

The Common Core, English Learners, and Morphology 101: Unpacking LS.4 for ELLs

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ABSTRACT

The Common Core Learning Standards set forth learning goals for all students, including English learners, but this document does not provide information on effective literacy instruction for English learners or unpack the specific resources and challenges that bilingual students bring to the classroom. Language Standard 4 addresses morphological development across grade levels, a focus that holds particular advantages and issues for second language learners. In this article, we provide an overview of morphology as it is addressed through the CCLS, identify the issues around the development of morphological awareness in English for second language learners, and share effective instructional practices and resources for appropriately supporting the morphological development of bilingual students.

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Introduction

Fourth-grader Araceli reads a science article silently as she sits with a small group of students at a classroom table with her teacher. Occasionally, she uses her highlighter to underline a word. After a discussion about the content of the reading, the teacher inquires about words in the text that proved difficult for the students. As Araceli scans the preceding page, her finger stops on the highlighted word *vegetation*. Araceli explains to the group, "I didn't know it, but I remembered the word *vegetable* and it starts the same. I know lots of words end in *tion*, so that part was easy for me. My mom is always telling me to eat my *vegetales* at home, so that Spanish word is almost the same and that made me think it has something to do with vegetables. Since



the article was talking all about the different habitats and things that grow, I think vegetation means stuff that grows."

In this example, Araceli demonstrated morphological awareness. She was able to use her knowledge about the ways in which word parts work in English to understand an unknown word. Research has consistently demonstrated the importance of morphological awareness in reading, especially in supporting reading comprehension (Carlisle, 2000; Nagy, Berninger, & Abbott, 2006). The ability to analyze word parts when reading may support the ability to correctly pronounce an unknown word, to understand the meaning of an unknown word, or to do both. The development of morphological awareness by English learners may be even more crucial than for L1 (first language) English-speaking students because of the importance of English learners' ongoing acquisition of oral English vocabulary alongside their literacy development (Goodwin, Huggins, Carlo, Alabonga, Kenyon, Louguit, 2011; Kieffer & Lesaux, 2008). Kieffer and Lesaux (2008) assert that if English learners in the intermediate elementary grades "lack the awareness of derivational morphology that their native English speaking peers have acquired through greater exposure to English oral and written language, this may be a source of reading difficulty" (p. 787). Research by Nagy and Garcia (1993) indicates that Spanish-English bilingual students benefit from being aware of the relationship between English and Spanish words with shared roots. These findings support the use of explicit morphological awareness instruction to positively impact the reading comprehension abilities of English learners. However, in a more recent study, Kieffer and Lesaux (2012) found that students, particularly linguistically diverse students, benefitted from explicit morphology instruction, but that barriers to such instruction include a need for teachers themselves to have a greater understanding of morphology, access to curricular materials supporting explicit morphological instruction, and professional support.

What strategies and considerations will be most helpful in supporting the achievement of the Common Core Learning Standards (CCLS) addressing morphological skills? To address this question, teachers need to have a firm grounding in the morphological structure of English; we therefore begin this article with an overview of morphology and morphological awareness. Due to the prominent place that morphological knowledge has in the Language Strand of the CCLS, we next examine the ways in which morphological awareness is addressed in the standards. Finally, we conclude with a discussion of the instructional issues around morphology for English language learners and explore a variety of effective classroom strategies for increasing students' morphological awareness.

Morphology 101

Morphology is the study of the smallest units of language that hold meaning (see glossary in Appendix A). According to Carlisle (1995), morphological awareness is "children's conscious awareness of the morphemic structure of words and their ability to reflect on and manipulate that structure" (p. 194). In the example in the opening of this article, Araceli employed morphological awareness by recognizing and using the meaningful parts of the word vegetation to understand this new-to-her word in the context of the science text she read. Araceli identified two morphemes veg and tion. She used her knowledge of a cognate, a similar word in Spanish, vegetales, to confirm her hypothesis about the meaning this word.

A *morpheme* is a word or word chunk that has meaning. For example, *girl* is a morpheme and a word. We cannot break down *girl* any further and have a meaningful chunk. However, if



we add *s* to *girl* and make *girls*, we have added the *s* to make our word plural. In this case, *s* is a morpheme. However, it is clearly not a word. Another example is *write*, which is a morpheme and a word. We cannot break it down further. However, we can add the morpheme *re* to create *rewrite*.

We call morphemes that are words *free morphemes* because they can be used unattached. Both *girl* and *write* are free morphemes. Morphemes that cannot be used alone are known as *bound morphemes*. Both *s* and *re* are bound morphemes. When added as an affix—either a *prefix* or a *suffix*—to a word, bound morphemes adjust the meaning of the word, but they cannot be used alone as an unattached unit. Words may be constructed from combinations of free and bound morphemes. Compound words, such as *barnyard*, are constructed from two free morphemes. *Unfriendly* is constructed from the free morpheme and root word *friend* and the bound morphemes *un* and *ly*. Table 1 provides examples of bound and free morphemes.

Table 1: Examples of Morpheme Types	
Morpheme Type	Example
Free	Word, friend, cup, chair
Bound	Un-, ex-, -ceive, -sist, -er, -est, -ly, -tion

Two Types of Bound Morphemes

Morphemes that are added to words as affixes can be described as inflectional morphemes or derivational morphemes. Inflectional morphemes adjust the meaning of a root word without changing its part of speech. Furthermore, inflectional morphemes do not change the base meaning of the word. For example, both *girl* and *girls* are nouns. The addition of *s* to *girl* changes the word from singular to plural, but it does not change its part of speech. As shown in Table 4, inflectional affixes are addressed by Language Standard 4 beginning in the primary grades. Instruction of inflectional affixes is usually part of the teaching of grammar in the Reading/Language Arts classroom. This is in contrast to derivational affixes, discussed next, which are generally taught through examining the meaning they bring to the new word they construct.

Inflectional morphemes. Table 2 below includes the most common inflectional morphemes of English. While learning about the morphological structure of English for the first time can be overwhelming, two facts about inflectional morphemes are helpful to keep in mind: (1) In English, there are a very limited number of inflectional morphemes, and (2) in English, all inflectional morphemes attach to the end of the root word, as suffixes.

Derivational morphemes. These morphemes adjust the meaning of the root word and may change the part of speech. Although adding *re* to *write* does not change the part of speech of *write*, it does change the meaning of the word. Therefore, *re* is a derivational morpheme. Table 3 lists some common derivational morphemes, their location as a prefix or a suffix, their etymology or linguistic origin, and their general meaning.



Table 2: Examples of Inflectional Morphemes in English				
Inflectional Morpheme	Function	Examples		
-S	To make nouns plural	girls		
-es	To make nouns plural	boxes		
-en	To make nouns plural	oxen		
-'s	To make nouns possessive	Tarie's book		
-s'	To make plural nouns possessive	the girls' book		
-ing	To change the tense of a verb	walking		
-ed	To change the tense of a verb	walk <i>ed</i>		
-en	To change the tense of a verb	written		
-er	To show comparison in adjectives and adverbs	happier, faster		
-est	To show comparison in adjectives and adverbs	happiest, fastest		

Table 3: Examples of Derivational Morphemes in English				
Morpheme	Location	Etymology	General Meaning or Function	Example
ex	Prefix	Latin	Out of	extract
dorm	Prefix	Latin	Sleep	dormant
anti	Prefix	Greek	Against	antiwar
ness	Suffix	Old English	Affixed to adjectives to form nouns	happiness

Note: See Appendix B for resources that contain tables of derivational morphemes, as well as resources about cognates and shared morphemes between English and other languages.

Why Morphology?

Why should we attend explicitly to morphology when choosing an aspect of the Standards to unpack for teachers of English learners? One reason is the prevalent role that morphology plays in the *CCLS*. We first see morphological awareness addressed in the College and Career Readiness Anchor Standards for Language under Vocabulary Acquisition and Use: Standard 4: "Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, *analyzing meaningful word parts*, and consulting general and specialized reference materials, as appropriate" (NYSED, n.d., p. 35, italics ours). This standard becomes more specific within grade levels. Table 4, below, details the specific grade-level standards within the thread of Language Standard 4 that address morphology.

When we work with teachers around the topic of morphological instruction, many are surprised to learn that the *CCLS* includes standards that address morphological awareness beginning in kindergarten. From the start, students are encouraged to engage in *word solving*

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(Pinnell & Fountas, 1998). Rather than a list of prefixes to be learned by rote, CCLS expectations for morphological awareness from kindergarten through grade 12 require students to actively use their expanding knowledge of meaningful word chunks to construct and deconstruct word meanings in text. At the primary level, teaching focuses on inflectional and derivational morphemes. Later, in grades 4-12, LS.4 includes knowledge about etymology. Specifically, in grades 4-8, students learn morphemes with Latin and Greek etymologies, which construct many academic English words, particularly in the content areas of science and math. Later, in grades 9-12, LS.4 includes independent etymological investigations.

Table 4: Morphological Awareness Examples from CCLS Language Standard 4 Vocabulary Acquisition and Use		
Kindergarten	4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>kindergarten reading and content</i> .	
	b. Use the most frequently occurring inflections and affixes (e.g., -ed, -s, re-, un-, pre-, -ful, -less) as a clue to the meaning of an unknown word.	
Grade 1	4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 1 reading and content</i> .	
	b. Use frequently occurring affixes as a clue to the meaning of a word.	
	c. Identify frequently occurring root words (e.g., look) and their inflectional forms (e.g., looks, looked, looking).	
Grade 2	4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 2 reading and content</i> , choosing flexibly from an	
	array of strategies.	
	b. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., happy/unhappy, tell/retell)	
	c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., <i>addition, additional</i>).	
	d. Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., <i>birdhouse</i> , <i>lighthouse</i> , <i>housefly</i> ; <i>bookshelf</i> , <i>notebook</i> , <i>bookmark</i>).	
Grade 3	4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 3 reading and content</i> , choosing flexibly from an array of strategies.	
	b. Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat).	
	c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., <i>company, companion</i>).	
Grade 4	4. Determine or clarify the meaning of unknown and multiple-meaning words	
	and phrases based on <i>grade 4 reading and content</i> , choosing flexibly from an array of strategies.	
	b. Use common, grade-appropriate Greek and Latin affixes and roots as clues	
	to the meaning of a word (e.g., telegraph, photograph, autograph).	



Table 4: Morphological Awareness Examples from CCLS Language Standard 4 Vocabulary Acquisition and Use		
Grade 5	4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 5 reading and content</i> , choosing flexibly from an array of strategies.	
	b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., <i>photograph</i> , <i>photosynthesis</i>).	
Grade 6	4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 6 reading and content</i> , choosing flexibly from an array of strategies.	
	a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.	
	b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., <i>audience</i> , <i>auditory</i> , <i>audible</i>).	
Grade 7	4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 7 reading and content</i> , choosing flexibly from an array of strategies.	
	a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.	
	b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., <i>belligerent</i> , <i>bellicose</i> , <i>rebel</i>).	
Grade 8	4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 8 reading and content</i> , choosing flexibly from an array of strategies.	
	a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.	
	b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., <i>precede</i> , <i>recede</i> , <i>secede</i>).	
Grades 9-10	4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grades 9-10 reading and content</i> , choosing flexibly from an array of strategies.	
	a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.	
	b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., <i>analyze</i> , <i>analysis</i> , <i>analytical</i> ; <i>advocate</i> , <i>advocacy</i>).	
	c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses,) both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, or its etymology.	



Table 4: Morphological Awareness Examples from CCLS Language Standard 4 Vocabulary Acquisition and Use

Grades 11-12

- 4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 11-12 reading and content, choosing flexibly from an array of strategies.
 - a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
 - b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., conceive, conception, conceivable).
 - c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses,) both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage.

Morphology and English Learners

In this section, we first address the benefits of multilingualism, and then explore the particular place of morphology in the instruction of English learners. As the CCLS state, the standards do not include "the full range of supports appropriate for English language learners" while also asserting that "all students must have the opportunity to learn and meet the same high standards if they are to access the knowledge and skills necessary in their post-high school lives" (NYSED, n.d., p. 4). Clearly, the standards have created high expectations for all students, including English learners, but they do not offer a road map on how to provide effective instruction and supports for English learners to meet those expectations. In order for teachers to facilitate students' growth in morphological awareness, teachers themselves must be open to the funds of linguistic knowledge students possess as speakers of their first language (Moll, Amanti, Neff, & Gonzalez, 1992). Additionally, teachers need to be well-versed and confident in their understandings of morphology as well as have access to a range of effective practices for instructing culturally and linguistically diverse students.

Defy the Deficit Orientation

One challenge that many English learners face is that their bilingual abilities may be viewed as a deficit rather than the resource and asset that it is. As noted in the *Application of* Common Core State Standards for English Language Learners, "many ELLs have first language and literacy knowledge and skills that boost their acquisition of language and literacy in a second language" (n.d., p. 4). Research on bilingualism demonstrates that bilingual students from a range of proficiency levels bring a metalinguistic edge to word and grammar analysis that may give them an advantage over monolingual students (Bain & Yu, 1980; Diaz, 1985; Martin-Beltrán, 2009). Furthermore, Jiménez, García, and Pearson (1996) found that Latino bilingual students who viewed their bilingualism as positive were more successful readers than Latino bilingual students who viewed their bilingualism as damaging to their reading achievement. As



teachers, we have great power in supporting students to view their bilingualism as an asset that can support their academic achievement (Yoon, 2007).

Teachers who do not share the first languages of their students can still use available resources in order to understand morphological aspects of students' home languages and use this information to guide morphological instruction. Indeed, bringing this information into class discussions not only clarifies linguistic differences for bilingual English learners, but can support the morphological awareness development of English Only students.

The Importance of Teacher Knowledge of First Language

Given that English morphological processes differ from other languages in a variety of ways, it is imperative that teachers acquire morphological information about the home languages of their students. When providing morphological instruction for English learners, teachers must be explicit and clear about how morphemes function and behave in English. Understandings about morphology that may be common knowledge for English Only students may be new to or confusing for linguistically diverse students. Teachers can support English learners by providing comprehensible demonstrations of the ways in which English is different from the students' home languages. In the following section we provide specific examples of some techniques that have been successful with our students.

Affix instruction. In English, the only way that bound morphemes construct words are in the form of either prefixes or suffixes. This is not the case in many other languages, which have infixes, affixes that are placed in the middle of a word. For example, to construct an infinite verb in English, one uses the word to in front of the verb stem as in to write. However, other languages use various morphological processes to construct the infinitive. Tagalog uses infixes so the verb stem sulat is write, but the infix um is inserted to create the infinitive, sumulat, which means to write. Being aware of the morphological processes of your students' home languages will help you to better understand and address their errors.

Derivational morphemes. While differences in L1 and L2 (target language) morphology can create opportunities for morphological instruction, similarities in morphological structure between languages can also generate teaching points. For instance, many English suffixes have equivalent Spanish counterparts. Thus, adverbs ending in the English suffix -ly like finally are equivalent to words that contain the Spanish suffix -mente like finalmente. We have both witnessed our own students experience "Aha!" moments upon realizing that there are comparable derivational morphemes in Spanish and English. One simple exercise to teach corresponding suffixes is to present a short list of words with the target suffix, e.g., explosion, situation, communication, then work together with students from that home language group to translate each word.

Cognates and false cognates. The majority of English learners in the United States speak Spanish, which is a Romance language, meaning that it has Latin as a linguistic ancestor. Speakers of Romance languages, which include French, Portuguese, Italian, Romanian, and Catalan, come to the classroom with implicit knowledge about Latin-based morphemes because their Tier 1 vocabulary words share morphological roots with many of the Tier 2 and Tier 3 words of English. *Cognates* are words in two languages that share a common ancient root. For example, the English word *different* and the Spanish words *differente* mean the same thing because they share the Latin root *differre* meaning "to set apart" (Online Etymology Dictionary, n.d.). *Different* and *diferente* are cognates. However, these shared roots and meanings with Latin

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are not helpful to students unless they are aware of the relationship between words they use in their home and new words they are encountering in English.

When teaching new words, teachers must find out if new words have cognates in students' home languages and explicitly show the similarities of the written words to students during instruction. We share resources for cognate lists in Appendix B. We have found that including a space for cognates in vocabulary activities such as the creation of personal glossaries or using the Frayer Model creates an opportunity to point out cognates to students and demonstrate the similarities between the words. When a classroom includes many students from a cognate-sharing language, co-creating and posting charts of English-Home Language cognates and referring to it during class discussions can support students in strategically using their home language as a resource.

Finally, be aware of *false cognates*. False cognates are words in two languages that look similar but have very different roots and meanings. A striking example of a false cognate is the Spanish word embarazada, which looks similar to the word embarrass in English. However, embarazada actually means pregnant! We have included resources that address these "false friends" in Appendix B.

What Can I Do to Support the Morphological Development of English Learners?

When planning for morphological instruction, keep in mind that there are two approaches. The first approach, unpacking and making explicit the morphological processes and structures of English, will benefit all English learners, regardless of their first language. The second approach, using students' L1 as a bridge to English morphological development, will depend upon the language distance between students' L1 and English. Language distance refers to the strength of the linguistic relationship between two languages and their resulting similarities and differences. For example, referring back to the Romance languages, Italian and French are linguistically closer than English and French. However, English and French are linguistically closer than English and Korean. Thus, the difficulty of using students' L1 morphological processes as a bridge to English language development increases as the language distance increases. However, given that the majority of English learners in the United States are from linguistically similar languages, it is a useful and meaningful approach to pursue. In the following section, we offer both general activities for teaching how English works as well as strategies for instruction based on the morphological processes of students' L1. Additional resources for instruction are provided in Appendix B. Finally, the guiding principle in morphological instruction for English learners is to provide explicit teaching. What may be implicit, instinctive, and common sense for English Only students may be confusing and unclear to English learners.

General Activities for Teaching How English Morphology Works

Charts for generative activities. One easy way to begin morphological awareness instruction is through the use of word trees (Bear, Invernizzi, Templeton, & Johnston, 2012) or charts that demonstrate the relationships of related words. Begin by writing a Greek or Latin word element, like the Greek cycl on chart paper, followed by words that contain this root like recycle, bicycle, and cyclone. Discuss what the example words have in common and support students as they hypothesize the meaning of the Greek roots before revealing the definition,



which is *circle*. Next, challenge students to brainstorm other words that are morphologically related to add to the chart (some examples are *encyclopedia*, *tricycle*, *motorcyclist*, *cyclical*). Students can also create personal versions of these charts and make illustrations to help them remember new words.

Inflectional suffix -ed sort. Initially, many students are perplexed by the fact that the inflectional morpheme -ed has three pronunciations in English: /t/, /d/, and /ed/. We say /t/ for words that end in an unvoiced phoneme like walked, stopped, and liked. We use /d/ when pronouncing the -ed at the end of a word with a voiced phoneme like turned, grabbed, and stirred. We pronounce the -ed as an additional syllable, /ed/, when a word ends with a /t/ or /d/, as in needed, added, acted, or wanted. This principle becomes clearer to students through word sorting. Start with a list of high frequency words that end in -ed. Select one word as a sample for each category. Say each word with the class, helping the students determine the sound pronounced as well as if a new syllable is added. Then, ask students to work together to sort the remaining words. Help students generate the rules (listed above) that govern the pronunciation.

Latin word elements. Once Latin word elements have been introduced, students can practice their morphological skills by playing games. *Caeser Pleaser*, developed by Hosty and Gips at www.play2read.com, is a game played with a deck of cards, each of which lists an affix like *dis-*, *sub-*, and *-tion*, along with word root like *ject* and *tract*. Each card contains the definition for that word element. To play, 16 cards are laid out face up. Students compete to be the first to combine these elements to form words. The greater number of morphemes included in the word, the greater the points earned. With the help of lists that contain Latin and Greek word elements, teachers can produce any number of games to help students practice targeted morphological families. Another student favorite is Latin Root Jeopardy (Bear et al., 2012). Each category for the game consists of a root the students have been studying. For the clues of the category, select five words that contain the same root, and write the definition of the word on a card. The \$100 clues are the easiest, while \$500 clues are the most difficult. Students collaborate to determine the correct word that matches the definition.

Teaching Based on the Morphological Processes of L1

The first step to providing instruction based on the morphological processes of students' L1 is to be aware of what those morphological processes are. Knowing a bit about how students' first languages work can help you to identify and address errors that may arise when they use their L1 expertise to make sense of new learning in English. Tap the expertise of your bilingual colleagues and friends who can serve as linguistic informants. Knowing the inflectional morphemes present in the first languages of your students will help you understand difficulties they may have with English plurality, tense, and comparatives. This information will provide insights into the reasons behind their errors (Scarcella, 2003).

L1 as a resource. Treat the first languages of English learners as a resource rather than a deficit. Use students' first languages as a source of comparison when analyzing the morphological processes of English. Note that students who speak a Romance language can have an advantage and serve as a resource to their peers regarding morphemes with Latin word elements. Students who speak other Indo-European languages will also likely share a number of cognates with English. When teachers make these connections explicit, such instruction can deepen the understanding of English Only students as well as English learners.



Metalinguistic awareness. Metalinguistic awareness is the ability to reflect upon and be explicitly aware of the differences between two languages. The ability to be metalinguistic may support both second language learning and reading comprehension (Lems, Miller, & Soro, 2010; Zipke, 2008). Lems, Miller, and Soro suggest L1 morpheme study. They provide the example of *cumpleaños*, the Spanish word for birthday which comes from two Spanish morphemes meaning *complete* and *year*. Thus, a birthday is the completion of a year. In English, on the other hand, the word birthday comes from the Germanic roots *birth* and *day*, a commemoration of the first day of a child's life (p. 106, italics added).

Cognates. Consider holding a cognate "treasure hunt" to support students' awareness of cognates in their L1 and English. Bilingual children's picture books with text in L1 and in English are ideal for this activity. Preview the text to identify shared cognates. Consult a list that shows cognates in the student's L1 and English or ask a colleague who is familiar with the language. Note words that are similar in both texts, being wary not to include false cognates. This is more difficult to do in languages, such as Russian, that use a different alphabet, but it is possible, especially with students who have strong L1 literacy skills, as Slavic languages share many cognates with English (зебра/zebra; видео/video— a resource for Russian-English cognates is posted in Appendix B). For students coming from writing systems different from English, cognates may be more identifiable through their pronunciation rather than their appearance. Once you have identified the cognates, have the students identify words that look or sound alike. Have the students create a cognate list.

More cognates. Given that the majority of English learners in the United States speak Spanish, consider creating a cognate list as a classroom resource. Using a Spanish-English cognate list, identify words that students are likely to encounter in the current or upcoming curriculum, and invite students to create a class chart showing the Spanish-English words side by side to highlight their similarities, such as *verbo/verb*. We include a resource for identifying Spanish-English cognates in Appendix B.

Conclusion

As skilled readers and writers, teachers use their morphological knowledge of English to unpack texts every day. Given the salience of morphological knowledge in the CCLS and its importance in reading comprehension, especially for English learners, it is vital that we provide systematic and explicit morphological instruction for our students. In order to implement such instruction effectively, teachers need to have a strong understanding of morphology, of morphological processes in English, and the issues around supporting English morphological development for language learners. The information shared in this article is just a starting point, but we hope that we have helped to unpack Language Standard 4 for you while simultaneously supporting you as a developing morphological expert.



Appendix A Glossary of Terms

Affix: Units of meaning, in the form of bound morphemes, that are added on to root morphemes to construct new words.

Bound morpheme: A morpheme that cannot stand on its own. It must be attached to other morphemes to construct a word.

Cognate: Words in two or more languages that have a shared root.

Derivational morpheme: A bound morpheme that adjusts the meaning of the root word and may change the part of speech. *Re-* in *rewrite* is a derivational morpheme, as is *-ness*, in *happiness*.

Etymology: The linguistic origin of a particular word.

False cognates: Words in two languages that look similar but have very different roots and meanings

Free morpheme: A morpheme that can be used alone, as a word, without additional affixes.

Infix: An affix that is placed in the middle of the root morpheme. English does not have infixes.

Inflectional morpheme: A bound morpheme that adjusts the meaning of a root word without changing its part of speech, such as pluralizing nouns or changing verb tense. Furthermore, inflectional morphemes do not change the base meaning of the word.

Morpheme: The smallest unit of meaning in a language. A morpheme may be a word or a word unit.

Morphological awareness: The ability to identify, know the meaning of, analyze, and use the units of meaning that construct words.

Morphology: The study of meaningful units of language.

Prefix: An affix that is placed at the beginning of the root morpheme.

Suffix: An affix that is placed at the end of the root morpheme.



Appendix B Resources for Understanding and Teaching Morphological Awareness

Books

- Bear, D. Invernizzi, M. Templeton, S. & Johnston, F. (2012). *Words their way: Word study for phonics, vocabulary, and spelling instruction* (5th ed.). Boston: Pearson.
- Helman, L., Bear, D., Templeton, S., Invernizzi, Johnston, F. (2012). *Words their way with English learners: Word study for phonics, vocabulary, and spelling* (2nd ed.). Boston: Pearson.
- Freeman, D.E., & Freeman, Y.S. (2004). Essential linguistics: What you need to know to teach reading, ESL, spelling, phonics, and grammar. Portsmouth, NH: Heinemann.
- Herrera, S.G., Perez, D.R., & Escamilla, K. (2010). *Teaching reading to English language learners: Differentiated literacies*. Boston: Allyn & Bacon.
- Lems, K., Miller, L.D., & Soro, T.M. (2010). *Teaching reading to English language learners: Insights from linguistics*. New York: The Guilford Press.
- Scarcella, R.C. (2003). *Accelerating academic English: A focus on the English learner*. Oakland, CA: Regents of the University of California available at: exstream.ucsd.edu/UCPDI/webtool/html/publications/ell_book_all.pdf

Online Resources, General

- Wikipedia (www.wikipedia.org) generally has accurate and useful information regarding languages, as well as linguistics, including morphology.
- Frankfurt International School (http://esl.fis.edu/grammar/langdiff) has information on 16 languages. This website is designed for teachers of English learners.
- For information about cognate instruction, visit WETA's educational initiative (www.colorincolorado.org/article/14307).
- Online Etymology Dictionary (http://www.etymonline.com).
- Information on False Cognates is at Spanish Learning (www.spanish.bz/false-cognates.htm), Brown University's Language Resource Center (www.brown.edu/Departments/LRC/pluma/voc_false_cognates.pdf), and About.com's Guides (french.about.com/cs/vocabulary/a/falsecognates.htm, german.about.com/library/blfalsef.htm).
- Caesar Pleaser Latin Word Elements Card game from Play2Read (www.play2read.com/caesar.html or contact Michelle Gips, MA, CCC-SLP at (301) 509-6263).

Online Resources, Language-Specific

Mandarin Chinese: Scarcella (2003).

About.com Guide, (mandarin.about.com/od/educationlearning/tp/

learn_by_step.htm)

Hindi: Omniglot (www.omniglot.com/writing/hindi.htm)



Online Resources, Language-Specific (continued)

Hmong: Scarcella (2003).

Omniglot (www.omniglot.com/writing/hmong.htm)

Japanese: About.com Guide (japanese.about.com)

Korean: Omniglot (www.omniglot.com/writing/korean.htm)

Russian: Language Daily (russian.languagedaily.com/wordsandphrases/Russian-

cognates)

Spanish: Scarcella (2003)

Spanish Language Guide (www.spanishlanguageguide.com)

About.com Guide (spanish.about.com)

Velazquez Spanish Cognates (spanishcognates.org)

Vietnamese: Omniglot (www.omniglot.com/writing/vietnamese.htm)



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- Nagy, W.E., & Garcia, G.E. (1993). Spanish-English bilingual students' use of cognates in English reading. *Journal of Reading Behavior*, 25, 241-260.
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- Scarcella, R.C. (2003). *Accelerating academic English: A focus on the English learner*. Oakland, CA: Regents of the University of California.
- Zipke, M. (2008). Teaching metalinguistic awareness and reading comprehension with riddles. *The Reading Teacher*, *62*(2), 128-137.
- Yoon, B. (2007). Classroom teachers' understanding of the needs of English-language learners and the influence on the students' identities. *The New Educator*, *3*, 221-240.