) and using students' creativity to understand how a student is approaching words. Morphological structures help students to feel a sense of responsibility and power over their literacy. This responsibility for their learning can help students exemplify their understanding and application of morphological structures.

According to common core standards being used in many schools, understanding and recognizing affixes should be cemented early in a student's academic career. For example, it is assumed that children can decipher suffixes and prefixes by grade three (Green, 2015). This skill becomes vital to teachers with the looming idea of standardized testing and the impact the scores may have on the teacher and their school. Engaging students to actively participate in prefix and suffix additions to words are essential for comprehension, a key indicator for developing literacy. It is essential to give students an explicit chance to connect with affixes using interactive and hands-on activities instead of simply asking them to fill in worksheets (Green, 2015). One interactive activity suggested is to post a poster board of a prefix like 'in-' and ask students to provide root morphemes that may use this prefix, e.g., consistent to inconsistent (Green, 2015). This unit plan below includes

morphological instruction by using cognates as base words to prioritize teaching morphological word parts.

Cognate based instruction

Cognates can provide learners with immediate access to vocabulary within the English language; a scaffolding approach is helpful to English language acquisition that builds learner confidence and aids in vocabulary development. Building a rich and diverse first language vocabulary promotes literacy in any additional language. Cognates can help students quickly access meaning to many words through decoding strategies taught while using familiar cognates. Cognates have been used historically in teaching to forge connections linguistically between communities (Freeman & Freeman, 2006). Cognates can also help to increase speed and accuracy in vocabulary, therefore, increasing fluency. They provide scaffolding to new languages through the detection of familiar words and similar word parts.

Cognate teaching has the opportunity to play a critical role in developing a second language. Graves (2013) hypothesizes that cognates may account for half of the learners' active vocabularies. Teaching Spanish-speaking students to use cognate knowledge is a powerful tool, both for their confidence as a multilingual learner and recognizing the benefit first language lends across content areas. Learners may already have an established understanding of borrowed words, and this knowledge could be utilized to learn English. Cognates have multiple uses and appear across different domains, and cognate teaching is an opportunity to support learners through authentic experience, finding a text, and having students read and assess what cognates are within a given text. Teaching cognates is particularly challenging in a diverse, multilingual classroom, as many teachers will attest, yet this does not diminish the importance of

teaching cognates. For example, as Spanish speakers reach higher grade levels, the application of cognates presents a more significant advantage in the accessibility of curriculum, especially in areas with Latin-based terms due to the etymology of language.

Options for the teaching of cognates

Creating a space where a student's experience and culture are recognized and respected is essential for any language teacher's classroom. Teachers must use diverse and rich academic language in order to inspire cognate recognition for students. This level of language will help students to recognize the importance their first language lends to literacy. This strategy will energize and invigorate learners. This power to problem-solve using the first language excites ELL students, recognizing the benefit of first language vocabulary in second language acquisition (Lems et al., 2010). Teachers can evoke this in students through directed practice in reading and vocabulary acquisition. One such notion is to create a wall to provide students with a place to write and showcase cognates on a wall as they encounter them within texts (Freeman & Freeman, 2006). The students are then helping to create content from which the teacher can bring the cognates into routine lessons. This wall has the prospect to ignite conversations about language and metacognition in the first language and further contribute to a deeper understanding of English etymology. When instituting this word wall idea, it is vital to have students provide definitions to assure that the cognate is indeed a true cognate (Freeman & Freeman, 2006). Freeman and Freeman have discovered that using cognates to teach morphological endings improves young readers' ability to access new vocabulary within readings.

Recognizing cognates and utilizing that knowledge will allow students a distinct advantage from those students who have not learned this strategy. In "*Identifying Spanish-English Cognates to Scaffold Instruction for Latino EL's*" by Montego, Hernandez, and Herter, they suggest that

there are 20,000 shared cognates mainly derived from Latin between the Spanish and English language. As a way to utilize the vast amount of words that are shared between languages, there are tools like WordSift (www.wordsift.org), an online program for supporting EL's. Teachers can put in up to 65,000 text characters, and then WordSift will output the 50 most recurrent words, not including function words, and then display those words in a tag cloud (Montelongo, 2011). With careful examination of the WordSift results, teachers can pull their cognate list and design a lesson around that list. This tool may help teachers pick an appropriate vocabulary lesson before assigning text for reading and then be able to use the text as a medium to cement and contextualize vocabulary learning. WordSift also categorizes words into academic disciplines like science, math, or language arts (Montelongo, 2011). WordSift is a helpful tool to use as students' progress through general education to support their learning.

In addition to WordSift, it is straightforward to google (any first language) to English. For example, a search for "*Spanish-English Cognates*" will present a list that may help teachers pick the cognates to teach as their lessons progress. Another strategic tool called the Find-A-Cognate database may help teachers identify cognates within their lessons and add those words to their lessons where applicable (Montelongo, 2011). Using tools like WordSift, google searches for cognates, or Find a Cognate database can make finding cognates within existing lessons easy for the teacher. For example, on page 78 of the Pace book, by Dale and Young, a reader may find the following table of cognates (please note additions have been made in blue to add words I found academically valuable):

Source	Cognates
Arabic	alcohol, algebra, candy, coffee, giraffe, magazine, mattress, sofa, zero, jar , safari
Dutch	bass, caboose, coleslaw, cookie, cruise, golf, groove, landscape, spool, snoop, waffle, wife , water , better , swarm
French	bayou, bureau, butte, cache, chowder, depot, gopher, levee, prairie, absence, ballet, debate, impression, liberty, quality, transaction, visitor, ordinary
German	cobalt, hoodlum, kindergarten, loafer, lobby, noodle, ouch, poker, poodle, pretzel, protein, quartz, semester, seminar, waltz, zinc, fresh , athlete , baby , battery , exact , jazz , jet , original , pure , vulgar
Italian	balcony, balloon, bankrupt, cartoon, lasagna, pasta, piano, spaghetti, umbrella, memorable , adorable , impossible , visible , flexible
Japanese	geisha, haiku, judo, karate, kimono, sake, tycoon, juice , handkerchief , butter , bar
Slavic Languages	intelligentsia, mammoth, polka, robot, vodka
Spanish	banana, breeze, cargo, couch, coyote, guitar, mosquito, ranch, rodeo, tequila, vanilla, actor, admirable, altar, animal, artificial, brutal, capital, colonial, conclusion, considerable, dimension, division, elemental, fundamental, habitual, invasion, liberal, marginal, mediocre, natural, normal, personal, plural

Teaching Morphology with Cognates as Root Morphemes

Using cognates in morphological instruction could substantially impact the success of instruction and student confidence in vocabulary. Texts are often dense with content-specific vocabulary in order to convey specific critical ideas. The words used (like “activation,” “magnetism,” and “equation”) are often used in two ways. One is through academic vocabulary, and the other is through academic syntaxes (Goodwin, 2016). These words have other derivational endings that are often used in classroom language, like activate(activated, activation, activate), magnetize(magnetism, magnetization, magnets), and equate(equation, equates, equal). When identifying these academic vocabulary words, acknowledge the effectiveness of a morphological approach to new vocabulary.

Teaching students to make inferences based on the morphological structures of words is essential to teaching academic vocabulary through morphological instruction. Often words in academic texts may be affixed in a way that would be recognizable with explicit morphological instruction (Goodwin, 2016). Teaching students to recognize morphologic parts will allow students to find and decode those specific words. Common sense would suggest that teaching 200,000 words is impossible within a set time, such as a K-12 academic career (Goodwin, 2016). However, teaching specific root morphemes and how they acquire affixes could exponentially grow the number of vocabulary words that teachers can instruct upon with any given school year since Nation asserts that language learners need to know a small sample of words to negotiate communication successfully. Moreover, thus, growing the vocabulary size of students by exponential numbers throughout their academic career. “The good news for second language learners and second language teachers is that a small number of the words of English occur very

frequently, and if a learner knows these words, that learner will know a substantial proportion of the running words in a written or spoken text” (Nation and Waring, 1997).

A basic understanding of what the base language students are building on will offer an advantage to students. For example, recognizing similar structures such as some Italian cognates are close to English; however, the ending is *-zione* instead of *-tion*; therefore, they are phonetically similar while being orthographically different (Stellisano, 2018). In teaching cognates, it is crucial to recognize that a learner may not know the word in their native language vocabulary or that word may not exist in that language itself. It is common in some contexts (like schools in the United States) to have deficits in native language vocabulary, especially for students who may hear a combination of languages at home. The lack of rich and diverse language is not unheard of within ELL teaching. Rich language and word frequency are other things to consider. Often words commonly used in a different language may be lower in English, and the same can be said about other languages. Recognizing the frequency of words will help students to utilize the cognates appropriately. Finally, to effectively teach cognates, teachers must identify the student’s vocabulary level within the native language. This identification of vocabulary in the first language can challenge language teachers with limited knowledge of their students’ first language.

English Language Learners’ ability to incorporate their native language into acquiring a new language is a significant advantage for success. Additionally, they experience various advantages of their multilingualism. The familiarity of word patterns and overall generalizing the word patterns to create new words are frequently seen in these learners (Montrul, 2011). Multilingual learners are better able to recognize word patterning than their monolingual counterparts (Montrul, 2011). Morphological awareness has many benefits for multilingual

learners, including increasing literacy rates and word analysis skills (Montrul, 2011). These skills benefit vocabulary acquisition and utilization.

Using cognate roots to demonstrate decoding strategies can benefit learners from many language backgrounds. Kieffer and Lesaux (2007) researched the relation between morphological endings and Spanish speakers' understandings of cognates. Although teachers often recognize the importance of teaching vocabulary within context, this method of teaching morphology is similar to teaching content-specific words yet furthers it by teaching root morphemes and affixes that may be utilized throughout a student's academic career.

Research on cognates and morphology is not uncommon. However, the combination of both within one study is a relatively new concept. Kieffer and Lesaux (2007) studied Spanish-speaking urban fourth and fifth graders in California and their ability to break down words compared to their English-speaking classmates. They studied students' ability to break apart words based on their vocabulary and reading comprehension (Kieffer and Lesaux, 2007). Kieffer and Lesaux included 111 students, 87 Spanish speaking and 24 native English speakers (Kieffer and Lesaux, 2007). They gave students various standardized tests, including reading comprehension, vocabulary, and word reading fluency tests. Kieffer and Lesaux found strong evidence that morphology was directly related to reading comprehension. Students in this study that had a higher understanding of morphology also had higher reading comprehension scores (Kieffer and Lesaux, 2007). "Students can be taught to recognize the regular relationships between English and Spanish suffixes (-idad in Spanish almost always translates to -ity in English, as in *originalidad* and *originality*)" (Kieffer and Lesaux, 2007). Thus, they were developing an understanding of morphology even within the first language can transfer and be a positive addition to a learner's toolbox for vocabulary acquisition. There are some challenges associated with this perspective.

First, the teacher must have an in-depth understanding of the Native language of the student. In the United States K-12 system, another challenge is the diversity of languages within schools, so while a teacher may have an in-depth understanding of one language, they may have multiple languages spoken within their school. For example, the school I teach at has seventeen languages spoken currently. Second, the teacher must be able to apply morphological knowledge on a high level across lexicons, and finally, the teacher must be able to draw these conclusions with their students and allow their students to experience problem-solving with drawing conclusions.

Students who have absorbed concepts in one language will transfer that knowledge to learning in another language. For example, students who learn the life cycle in a different language are likely to understand that same cycle in English and acquire vocabulary while learning the life cycle within the target language (Freeman & Freeman, 2006). This theory falls in line with the current K-12 idea of teaching English through content-based instruction. This theory also agrees with Cummins' theory of common underlying proficiency (Freeman & Freeman, 2006). Cummins uses research to show the interdependence of concepts, skills, and linguistic knowledge in a second language (Freeman & Freeman, 2006). It is significant to note, students who have experienced a structured school setting in another language are better set up to succeed within a new language and school concept (Freeman & Freeman, 2006).

Final Thoughts

In conclusion, the morphological skills that improve reading comprehension can be simply a matter of awareness for both monolingual and bilingual learners. Learners should be able to decipher and analyze more complex words with the use of morphology. Using morphological instruction to guide vocabulary instruction while utilizing common cognates can provide access to vocabulary acquisition skills that would otherwise be underutilized.

Learners can deduct meaning from morphological structures and develop strategies to improve reading comprehension and word decoding. Using morphological analysis skills to build learner word decoding and reading comprehension has been proven to be a valuable tool for teachers who recognize the effect of such strategies. Teachers need to recognize the value of cognate use in morphology teaching. Providing familiar words with varying additional affixes and prefixes can provide students with decoding skills to recognize the roots of words within texts. This reflective practice can improve student test scores due to the skill acquired instead of specific vocabulary focus of the past.

Teaching students skills in line with morphemic analysis will benefit the content areas due to the crossover of affixes. Teachers need the ability to form connections with their student's home language and assist in creating connections between affixes they know and new vocabulary. Teaching cognates can be a valuable tool for learners to acquire rich and diverse vocabulary to promote reading comprehension. Cognate lessons in English as a Foreign Language classroom may be easier to assemble. However, the diversity of languages within an ESL classroom may allow students ownership and the opportunity to explain to other students the meanings of the cognate in their native language, promoting a feeling of community in the classroom. If teachers promote the student's native language as a scaffold for vocabulary acquisition, it will ignite awareness of existing vocabulary within first language.

Students who can create rules for their learning can better utilize them and generalize input into their use. Brooks, Kempe, & Donachie (2011) studied how learners had many low-level schemas that can help with generalization building like the past tense forms of verbs. Students can create low-level rules instead of wholly comprising general rules; then, students can then apply the morphological processes to new verbs to create clusters that allow morphological additions.

Even lower-level students can use generalization-building skills to acquire a new and essential understanding of morphological endings. Brooks et al. (2011) theorized that morphology approaches often assume that the structure of morphology is intrinsically graded on analogical support or the idea that morphology always shares structure. When in fact, students often understand support through lexical items with overlapping formal and semantic features. Semantic feature instruction can assist students in the classification of stems in order to recognize new morphological structures. For example, English tends to have more neighbors with a rhyming overlap like mouse, house, spouse and not as much overlap with onset-vowel overlaps like a house, howl, how (Brooks et al., 2011). This study observed that the advantage of vocabulary recall could show benefits from morphonological similarity very quickly, but they do not require a large stored vocabulary bank (Brooks et al., 2011). This evidence supports the idea that instead of developing large vocabularies, teachers should focus on students' word decoding abilities. Word decoding will then allow students to recognize morphological parts, and this will help students acquire new vocabulary through morphologic instruction.

“If *interdisciplinary* literacy is the destination, then the study of the recurrent roots and affixes in each discipline is the road” (Mountain, 2015, P. 567).

Call for Further Research

Research between languages that are similar in both writing systems and phonetic variance is plenty. However, vocabulary research among children whose first language does not share a writing system or cognates is lacking. Uchikoshi (2013) explored if students with dissimilar (Cantonese-English) first language learn to read in the same manner as those with similar (Spanish-English) first language. There is extensive research on Spanish-speaking ELL students, but much less on Cantonese-speaking ELL students. The goal of this study was to create a systematic

equation for reading comprehension in L2. However, through this exploration, this study found that vocabulary played an essential role in reading comprehension. Teachers need to recognize the challenges stemming from similarities and differences in comprehension for students from varying language backgrounds (Uchikoshi, 2013). Uchikoshi found that with Cantonese speakers in bilingual programs and mainstream classrooms, vocabulary played a meaningful part in three distinctive areas; listening comprehension, word reading, and reading comprehension (Uchikoshi, 2013). Vocabulary size impacts learners regardless of whether students are in mainstream classes or bilingual education programs.

Findings on Chinese speakers, mainly using morphological analysis skills to decode English words, are hard to find and vice versa. Morphological interventions for students who have challenges in language learning and literacy are optimistically helpful, but further research is required to provide a basis for informed decisions and the design of effective morphological interventions (Nagy et al., 2014). Nevertheless, providing morphological support to students and prioritizing teaching words concerning semantic classes can be a highly effective way to build literacy confidence among multilingual learners.

Further research is a necessary sequence to teach cognates matters. The hope with the current information is that teachers will learn to utilize cross-linguistic transparency with the hope that fewer students will be thought of as learning disabled when instead a deficit of the English language exists, the difference between language difference and disability is incredibly challenging to recognize. For example, morphological interventions for students who have challenges in language learning and literacy are optimistically helpful, but further research is required to provide a basis for informed decisions and the design of effective morphological interventions (Nagy et al., 2014). The relationship between languages is a diverse one. The

variance between languages with similar orthography to English and the logographic languages has significant differences in their challenges. Another area for future research is analyzing standardized test scores from ELL students who have had explicit morphological instruction of using cognates compared to those who have experienced a more vocabulary-focused approach to reading comprehension.

Unit Plan

This unit plan focuses on the idea of inviting home language into the classroom to be utilized in the accessibility of cognates in morphological instruction. Exposing students to metacognitive strategies to utilize their first language vocabulary to acquire the English language. Throughout the lessons described in this unit plan, I will ask students to discuss cognates in pairs thus building background knowledge. In my classroom, there is a high level of native language comprehension and education. Students have extensive vocabulary within first language and are therefore able to cross-linguistically transfer information. Students will be using first language to scaffold instruction in the unit plan. This unit plan's goal is to assist students in building connections between home language and English. The central focus of this unit plan is to assist students in recognizing morphological patterns and cognates within content area classes.

Learning goals

1. Students will be able to identify and decode morphological features of words when completing worksheets.
2. Students will be able to recognize cognates in their first language and in English and change those words to create new forms of the word using morphological awareness.
3. Students will be able to discuss similarities in vocabulary between their native language and English with their peers.
4. Students will be able to use affixes in their speech and writing.

Class description

Grade Level: 10th grade pull-out in Wisconsin K-12 System

Student Language & Cultural Background: Spanish-speaking students

Students past educational experience: Student A & B have been in the school for one full school year, student C is new to the school district. Students D, E and F have been in the district four years. Students have strong base in first language.

Class Size: 6 students

Student WIDA Levels:

The students in this class are relatively similar language levels according to WIDA all of them fall within the category of *developing (level 3)* in regards to their literacy. Their composite scores vary more, ranging from *emerging (level 2)* to nearly *expanding (level 4)*. This would likely be due to varying speaking and listening scores. All students in this class would be reaching for *expanding (level 4)* in their writing and reading. More detailed information regarding their levels can be found in the table on the following page.

Students	Literacy	Composite
A	3.2	2.9
B	3.6	3.8
C	3.2	3.0
D	3.8	3.0
E	3.6	3.7
F	3.7	3.0

Standards

Standard 2 – Language of Language Arts: English language learners communicate information, ideas and concepts necessary for academic success in the content area of language arts.

Standard 4 – Language of Science: English language learners communicate information, ideas and concepts necessary for academic success in the content area of science.

Academic language demands

I will preview vocabulary each day and review the material from the day before. I will have students highlight vocabulary words within reading to find their definitions in a dictionary, and make a glossary of words in their notebook. The students will make their own glossary to keep throughout the semester including affixes and suffixes.

Specific ways students will use the content

Students will use the skills of morphological decoding to use words in science classes. This skill will be transferrable across content areas, as we work to activate student's understanding of morphological structures.

Prior Work

In their previous work students are familiar with plural affix (-s) and tense affixes including *-ed* and *-ing*, however they are learning to recognize other affix possibilities. Cognates are a newer concept to these students however, they were previously introduced to cognates.

*Day 1***Instructional Strategies and Learning Tasks****Objectives**

By the end of the lesson, students will be able to:

- Explain verbally the definition of a cognate and provide examples.
- Explain verbally the definition of a false cognate and provide examples.
- Identify cognates in their own reading.
- Discuss verbally similarities in Spanish and English languages.

**Launch
5 minutes**

Teacher will begin class by writing words on the board. Teacher will read these words to students. These are all Cognates, teacher can choose what to write on the board, whether it be Spanish or English.

práctica	practice
actividad	activity
página	page
día	day
brillante	brilliant
artístico	artistic
honesto	honest
hora	hour
excelente	excellent
famoso	famous
moral	moral
paciente	patient

Students will be paired according to native language level. Students will be asked to translate these words into English and write them on a piece of paper and discuss in pairs similarities and what they noticed.

Teacher will ask students to share the words in English, by calling on students. Teacher will start calling on students based on home language proficiency.

<p>Instruction 25 minutes</p>	<p>Teacher will hand out <i>Appendix 1 Cognates and False Cognates</i>.</p> <p>Teacher will project <i>Appendix 1 Cognates and False Cognates</i> on the overhead projector.</p> <p>Teacher will say “<i>Cognates are words that have the same origin and mean the same thing</i>” teacher will model filling out <i>Appendix 1 Cognates and False Cognates</i>.</p> <p>Class will discuss the cognates students may know, included in <i>Appendix 2 Cognate word bank</i>.</p> <p>Teacher will pair students again to discuss cognates for 3 minutes.</p> <p>Teacher will then ask students to create a sentence in either Spanish or English using a cognate and write it in their student notebook.</p> <p>Teacher will discuss false cognates. <i>False cognates are a word that looks or sounds the same but means different things</i>.</p> <p>Teacher will preview words that look or sound the same and explain their meaning.</p> <p>Teacher will ask students if they have any other ideas of false cognates.</p>
<p>Closure 5 Minutes</p>	<p>Teacher will ask students to retrieve library books from their desks and skim to find cognates and false cognates. When they find one they will raise their hand to share with the class.</p>
<p>Differentiation</p>	<ol style="list-style-type: none"> 1. Provide verbal directions. 2. Provide visuals when requested. 3. Allow additional time for notes. 4. Allow students to discuss using first language. 5. Allow students to communicate with each other mixing levels of students. 6. When asking students to answer questions, start with higher level students.

Assessment of Learning	<ol style="list-style-type: none"> 1. Teacher will assess student's understanding through contributions to class discussion, and notes in <i>Appendix 1 Cognates and false cognates</i> and class notebooks. 2. Teacher will assess understanding of the content through a survey on the bottom of <i>Appendix 1 Cognates and false cognates</i> 3. Teacher will assess understanding of cognates and false cognates through examples students provide of cognates and false cognates found within their readings
Homework	Students will read at home for 30 minutes, they will write any words with affixes in their notebook.
Contingency Plan	Students will make a list of cognates they know in their student notebook.
Materials	<ul style="list-style-type: none"> • whiteboard • whiteboard marker • student notebooks • pencil • document camera • Appendix 1 Cognates and False Cognates, Appendix 2 Cognate word bank, • library books

Day 2

Objectives	<p>By the end of the lesson, students will be able to:</p> <ol style="list-style-type: none"> 1. Explain verbally the definition of root morphemes. 2. Identify suffixes in their own reading. 3. Explain verbally the meaning of <i>mono-,bi-,tri-,quad-, un-</i> suffixes
Launch 5 minutes	<p>Teacher will hand out <i>Appendix 3 Spanish to English Cognate activity</i>. This page is devoted to cognates, it has an English word bank. Students will work in pairs to fill out the <i>Appendix</i>.</p> <p>Teacher will ask students to summarize to their partners what we are working on in class. <i>What are cognates? What are false cognates?</i></p> <p>Teacher will preview adding suffixes to cognates using the word <i>section, bisection, quad section, trisection</i>. Explaining that each of these words means how many parts it is split into.</p>
Instruction 25 minutes	<p><i>Teacher will explain that there are two types of affixes, there are prefixes and suffixes. Prefixes come before the word and are added to the front of the word. Suffixes can be added to any part of the word. Some suffixes can only go on the end of the word.</i></p> <p>Teacher will hand out <i>Appendix 4-Prefix activity</i>.</p> <p>Teacher will introduce the concept of root morphemes.</p> <p><i>Root morphemes are words we can add different affixes to change the word.</i></p> <p><i>For example</i></p> <p><i>Today we are going to focus on mono-, bi-, tri-, quad-.</i></p> <p><i>Teacher will provide definitions of each prefix and students will take notes.</i></p> <p>Students will create a sentence using a word with a prefix on it.</p> <p>Teacher will lead discussion around these prefixes and ask for other applications of these prefixes.</p>
Closure 5 Minutes	<p>Teacher will hand out <i>Appendix 5- Prefix graphic organizer</i>, students will draw with no words what each prefix means.</p> <p>Students will share with partners their drawings.</p>

Assessment of Learning	<ol style="list-style-type: none"> 1. Teacher will assess student's understanding through contributions to class discussion, and notes in <i>Appendix 3-Spanish to English Cognate activity</i> 2. Teacher will assess understanding of the content through questioning-strategies while discussing suffixes and prefixes. 3. Teacher will be attentive to students as they complete the graphic organizer provided in <i>Appendix 5-Prefix graphic organizer</i>.
Differentiation	<ol style="list-style-type: none"> 1. Provide verbal directions. 2. Provide visuals when requested. 3. Allow additional time for notes. 4. Allow students to discuss using first language. 5. Allow students to communicate with each other mixing levels of students. 6. When asking students to answer questions, start with higher level students.
Contingency Plan	<p>Students will look for suffixes around the classroom and in their library books.</p> <p>Students will raise their hands when they find a suffix, teacher will help students to recognize suffixes.</p>
Materials	<ul style="list-style-type: none"> • whiteboard • whiteboard marker • student notebooks • pencil • document camera • Appendix packet (1-5)

Day 3

Instructional Strategies and Learning Tasks:	
Objectives	<p>By the end of the lesson, students will be able to:</p> <ul style="list-style-type: none"> • Identify specific (<i>pro-</i>, <i>anti-</i>, <i>re-</i>, <i>-able</i>) affixes in their reading. • Verbally describe the meaning of <i>pro-</i>, <i>anti-</i>, <i>re-</i>, <i>-able</i> affixes.
Launch 5 minutes	<p>Teacher will hand out <i>Appendix 6 Affix awareness activity</i>. Students will use a highlighter to identify the prefix on each word.</p> <p>Students will work in pairs to correct <i>Appendix 6 Affix awareness activity</i>.</p>
Instruction 25 minutes	<p>Teacher will project a completed <i>Appendix 6 Affix awareness activity</i> on the screen to allow students to correct their own paper.</p> <p>Teacher will ask students to close their eyes and provide a rating of how they did and how well they understand. <i>Thumbs up if you could teach it, thumbs to the side if you think you understand and thumbs down if we could do more to understand it.</i></p> <p>Teacher will explain <i>Appendix 7 Using affixes activity to students</i>. Teacher will project this on the screen, and explain each suffix and prefix (see <i>Appendix 7 Using affixes activity teacher key</i>)</p> <ul style="list-style-type: none"> • <i>pro</i> • <i>anti-</i> • <i>re-</i> • <i>able</i> <p>Students will pair up to write sentences using the affixes.</p>
Closure 5 Minutes	<p>Students will share their sentences using the affixes.</p> <p>Students will draw pictures to help facilitate their understanding of the affixes.</p>
Assessment of Learning	<p>1. Teacher will assess student's understanding through <i>Appendix 6 Key for Affix awareness activity</i> highlighting of the affixes.</p>

	<ol style="list-style-type: none"> 2. Teacher will assess understanding of the content through student rating with their thumbs on their understanding. 3. Teacher will be assessing students through <i>Appendix 7 Using affixes activity</i>, and assess students' generation of sentences using the affixes. 4. Teacher will assess understanding of affixes by monitoring the classroom as students' complete drawings of the meaning of the affixes.
Differentiation	<ol style="list-style-type: none"> 1. Provide verbal directions. 2. Provide visuals when requested. 3. Allow additional time for notes. 4. Allow students to discuss using first language. 5. Allow students to communicate with each other mixing levels of students. 6. When asking students to answer questions, start with higher level students.
Contingency Plan	Students will take out their books and look for root morphemes. They will try to find as many affixes as possible.
Materials	<ul style="list-style-type: none"> • whiteboard • whiteboard marker • student notebooks • pencil • highlighter • markers • document camera • Appendix 6 Affix awareness activity, 7 Using affixes activity

Day 4

Instructional Strategies and Learning Tasks:	
Objectives	<p>By the end of the lesson, students will be able to:</p> <ul style="list-style-type: none"> • Discuss familiar cognates and false cognates with a partner. • Write sentences using cognates. • Define cognates and provide examples. • Identify affixes attached to root morphemes. • Identify cognates from a word bank.
Launch 5 minutes	<p>Students will take out Appendix 1-5 and discuss with a partner cognates, false cognates and suffixes.</p> <p>Teacher will ask one student from the group to summarize and share with the class.</p>
Instruction 25 minutes	<p>This lesson will focus on reviewing prior day's work.</p> <p>Teacher will hand out <i>Appendix 8 Cognate use activity</i> students will work in pairs to complete <i>Appendix 8</i>. In this Appendix, students will create sentences including cognates, either in Spanish or English. Then they will designate cognates in the table, write a definition and a sentence.</p> <p>Students will work independently on completing <i>Appendix 9 final assessment for unit</i> as a final assessment of the material.</p>
Closure 5 Minutes	<p>Students will take a short survey of their understanding of the affixes and cognates (Appendix 10-Exit ticket)</p> <p>Students will write a cognate on a piece of paper to be included on the cognate tree that will be started in the classroom on a board. This tree will continue to be expanded on throughout the semester and school year.</p>
Differentiation	<ol style="list-style-type: none"> 1. Provide verbal directions. 2. Provide visuals when requested. 3. Allow additional time for notes.

	<ol style="list-style-type: none"> 4. Allow students to discuss using student's first language. 5. Allow students to communicate with each other mixing levels of students. 6. When asking students to answer questions, start with higher level students.
Assessment of Learning:	<ol style="list-style-type: none"> 1. Teacher will assess student understanding of affixes by listening to the group summary of cognates, false cognates and suffixes. 2. Teacher will monitor the classroom while student's complete <i>Appendix 8</i> in pairs, teacher will listen to discussion between partners. 3. Teacher will assess final understanding through <i>Appendix 9</i>, students will complete this independently and hand in at the end of the learning segment.
Contingency Plan	Students will take out their books and look for words with affixes. They will try to find as many affixes as possible.
Materials	<ul style="list-style-type: none"> • whiteboard • whiteboard marker • student notebooks • pencil • document camera • green construction paper • markers • Appendix 1, 2, 3, 4, 5, 6, 7, 8, 9

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Appendices

Appendix 1: Cognates and false cognates

Name: _____

Cognate: Cognates are words that have _____ and _____ thing.

List 3 cognates you know:

1.

2.

3.

False Cognate: A word that _____ or _____ the same but means _____ things.

Some examples are:

Embarazado—pregnant

Éxito—It looks like exit but it means success

Fábrica—Factory

Realizar—to do or perform

List 3 false cognates you know:

1.

2.

3.

How can we check if a word means the same thing in both languages?

Appendix 2: Cognate word bank

Name: _____

- Banana
- capital
- breeze
- colonial
- cargo
- conclusion
- couch
- considerable
- coyote
- dimension
- guitar
- division
- mosquito
- elemental
- ranch
- fundamental
- rodeo
- habitual
- tequila
- invasion
- vanilla
- liberal
- actor
- marginal
- admirable
- mediocre
- altar
- natural
- animal
- normal
- artificial
- personal
- brutal
- plural

Appendix 3: Spanish to English cognate activity

Name: _____

Cognates

fantastic	ocean	positive	imagination
coast	giant	patient	canal
science	peninsula	serious	realist

Use the word bank to write the English word next to the Spanish word.

1. Imaginación _____

7. positive

2. Serio _____

8. canal _____

3. Realista

9. paciente _____

4. Costa _____

10. peninsula _____
—

5. ciencia _____

11. gigante _____

6. océano _____

12. fantastico _____

Circle one: How do you feel about knowing what a cognate is?

I don't know-----hard-----begin to understand-----Okay ----- good-----Really good

Appendix 4: Prefix activity

Name: _____

Root morphemes-The main part of a word that conveys meaning.

Examples:

Prefix	Definition + Example	Sentence + Picture
Mono-		
Bi-		
Tri-		
Quad-		
Un-		

Appendix 4: Key for prefix activity

Root morphemes-The main part of a word that conveys meaning.

Examples:

We know how to make a word plural, adding an s or -es, this changes our root word. These affixes are similar and are added to the beginning of the word.

Prefix	Definition + Example	Sentence + Picture
Mono-	One or alone. Explain: Monotonous, monotone, monorail, monopoly, monochrome	He sounded monotonous.
Bi-	Two Explain: Bilingual, biceps, bicultural, bicycle, biweekly, binoculars	He was bilingual, he also spoke Spanish.
Tri-	Three Explain: Trilingual, triceps, tricycle, triennial (every three years).	He rode the tricycle because it was more stable than the bicycle.
Quad-	Four Quad, quadrangle, quadruplet	He had 3 brothers and sisters born the same day, he was a quadruplet.
Un-	Not Unfair, unfairly, unfelt, unseen, unformed, unheard of, unrest	It was unfair that everyone else got candy.

Appendix 5: Prefix graphic organizer

Name: _____

Mono-	Bi-
Tri-	Quad-

Appendix 6: Affix awareness

Name: _____

Highlight the prefix using a different color marker or highlighter.

1. Unfair
2. Quadrant
3. Binoculars
4. Monochrome
5. Monotone
6. Triceps
7. Bicycle
8. Bilingual
9. Unseen
10. Monopoly

Today's affixes: What words do you know that use these affixes?

Pro

Anti-

Re-

-able

Appendix 6: Key for affix awareness activity

Name: _____

Highlight the prefix using a different color marker or highlighter.

1. **Un**natural
2. **Quad**ricep
3. **Bi**regional
4. **Mono**chrome
5. **Mono**tone
6. **Tri**ceps
7. **Bi**cycle
8. **Bi**lingual
9. **Un**habitual
10. **Mon**opoly

Appendix 7: Using affixes activity

Affix	Definition	Sentence	Draw
Pro-			
Anti-			
Re-			
-able			

Appendix 7: Key for using affixes activity

Affix	Definition	Sentence	Draw
Pro-	For Protest Pronunciate Procreate	He went to a protest on Sunday.	
Anti-	Against Antibiotic Antigravity antibacterial	She used antibacterial soap. When she got sick, she needed an antibiotic.	
Re-	Again, repeat Rewrite Reactivate redo recreate	When you are finished writing, rewrite your draft. Remember sometimes you must redo your work.	
-able	Able, can Capable Fixable Floatable impassable Communicable	Some things are not fixable. He was a very capable adult.	

Appendix 8: Cognate-use activity

Name: _____

Create 3 sentences in English or Spanish using a cognate.

Examples of cognates:

Episode, north, natural, map, valley, professor, theatre, music, mathematics, generous, novel, imagination

1. _____

2. _____

3. _____

Cognate	Definition	Sentence

Appendix 9: Final Assessment for Unit

Name: _____

A cognate is _____

Examples: secondo, vocabulario, cultural, inteligente, serio,

What examples do you know?

_____.

A False cognate is _____

_____.

Examples:

Highlight the affix:

1. Bilateral
2. Monochrome
3. Reactivate
4. Repair
5. Protest
6. Anticlimactic
7. Fixable
8. Repairable

Circle the cognates:

Drama

Actor

Canal

author

Embarrassed

Hope

Appendix 9: Key for final assessment

A cognate is a word that looks or sounds the same in two languages.

Examples: secondo, vocabulario, cultural, inteligente, serio,

What examples do you know?

A False cognate is a word that looks or sounds the same in two languages but means different things.

Examples:

Highlight the affix:

1. **B**ilateral
2. **M**onochrome
3. **R**eactivate
4. **R**epair
5. **P**rotest
6. **A**nticlimactic
7. Fix**a**ble
8. **R**epair**a**ble

Circle the cognates:

Canal

Drama

Embarrassed

Author

Actor

Hope

Appendix 10: Exit ticket

Rate my understanding overall of affixes:

Need more help 0 1 2 3 4 5 expert could teach others

Rate my understanding of cognates:

Need more help 0 1 2 3 4 5 expert could teach others

Rate my understanding of -able:

Need more help 0 1 2 3 4 5 expert could teach others

Rate my understanding of pro-:

Need more help 0 1 2 3 4 5 expert could teach others

Rate my understanding of bi-:

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