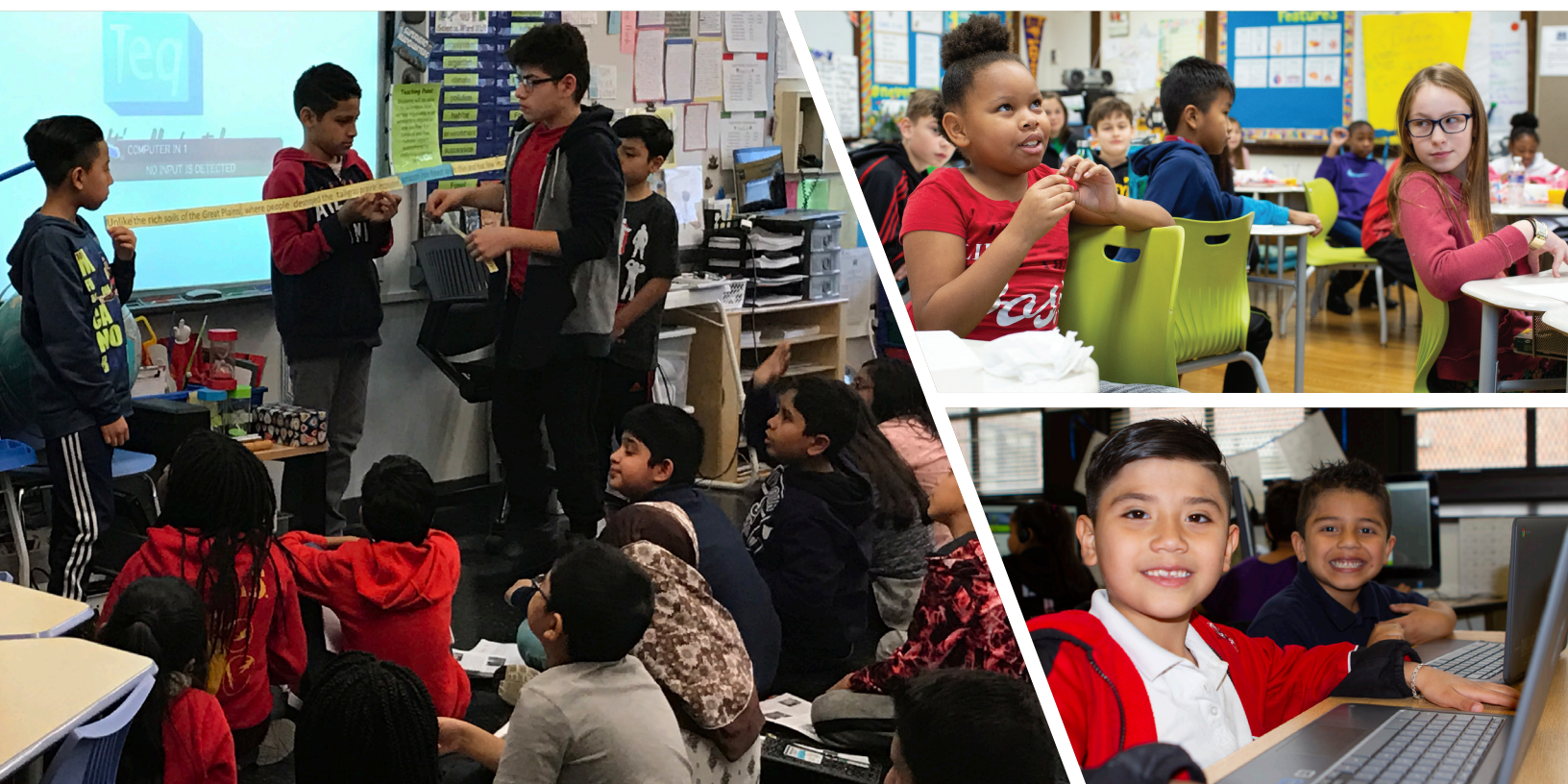




# A Framework for Foundational Literacy Skills Instruction for English Learners

Instructional Practice and Materials Considerations  
Spring 2023



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The Council of the Great City Schools is the only national organization exclusively representing the needs of America's urban public-school districts. Composed of 78 large city school districts, the organization's mission is to promote the cause of urban schools and to advocate for inner-city students through legislation, research, instructional support, leadership, management, technical assistance, and media relations. The organization also provides a network for school districts sharing common problems to exchange information and to collectively address new challenges as they emerge to deliver the best education for urban youth.

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# Acknowledgments

English learners (ELs) are one of America’s fastest-growing student groups, and their numbers are most concentrated in our Great Cities. In addition, the academic needs of these school children are complex and varied, especially as they are developing knowledge of multiple language systems.

This document is continued evidence of how urban school leaders are working to ensure success for all our students. Considering recent concerns about the reading proficiency levels of students across the country and discussions about best practices to support foundational literacy skills development, the Council has developed a vision for foundational literacy skills instruction that meets the complex needs of English learners.

This document provides a review of general and EL-specific research on early literacy, drawing from both to define a vision for foundational literacy skills instruction for ELs. The document outlines a framework for foundational literacy skills instruction around six principles to ensure that ELs develop the necessary literacy skills to engage with complex text in all subject areas successfully. Finally, the document also presents criteria by which school administrators and teachers can determine whether instructional materials for foundational literacy skills instruction are conducive to meeting the needs of English learners.

We are most grateful to the *Foundational Skills for ELs Working Group* composed of EL program directors and staff who contributed their expertise, real-world challenges, and research recommendations, and to Gabriela Uro, David Lai, and Tamara Alsace who led this effort.

We also want to thank Madeleine Oulevey, our summer policy fellow, whose robust analysis of member districts’ approaches and materials used for foundational skills instruction for ELs grounded and propelled this work. Finally, we also thank the many Council staff who contributed to the development of this document, including Robin Hall, Ricki Price-Baugh (retired), Aaron Park, and Amanda Corcoran.

Ray Hart  
*Executive Director*

# Executive Summary

English learners (ELs) need a *comprehensive and connected approach* to foundational literacy skills development that involves grade-level instruction by knowledgeable teachers who build on the linguistic repertoire of ELs and can teach ELs how the English language system works to convey meaning. Yet, most English learners experience foundational skills instruction in English heavily focused on code-based skills, built on findings from research on how monolingual English speakers learn to read English text. This document is intended to help rethink English foundational skills instruction for English learners by explicating the supporting research, explaining what teachers should know and do, and providing considerations for the design and selection of instructional materials to support this instruction.

A comprehensive and connected approach recognizes the need for English learners to develop both **broad language-based skills** with related content knowledge to support meaning-making and learning the English language system and **code-based skills** that build phonemic awareness and decoding skills. We present six principles that enable a comprehensive and connected approach as a critical component of Tier I literacy instruction for English learners. These principles, which address English learners' unique age- and grade-level needs and honor their linguistic assets, are —

1. The linguistic repertoire of ELs and registers of English are valued and leveraged.
2. Grade-level content serves as the anchor for foundational literacy skills development in service of mastering spoken and written academic language.
3. Meaning-making and comprehension are prioritized.
4. Mastery of academic English expands student linguistic identities.
5. Language-based and code-based skills are developed simultaneously.
6. Comprehension of text is signaled by students' ability to read with the proper expression to convey meaning, not solely speed and accuracy.

Literacy instruction in schools is experienced differently by students from English-speaking backgrounds and English learners. Students from English-speaking homes are equipped with the critical knowledge of how the smaller components of English come together to express ideas, but English learners are not. ELs have these insights about their home language(s), not about English. Just as English-speaking students learned prior to formal schooling, ELs will need to learn how English sounds and works through meaningful interactions as part of the normal process of acquiring a new language at any age. One must know how a language “works” (i.e., language-based skills) to convey ideas before abstracting it to learn its parts (i.e., code-based skills). For most children, language acquisition begins soon after birth by listening and eventually speaking. Literacy development, in school, builds on the oral language skills learned at home. Knowledge of how a language is structured and sounds to convey meaning, orally, enables students to work toward understanding how the words they speak can be written and read.

In the comprehensive and connected approach, English learners develop literacy by learning the following: (1) oral language and broad-based language skills; (2) an understanding of the English language and how it may differ from their home language; (3) code-based skills to engage with texts in service of learning grade-level content successfully; and (4) how academic English works to convey meaning.



# Introduction

Literacy can be broadly defined as the ability to identify, understand, interpret, create, communicate, and compute, using printed and written materials associated with various contexts (UNESCO, 2022). The hallmarks of effective literacy instruction have long been debated in education circles to address ongoing concerns over low reading levels and assessment performance. Most recently, the 2022 results of the National Assessment of Educational Progress (NAEP) generally show continued underperformance nationwide in reading scores, further propelling advocacy for effective foundational skills instruction (U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics 2022). Schools play an important role in ensuring that students acquire the literacy skills necessary to meet grade-level content expectations and progress through the grades successfully. Thus, the types of pre-literacy experiences that prepare young children to learn how to read and the foundational literacy skills instruction they receive once they get to school are important areas requiring ongoing attention.

For young children developing early language skills in languages other than English, English literacy development is especially important for success in U.S. schools where English is the primary language of instruction. More than five million English learners (ELs) in U.S. public schools are learning how to read, write, listen, and speak in a language different from their home language (National Center for Education Statistics [NCES], 2022). They need instruction tailored to this reality. While ELs represent approximately 10 percent of total K-12 enrollment in U.S. public schools according to NCES (2022), ELs enroll in larger numbers in the early K-12 grades—with kindergarten ELs comprising 15 percent of all ELs in the nation. Table 1 shows the number and percentage of kindergarten ELs enrolled in three states for which such data are publicly reported. California's kindergarten enrollment includes 15.4 percent who are ELs. New York's kindergarten enrollment includes 11.9 percent who are ELs. These percentages likely underestimate the actual number of ELs because not all school districts screen kindergarteners for English proficiency. Moreover, statewide averages mask trends for the much larger percentages of ELs in urban areas and other districts with high concentrations of multilingual learners.

Table 1. Full Day Kindergarten Enrollment in Selected States, SY 2020-21

State	ELs in Kindergarten	All Students in Kindergarten	ELs as Percentage of All Students in Kindergarten	Total K-12 ELs	K-12 ELs as Percentage of Total K-12 Enrollment
California	71,237	462,172	15.4%	1,062,290	17.7%
New York	20,193	170,052	11.9%	240,035	9.6%
Virginia	7,144	80,586	8.9%	104,769	8.4%
National (Fall 2019) <sup>1</sup>	555,599	3,716,023	15.0%	5,115,887	10.1%

Source: California Department of Education (CDE) (n.d.); National Center for Education Statistics (2021); New York State Education Department (NYSED) (n.d.); Virginia Department of Education (VDOE) (n.d.)

ELs, like all children, begin school with varied literacy experiences. Furthermore, ELs begin school with literacy experiences in their home language and varied levels of English proficiency. Teachers typically struggle to use the appropriate instructional approaches to address these multiple literacies. Oftentimes, literacy materials and instructional strategies have not been developed with ELs in mind, requiring teachers to augment district-provided resources or supplement them with other materials. Unfortunately, the augmentation of materials typically happens with minimal direction from research specific to the experiences and needs of ELs.

For instance, the National Reading Panel's (2000) *Teaching Children to Read* and the National Research Council's (1998) *Preventing Reading Difficulties in Young Children* reports are important reviews of extant research on literacy instruction focused on phonemic awareness, fluency, and comprehension (i.e., vocabulary instruction, text comprehension, and comprehension strategies instruction). However, neither report reviewed studies of second language acquisition, bilingualism, and biliteracy. Hence, these seminal reports do not address issues specifically relevant to literacy development among multilingual youth (Garcia & Nájuez, 2011). In the two decades since the publication of these reports, the volume of research focused on ELs has substantially increased, contributing to an enhanced understanding of the cognitive development of multilingual learners. Nevertheless, there is still a need for more research focused on the attributes of effective instruction for multilingual learners that address new understandings about the cognitive and language development of multilingual students (NASEM, 2017).

Without clear direction from extant research on effective foundational literacy instruction for students who are learning English in school, teachers, reading/English as a second language (ESL) coaches, and other education professionals are expected to make sense of research on specific areas of literacy and language acquisition to inform their foundational literacy instruction for ELs. Making sense of the research to inform instruction, however, requires that educators have knowledge about: (1) second language acquisition pedagogy, (2) early literacy/reading development in English, (3) how the English language works, and (4) contrastive linguistics—to build on the home language assets their students bring to school and to ensure literacy instruction is effective for ELs. While some educators of ELs have this level of cross-disciplinary expertise, many do not. Typically, general education and literacy teachers do not have expertise in second language acquisition.<sup>2</sup>

<sup>1</sup> Data for SY 2020-21 unavailable. Figures from NCES *Digest of Education Statistics* Tables 203.45 and Table 204.27.

<sup>2</sup> Teachers are generally underprepared in both the knowledge and pedagogy necessary to teach foundational reading skills effectively (Binks-Cantrell et al., 2012). This is even more so with regard to teaching ELs to read.

## Purpose and Audience

The purpose of this document is to provide key information and resources for developing foundational literacy skills in English for students who speak other languages at home. This document expands on recent discussions related to foundational skills instruction to include an examination of relevant research and to identify important considerations for English learners in the areas of *second language acquisition*, *early literacy*, and *contrastive linguistics*. Research findings in these areas make a case for using an approach that addresses both language-based and code-based skills, that is anchored in the meaning-making of grade-level content, and that meets the specific language needs of ELs.

In recent debates about foundational skills instruction, code-based skills—including phonics, phonological awareness, and decoding words—have been emphasized. This emphasis tends to privilege English-proficient children who already have the early English literacy skills that they developed over years of exposure and experience with oral English language *prior to entering school*. The vast majority of ELs do not have this exposure to, or experience with, English prior to formal schooling. Thus, ELs' development of early language and foundational literacy *in English* requires instruction and materials that explicitly and systematically help them to develop both the **language-based skills** (e.g., oral language, semantic knowledge, syntactic knowledge) and the **code-based skills** they need to acquire foundational literacy skills in English.

Explicit and systematic instruction is necessarily teacher-designed and facilitated, as teachers structure the learning opportunities ELs need to develop early oral language skills or pre-reading literacy skills in English, in service of and in addition to developing their foundational literacy skills in English. This language and literacy development instruction must be anchored in grade-level content. For students who speak languages other than English at home, foundational skills instruction must be informed by second language acquisition pedagogy and contrastive linguistics to help ELs distinguish similarities and differences between English and their home languages and to learn how meaning is constructed in English.

This document describes and makes a case for a **comprehensive and connected approach** to foundational literacy skills development for ELs as part of the core—or Tier I—instruction. The document also specifies the features that instructional materials should include to support the foundational literacy skills development of ELs in a systematic and meaningful way.

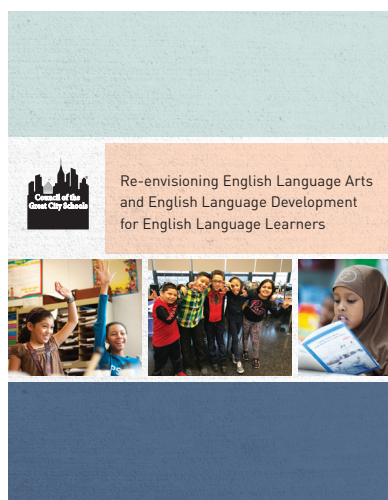
This document is intended for educators who are providing and/or are responsible for foundational literacy skills instruction to students whose home language is not English and who receive English language acquisition services in school (i.e., English learners). Additionally, this document is intended as a resource for members of instructional materials selection committees and individuals who make decisions about materials used for foundational literacy skills instruction. This document provides an important set of criteria to consider when selecting materials to support the unique literacy development needs and trajectory of English learners. These criteria also serve to inform developers and publishers about the key considerations for designing instructional materials that address the needs of ELs in learning foundational skills.



This document has four major parts—

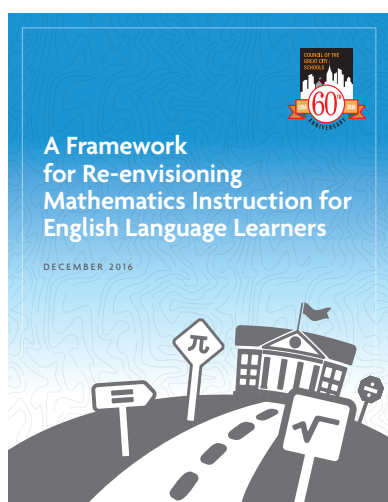
- I. Overview of Research on Foundational Literacy Skills
- II. Envisioning Foundational Skills Instruction for English Learners
- III. What Teachers Need to Know About Language
- IV. Considerations for Selecting Instructional Materials to Teach Foundational Literacy Skills to ELs

For considerations related to the grade-level content to which foundational literacy skills instruction is being anchored, this document can be used alongside the Council’s content-related frameworks for EL instruction —



### **Re-envisioning English Language Arts and English Language Development for English Language Learners (2017)<sup>3</sup>**

Presents the Council’s criteria for determining whether English language arts materials are compatible with college- and career-ready standards and appropriate for English language learners.



### **A Framework for Re-envisioning Mathematics Instruction for English Language Learners (2016)<sup>4</sup>**

Defines a new vision for mathematics instruction that explicitly attends to the needs of ELs, addressing the interdependence of language and mathematics.

<sup>3</sup> Council of the Great City Schools. (2017, May). *Re-envisioning English language arts and English language development for English language learners*. [https://www.cgcs.org/cms/lib/DC00001581/Centricity/domain/4/darrell/CGCS\\_ReinvisEngLang\\_pub\\_Rev\\_final.pdf](https://www.cgcs.org/cms/lib/DC00001581/Centricity/domain/4/darrell/CGCS_ReinvisEngLang_pub_Rev_final.pdf)

<sup>4</sup> Council of the Great City Schools. (2016, December). *A framework for re-envisioning mathematics instruction for English language learners*. [https://www.cgcs.org/cms/lib/DC00001581/Centricity/domain/4/darrell/FrameworkForMath4ELs\\_R10\\_FINAL.pdf](https://www.cgcs.org/cms/lib/DC00001581/Centricity/domain/4/darrell/FrameworkForMath4ELs_R10_FINAL.pdf)

## CHAPTER I

## Overview of Research on Foundational Literacy Skills

**Linguistic Assets**

Children’s oral language and language-based skills that develop prior to school, whether in English or another language, are linguistic assets that can support English language literacy development.

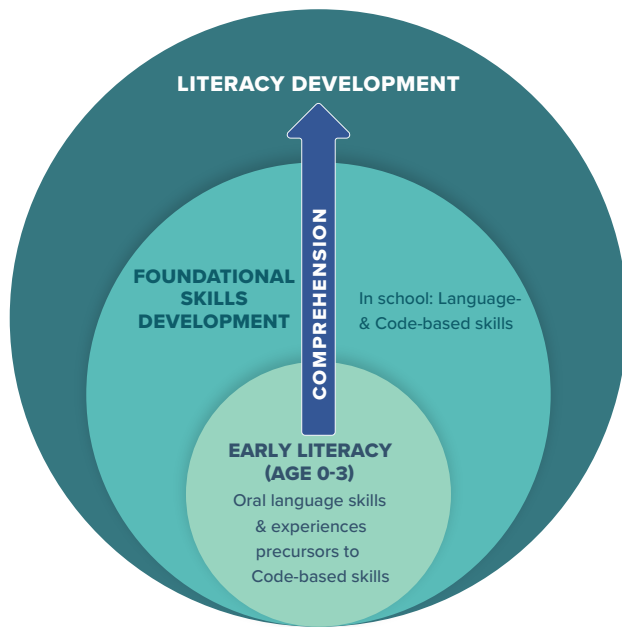
**Literacy Development**

Literacy is developed through a dynamic process that results in the ability to convey one’s thoughts orally and to read and write proficiently. A child’s pathway to language literacy begins soon after birth. As shown in Figure 1, literacy development includes *early literacy*,<sup>5</sup> the learning of precursory skills starting from birth and prior to formal schooling, and foundational skills development that occurs when students enroll in school.

The oral language and language-based skills that children develop prior to school, whether in English or another language, are linguistic assets that can support English language literacy development. Oral language and other pre-reading skills play an important role in developing foundational literacy skills and overall literacy in later years. We consider the entire process of acquiring literacy to be *literacy development*. While this literacy development process is generally true for all languages, the focus of this document is on the development of literacy skills *in English*, which is the main language of instruction in U.S. schools. While most ELs begin U.S. schools in pre-K or kindergarten, those who enroll in later grades may also need foundational literacy skills development as they acquire English. Thus, we do not associate foundational literacy skills development with specific grades. While we recognize the growing number of schools and districts that offer dual language instructional programs that aim to develop biliteracy in both English and a partner language, this document does not delve into the foundational skills instruction of partner languages.

5 Similar to early literacy is the notion of emergent literacy that Storch and Whitehurst (2002) suggest implies a continuum between prereading and reading in which essential literacy-related behaviors and activities take place during the preschool period. Whitehurst and Lonigan (1998) define emergent literacy as the skills, knowledge, and attitudes that are developmental precursors to reading and writing (Sulzby & Teale, 1991; Teale & Sulzby, 1986; Whitehurst et al., 1988; Whitehurst et al., 1994).

Figure 1. Pathway to Language Literacy



Based on Brown (2014), Storch & Whitehurst (2002), and Strickland et al. (2004).

### *The Relationship between Language-based Skills and Code-based Skills in Literacy Development*

First through intent listening and observation, later through mimicking, and finally through interaction with adults and older children, children learn the sounds of the language spoken at home, the structure of sentences, and the general norms of discourse in oral communication. Children also learn the meaning of words, including words for specific objects, in the period prior to school, preparing them to learn to read and write when they begin pre-K (Strickland et al., 2004). English-speaking children’s ability to communicate orally in English results from the important knowledge about the language they have acquired through experience with and exposure to English in the years prior to school. This is also true for any language because children typically acquire this important knowledge about how language works through exposure to their home language and learning how it is used to communicate effectively (NASEM, 2017).

Foundational to literacy development are language-based skills—usually acquired through oral language, which is a primary mode for language learning in most children, especially in the early years. Language-based skills and knowledge include—

- **Semantic (word) knowledge**—expressive and receptive vocabulary;
- **Syntactic knowledge**—word order and grammatical rules; and
- **Narrative discourse skills**—the ability to construct an original story and retell a recently heard story (Strickland et al., 2004).



Foundational literacy development builds on language-based skills as well as code-based skills (e.g., phonics, phonological awareness, conventions of print)—and is closely linked to children’s earliest experiences with books and interactions with adults, including singing nursery rhymes, listening to stories, recognizing words, and scribbling. The oral language ability—vocabulary skills and phonological sensitivity—that children acquire in the years before school supports the direct role that code-based skills play in the early stages of reading (Brown, 2014; Storch & Whitehurst, 2002).

### *The Role of Comprehension*

Comprehension and oral language development are inextricably linked. Children develop comprehension through increasingly sophisticated oral interactions that begin with infants’ early efforts to communicate. Furthermore, as children become more engaged in oral interactions, their comprehension of language increases. This development plays a critical role at every stage of literacy development, as represented in Figure 1.

As children mature, they gain linguistic knowledge to extract meaning from increasingly sophisticated interactions, including interactions with text found in books and other print materials. Children exposed to books develop increasingly sophisticated behaviors. For example, infants will tend to mouth books, two-year-olds will begin to handle books, and five-year-olds will be able to page through books. These behaviors are meaningful and are associated with children’s developing comprehension. Judith Schickedanz (1999) categorizes these early experiences with books, in order of complexity, as (1) book-handling behaviors, (2) looking and recognizing, (3) picture and story comprehension, and (4) story-reading behaviors. These early experiences with language help to develop comprehension skills and constitute the building blocks for reading and writing development.

**Fluency and comprehension.** Students orally fluent in English have basic knowledge of grammar and vocabulary and can detect language patterns to support reading by anticipating subsequent words in the text (Geva & Ramírez, 2016). This knowledge enables students to focus on the meaning of what is being read rather than on decoding words. In this case, for native English speakers, fluency and comprehension are strongly correlated. Among English learners, however, this correlation is less strong because their proficiency and fluency in English do not yet include the internalized knowledge of grammar, vocabulary, and language patterns needed for contextual facilitation of text comprehension (Geva & Ramírez, 2016). In other words, reading comprehension and fluency are more difficult for ELs when engaging with texts that use less familiar vocabulary and more complex sentences, especially on unfamiliar topics (i.e., insufficient background knowledge) (Neuman, 2010; WETA Public Broadcasting, 2019). ELs, nonetheless, may be good decoders, especially when reading familiar narrative structures with highly familiar content and vocabulary.

**Content knowledge and comprehension.** Code-based skills facilitate comprehension, but they play a lesser role in building knowledge than activities involving new concepts and ideas. For example, Recht and Leslie (1988) looked at children’s ability to comprehend and recall a text about baseball. Based on a standardized reading test, half of the children were good readers and half were poor readers—all having varying levels of background knowledge of baseball. The study found that knowledge of baseball played a greater role in comprehension than reading skills. Poor readers with high knowledge of baseball displayed better comprehension and recall than good readers with low knowledge of baseball (Recht & Leslie, 1988), underscoring the importance of teaching code-based skills as part of building knowledge.

To summarize, children need opportunities to develop oral language through interactions with others and exposure to print-based language that support the development of knowledge and comprehension skills—all experiences that contribute directly to early literacy development in the corresponding language. In the homes of ELs, oral language development and exposure to print-based language will take place in languages other than English, and thereby, support early literacy development in English in less direct ways. This means that ELs who hear English for the first time in U.S. schools need expanded opportunities for accelerated oral language development, exposure to print-based language, and purposeful instruction that systematically and explicitly addresses the related code-based and language-based skills to build comprehension of language and the grade-level content (Storch & Whitehurst, 2002).

### *Precursors to Foundational Literacy in Children Learning More than One Language*

Oral language development and comprehension progress differently in multilingual young children (called dual language learners [DLLs]) compared to monolingual children (NASEM, 2017). The National Academies of Sciences, Engineering, and Medicine (NASEM) reviewed research on children’s underlying capacity for dual language development from birth to five years of age and found that DLLs juggle four major components of language that shape their literacy development. Generally, these components are language discrimination and speech patterns; early word learning; early vocabulary development; and morphosyntactic development (NASEM, 2017).

1. **Language discrimination and speech patterns**—Dual language learners can discriminate among languages early in development, which is an important skill for learning two or more linguistic systems simultaneously. DLL infants can differentiate between the languages they hear in their environment, noticing the distinct rhythms as well as the basic word order of each language. If a student’s home language is different from the language of instruction, more time might be needed to learn the phonemes of the new language due to the phonemic contrasts. This is particularly the case if the phonemic contrasts in English do not exist in the DLL’s home language or are very different.
  - Infants up to six months in age are able to discriminate *all contrasts*. Infants between six and eight months can perceive the *vowel contrasting sounds* of their specific home language. Infants’ brains continue to develop in response to the languages they hear so that, at 10-12 months, infants can perceive the *consonant contrasting sounds* of their home language (NASEM, 2017).
2. **Early word learning**—Recent research identifies four interrelated areas developed by young dual language learners in the early stage of learning about words—
  - **Phonotactics** is related to the permissible combinations and sequences of sounds (phonemes) in a particular language that infants learn from exposure to languages over time. Research indicates that dual language learning does not compromise infants’ ability to learn the phonotactic constraints of a language or to recognize words (Graf Estes, Edwards, & Saffran, 2011; NASEM, 2017).
  - **Word segmentation and recognition** is the ability to extract words from continuous speech, a difficult task because there are no clear acoustic cues that signal the beginning and end of words. Children need time to acquire a stable detailed representation of the sounds that make up words within a language. In some instances, DLLs may take longer than monolingual learners to acquire sound representation, in part, because they are exposed to less of the target language (NASEM, 2017).

- **Associated word learning** is the ability to associate new words with referents or objects. Learning to associate objects with novel words that *differ by one phoneme* from an already familiar word is challenging for DLLs and could require more time than monolinguals to accomplish (NASEM, 2017).
  - **Mutual exclusivity** refers to the tendency of young children to associate new words with novel objects rather than objects for which they already have a label (word) (NASEM, 2017). This principle works primarily for monolingual students (Halberda, 2003). For DLLs, however, this principle is less true. DLLs learn that objects have more than one label—in their home language and in English. Therefore, particularly as DLLs amass experience and exposure in their home language, they are less likely to depend on mutual exclusivity when learning new words in another language (Davidson & Tell, 2005).
3. **Early vocabulary development** or vocabulary knowledge refers to the number of words a student knows in any language. DLLs develop vocabulary across languages. Standardized vocabulary measures administered in U.S. schools typically consider one language and fail to capture DLLs' vocabulary knowledge fully. When credited for knowledge of vocabulary in any language (known as “conceptual vocabulary”), monolingual children and DLLs show no significant difference in the number of words they know (NASEM, 2017; Pearson, Fernandez, & Oller, 1993).
  4. **Morphosyntactic development** is the acquisition of grammatical knowledge, including how words are combined to form phrases and sentences (e.g., the order in which subjects, verbs, and objects appear in sentences); how words are formed (e.g., pluralization and verb tense/conjugation); and the rules of morphology/word formation and syntax (sentence formation) that define well-formed sentences. DLLs acquire language-specific grammatical knowledge at similar ages as monolinguals (NASEM, 2017). Morphosyntactic rules are different across languages, and research finds that DLLs develop the required separate grammatical systems for the respective languages they are learning. For example —
    - In Hungarian, the noun endings express locative meanings, which in English are expressed through prepositions, such as *in*, *on*, and *between*. In fact, the Hungarian language has 18 specific cases in which bound morphemes perform the function of prepositions in English (Slobin, 2014).
    - In Chinese, plurality and past tense are typically expressed by separate words, such as *several* and *already* rather than bound morphemes (—s and —ed in English). In Chinese, these words may be omitted if these meanings are obvious in context. Thus, a native Chinese speaker who treats plurals and past tense as optional rather than obligatory in English would be applying the rules of Chinese.

**Vocabulary development in multiple languages.** Monolingual children and DLLs show similar patterns of general morphosyntactic development, typically starting with one-word, followed by two-word, and then multiword stages of development. Both groups begin to produce two-word combinations after having acquired about 200 words. The vocabulary size and overall complexity of utterances produced by DLLs and monolingual children are correlated (NASEM, 2017).



**Coexisting development of multiple language systems.** With respect to specific aspects of grammar, DLLs and monolingual students learning the same languages at a given age (or a given *mean length of utterance* (MLU)—the average number of words or morphemes in a stretch of language use)—usually demonstrate knowledge of the parallel grammatical structures and constraints. For example —

- Spanish-English DLLs exhibit language-specific and appropriate use of predicates and closed-class words (such as prepositions, conjunctions, articles, and auxiliaries, which establish relationships between words in a sentence) in both languages; and
- Spanish-English DLLs and typically developing monolingual English students of the same age in the U.S. do not differ on finite verb accuracy or the use of obligatory overt subjects in English (NASEM, 2017). In other words, DLLs learn about verb-subject agreement and verb tense, and that English requires the use of overt subjects (e.g., pronouns or descriptions), at similar rates as monolingual English students.

Research further indicates that as DLLs learn distinct language systems, they may use elements from two languages in the same utterances (i.e., code-switching/mixing). However, they do so in ways that respect the grammatical constraints of each language (NASEM, 2017).

**Language concordance between home and school.** When English-speaking children, including those who speak a dialect of English, begin to receive foundational skills instruction in U.S. schools, there is greater concordance between the oral language skills they possess and the language of instruction. This concordance, however, does not exist for students who first encounter English in a U.S. school, making the transfer of their existing oral language skills less straightforward in supporting foundational literacy skill development in English.

### Home Language Erosion

Oftentimes, English replaces the language of the home and family, even if parents do not understand or speak English well. This language replacement leads to a gradual erosion of communication between parents and children, and a lessening of the bonds between them, making it more difficult for parents to guide their children (Fillmore, 2000; Rumbaut & Massey, 2013).

Socio-political forces shape the language politics students must navigate as they acquire English and develop their identity. Children are highly susceptible to the English bias in school and the world. They know about insiders and outsiders and belonging or not. They can also detect bias against those who are unable to speak English easily or well (like their parents and family members).

The younger children are when they begin to learn English at school, the more easily they learn it, provided they have opportunities to interact with teachers and classmates in meaningful activities conducted in English. Regrettably, students exposed to other languages prior to formal schooling do not necessarily become bilingual by merely learning English in school. Attaining biliteracy requires the intentional, formal development of both languages. Unless home languages are supported in meaningful ways, including recognizing parents' home language proficiency as an asset, ELs are likely to put those languages aside—even in the home, as they learn English.

In sum, the latest research is clear about the central role that oral language development and comprehension play in early or pre-reading literacy development for DLLs, and the capacity of multilingual learners to develop knowledge of multiple language systems simultaneously. Effective instructional practices for early language and pre-reading literacy for DLLs and foundational literacy skills development for ELs in later years, therefore, require deliberate attention to oral language skills, comprehension, and contrastive linguistics that build the capacity to juggle the four major components of language essential to developing literacy in English as an additional new language (NASEM, 2017).

## Foundational Literacy Skills Development

Children's pre-reading or early literacy experiences, particularly their oral language skills, serve as a base on which to build learning about how print language works and is a foundation for broader language-based skills. Foundational literacy skills instruction should leverage and build on these pre-literacy skills. Within the school context, foundational literacy skills involve two broad categories of skills—

- **Language-based skills.** These include the knowledge and skills to use vocabulary and the structures of English initially acquired through oral language but later honed through instruction and reading academic and complex texts. *Semantic* or word knowledge consists of the vocabulary students understand and use, and their *syntactic* knowledge of word order and the grammatical rules to form phrases and sentences when expressing themselves. As children move beyond the early stages of reading development, researchers have found that sentence and text comprehension are affected by a child's general verbal ability and oral language skills (Phillips Galloway et al., 2020; Snow et al., 1991). Semantic knowledge, in particular, becomes increasingly important as children progress and attempt to comprehend units of text larger than individual words and as the text demands increase in later grades (Nation & Snowling, 1998; Phillips Galloway et al., 2020; Snow et al., 1991). This text-level work is critical to developing reading comprehension (Geva & Wiener, 2014).
- **Code-based skills.** These include the conventions of print (e.g., in English, writing goes from left to right and top to bottom across a page), beginning forms of writing (e.g., writing one's name), knowledge of graphemes (e.g., that the letter *b* makes the /b/ sound) and grapheme-phoneme correspondence (e.g., that the word *bat* begins with the /b/ sound), and phonological awareness (e.g., that the spoken word *bat* begins with the /b/ sound). Letter-name knowledge, phonological awareness, and print awareness, etc., directly relate to learning to read, particularly in the early stages when accuracy is emphasized (Gillon & Dodd, 1994; Share & Silva, 1987; Vellutino, 1991; Whitehurst & Lonigan, 1998).

Research cautions against overemphasizing phonological abilities in reading development and underemphasizing other components of oral language, such as semantic and syntactic ability, especially for English learners (e.g., Storch & Whitehurst, 2002), since language-based skills typically develop much earlier than code-based skills. For example, oral vocabulary develops prior to knowledge of letters and their sounds (Storch & Whitehurst, 2002). Research findings and recommendations about literacy instruction that are relevant and appropriate for *English-speaking children*, therefore, cannot be assumed to be equally applicable to ELs and can be counterproductive for their literacy development and acquisition of English. Moreover, language instruction should address newly encountered spoken and written forms of language containing unfamiliar words and sentence structures connected to specific grade-level academic content (Lesaux, 2014).

Despite that both language- and code-based skills are necessary for literacy development, the latest round of debates about reading instruction has renewed an overemphasis on code-based skills, such as decontextualized systematic phonics instruction with explicit instruction, guided practice, and independent reading and writing, at the expense of meaning-making. This emphasis on code-based skills insufficiently integrates broader language instruction and does not build children's capacity to comprehend lengthy, advanced, or more complex literary or informational texts that contribute to building knowledge (Mesmer, 2020; Neuman, 2010).

### *A Comprehensive and Connected Approach*

Fillmore (2017) and Scarcella (2003) underscore the *absolute necessity of a comprehensive and connected* approach for students new to English, consistent with Mesmer's (2020) call for a connected approach to literacy instruction for all children. Both language-based and code-based skills are present in a comprehensive and connected approach to literacy instruction that uses rich, complex texts to motivate students and to support their development of foundational literacy skills. Specifically, teachers need to systematically and strategically address both language-based and code-based skills, showing how these components of the language system interact; thus, enabling students to be effective code breakers, meaning makers, text users, and text analysts. Particularly for ELs, the interaction between code-based and language-based aspects of the English language might be less intuitive. For example, teachers can connect decoding and encoding to word-level instruction by including the meaning of words and their meaningful parts (morphemes). Word-level instruction can be connected to text-level instruction to understand the formation of sentences (Mesmer, 2020).

Mesmer (2020) emphasizes the importance of children's insights into the English language system in learning to read, the very insights that ELs are newly acquiring in school. She points out that phonics instruction, whereby students learn the correspondence between visual symbols (graphemes made of letters) and speech sounds (phonemes), requires children to already have certain insights to make sense of the language system. Focused phonics study alone does not provide the sufficient insights that ELs need to acquire literacy in English (Mesmer, 2020).

Thus, teachers need to ensure that students (1) can distinguish units of language, such as words, syllables, and speech sounds and (2) have phonological awareness that allows them to identify and manipulate the sound of these units orally. This does not mean that students, especially young children, should be taught a slew of grammar rules. Instead, English learners can internalize the system of rules through more indirect ways, including meaningful and engaging instructional activities that connect language with knowledge-building (Tabors & Snow, 1994). Once ELs (particularly older students) have acquired sufficient knowledge of how English works, they can understand and benefit from learning about key grammar rules, including the notable exceptions of the language to make sense of English (French & O'Brien, 2008).

As Fillmore (2017) indicates, ELs need to tackle new syllabic and word structures as well as focus their meaning-making efforts on comprehending new phrase- and sentence-level structures of the English language system along with its inconsistent sound-symbol correspondences. A few examples illustrate these points—

- **English has many unique syllabic and word structures.** It is not only the spelling system that makes learning to decode English difficult. Spoken English includes consonant clusters in ways that are very unique and different from other languages. For example, in English, up to three consonants can appear at the beginnings of syllables (e.g., scream, split) and as many as four can appear at the ends of syllables.<sup>6</sup> Spanish, in contrast, has some adjacent consonants within a syllable but never more than two, and these consonant clusters occur only at the beginnings of syllables, with the second consonant always an l or r.
- **English has inconsistent sound-symbol correspondence.** In English, there are 26 letters that are combined to represent 44 sounds (phonemes). The five vowels are used to represent 20 unique sounds. These features of the English language contribute to inconsistent sound-symbol correspondence (Ziegler, Stone, & Jacobs, 1997). A byproduct is that the same or similar spellings can be pronounced differently (e.g., [our, tour, sour] and [though, through, bough, cough]).<sup>7</sup> In other cases, certain vowel sounds are represented/spelled in a wide variety of ways (e.g., ate, eight, lake, say, stain, straight, steak, they, vein, etc.). Code-based skills instruction can help students to navigate the inconsistency and decode successfully.

Additionally, the mastery of code-based skills, as demonstrated through decoding, does not necessarily indicate or produce comprehension. Often-cited studies that point out the importance of decoding accuracy and fluency for literacy development are based on the literacy progression of native English speakers. However, an English learner's ability to decode—translate print to speech and sound out words—may not indicate an understanding of the passage being read (Storch & Whitehurst, 2002). The importance of decoding accuracy and fluency for ELs should not be overemphasized, as these are less indicative of comprehension for ELs. Decoding alone is not successful reading if the student is unable to connect the words to larger structures, such as phrases and sentences, and is unable to derive meaning from text. The distinct roles that language-based and code-based skills play along the literacy development continuum have important implications for instructional practice (Catts et al., 1999). For instance, phonological processing skills play a more visible, direct role in *early* reading achievement and these skills are determined, in part, by a child's oral language ability (vocabulary skills and phonological sensitivity in preschool) (Storch & Whitehurst, 2002). However, because ELs are newly developing English oral language, they have smaller vocabularies in English and less phonological awareness than their English-speaking peers to support phonological processing for early reading in English (Furnes & Samuelsson, 2009; Melby-Levåg et al., 2016; National Early Literacy Panel, 2008; Shanahan, 2018). Importantly, phonological awareness (a code-based skill) is necessary, but not sufficient, for the acquisition of decoding ability. Code-based skills must be taught in conjunction with language-based skills (Tunmer & Nesdale, 1985).

6 For example, *sixths* is pronounced [sɪksθs], and *glimpsed* is pronounced [ɡlɪmpst].

7 Additional examples include [good, food, blood] and [jury, bury].

Language-based skills and code-based skills are both essential but contribute in different ways to reading accuracy (the ability to sound out individual words) and reading comprehension (the ability to determine the meaning of words and text) (Catts et al., 1999).<sup>8</sup> In the early stages of reading development, reading accuracy and reading comprehension skills appear to be closely intertwined. Specifically, word recognition and reading comprehension ability are strongly related. In the later grades, however, the relationship between decoding and comprehension ability is less strong (Shankweiler et al., 1999). Using a comprehensive and connected approach allows for both sets of skills to be developed along the entire literacy continuum, within the context of grade-level text and knowledge building.

## Foundational Literacy Skills Components Identified in Literature

A vast array of literature on literacy instruction identifies skills that are considered foundational for literacy. These foundational literacy skills are critical for all students beginning to decipher and comprehend text in English (August & Shanahan, 2006; Riches & Genesee, 2006). A varied set of foundational literacy components are defined by assorted entities that include researchers, national reports on literacy, literacy advocacy organizations, phonics and/or literacy programs, and developers of instructional materials. While the respective lists include overlapping and similar components, there is no national consensus. Thus, for the purpose of this document, we focus on national research reviews and reports that identify skills that are considered foundational for literacy. These reviews and reports, and the skills each identify, are shown in Table 2.

**Table 2. Foundational Literacy Skills Components Identified in Literature**

Document and Brief Description	Identified Foundational Literacy Skills	Notes
<b><u>Teaching Children to Read: An Evidence-based Assessment of the Scientific Research Literature on Reading and its Implications for Reading Instruction (National Reading Panel, 2000)</u></b> — The National Reading Panel, a U.S. government body formed in 1997 to assess the effectiveness of different approaches used to teach reading, issued a report that summarized research related to literacy instruction.	<ul style="list-style-type: none"> <li>• Phonemic awareness</li> <li>• Phonics</li> <li>• Vocabulary</li> <li>• Fluency</li> <li>• Comprehension</li> </ul>	Significant weight is ascribed to code-based skills.
<b><u>Common Core State Standards-English Language Arts (National Governors Association Center for Best Practices &amp; Council of Chief State School Officers, 2010)</u></b> — The Common Core State Standards (CCSS) for English Language Arts emerged from an initiative by the National Governors Association and the Council of Chief State School Officers to detail what K-12 students across the U.S. should know and do.	<ul style="list-style-type: none"> <li>• Print concepts</li> <li>• Phonics and word recognition</li> <li>• Phonological awareness</li> <li>• Fluency</li> </ul>	The standards are anchored in complex text and the skills identified as foundational for literacy tend to ascribe significant weight to code-based skills.

<sup>8</sup> In addition, studies find that if the reading achievement outcome being measured is reading comprehension, language-based skills will likely emerge as playing a role, and if accuracy is being measured, code-based skills will play a larger role (Gillon & Dodd, 1994).



Table 2. Foundational Literacy Skills Components Identified in Literature

Document and Brief Description	Identified Foundational Literacy Skills	Notes
<p><b><u>Effectiveness of Early Literacy Instruction: Summary of 20 Years of Research</u></b> (Herrera et al., 2021) — The Institute of Education Sciences (IES) reviewed the past 20 years of published peer-reviewed research on effective interventions that improve language and literacy.</p>	<ul style="list-style-type: none"> <li>• Language</li> <li>• Early writing</li> <li>• General literacy</li> </ul>	<p>From the studies reviewed, six language and literacy domains for foundational literacy were identified, including some broad-language skills.</p>

The foundational literacy skills documents listed in Table 2, with the exception of the 2021 Institute of Education Sciences report, fail to include a more comprehensive set of components that address English learners' need for language-based knowledge. Code-based skills—including phonics, phonological awareness, and decoding words—appear more prominently. The emphasis on code-based skills found in most of the frameworks presumes that all children have strong language-based skills (oral language) in English when they first arrive at school and subsequently are ready to tackle decoding the smallest units of language. But, as noted earlier, linguists stress the importance of providing ELs with language-based instruction that also focuses on developing an understanding of phrase- and sentence-level structures and how the English language system works (Fillmore, 2017; Fillmore & Snow, 2018; Scarcella, 2003). English learners need this instruction to gain the insights into the English language system that are important to make sense of phonics instruction—connecting the correspondence between graphemes or letters to speech sounds (phonemes) when learning to read (Mesmer, 2020).

## CHAPTER II

# Envisioning a Comprehensive and Connected Approach to Foundational Literacy Skills Instruction for English Learners

Although English learners enter school with linguistic knowledge of their home language, there is a disconnect between this knowledge and the language of instruction typical in U.S. schools—English. The knowledge ELs bring of discriminating sounds in speech, words and the formation of phrases and sentences is about their home language, not English. When ELs enter school and begin to learn English, they now must juggle discriminating sounds in speech, learn words and how they are combined to form phrases and sentences, and make meaning of oral and written English—all while also learning the academic content taught in English. In contrast, when English-speaking children enroll in U.S. schools, foundational literacy skills instruction to develop language-based skills and code-based skills involves teaching the print or written form of words and expressions of an already familiar language.

For English learners, foundational literacy skills instruction requires building new vocabulary and phonological sensitivity—obtained through oral language development, necessary to support phonological processing and development of print concepts in English.

English learners, who have had limited or no exposure to English prior to enrolling in school, require foundational literacy skills instruction that builds new vocabulary and phonological sensitivity—obtained through oral language development, necessary to support phonological processing and the development of print concepts in English, and an understanding of how the English language system works. This knowledge will enable ELs to make meaning of spoken English and to convey their ideas in English, building a literacy foundation to map written forms of language.

## Components of Foundational Skills in a Comprehensive and Connected Approach for English Learners

In addition to bridging home language knowledge with the foundational skills learning in schools, ELs need to build oral language in English and acquire important insights about the English language system through an expanded set of components for learning foundational skills. Building on the components identified in the national reports described in Chapter I, Table 3 describes the components that English learners need: (1) broad language-based skills with related knowledge to support meaning-making and learning of the English language system; and (2) code-based skills that build phonemic awareness and decoding skills. This expanded set of components comprises a *comprehensive and connected* approach to foundational literacy skills for English learners.

Table 3. Critical Components Emphasized in a Comprehensive and Connected Approach

Component	Description
<b>Language-based Skills</b>	
Oral Language	<p><i>Oral language</i> skills include both receptive (understanding speech) and productive (the ability to convey meaning through spoken word) language skills. As children apply their developing listening and speaking skills to interact with others, they learn —</p> <ul style="list-style-type: none"> <li>the sounds of the language, the structure of sentences, and general norms of discourse;</li> <li>the pronunciation and meaning of words, including words for specific objects; and</li> <li>listening comprehension (making sense of syntax and vocabulary).</li> </ul> <p>Practice with oral language skills develops children’s narrative understanding and production, including —</p> <ul style="list-style-type: none"> <li>understanding — the ability to comprehend the basic structure and elements of stories, including the concepts of characters, settings, events, sequences, problems, and outcomes of narrative; and</li> <li>production — the ability to include the basic structure and the elements of stories in their own oral narratives, retell a story, and act out stories.</li> </ul>
Comprehension and Meaning-Making	<p><i>Comprehension</i> is a capacity that develops through early childhood and formal schooling. It involves the activation of prior or background knowledge and the use of strategies and skills to extract meaning from written or spoken language.</p> <p><i>Meaning-making</i> involves a process by which learners acquire and use knowledge to understand and interpret information (e.g., images, symbol systems, text, context) in service of learning grade-level content.</p>
Word Knowledge	<p><i>Word knowledge</i> involves the knowing of meanings, use, and pronunciation of words in both spoken and written forms within the context of the sentence structures of English. It also includes knowledge of word formation (morphology) to build the capacity to generate words.</p> <p>Word knowledge begins to develop through language-based literacy experiences, such as oral language use in the years prior to school.</p>
<b>Code-based Skills</b>	
Phonological and Phonemic Awareness	<p>This component also corresponds to language-based skills as children develop their phonological and phonemic awareness through oral language learning. However, it is listed under code-based skills because of the close connection to children’s initial process of mapping sounds to print.</p> <ul style="list-style-type: none"> <li><i>Phonological awareness</i> is a recognition of larger spoken units, such as syllables and rhyming words, and how these fit within corresponding larger units of language. For example, sentences can be segmented into words, and polysyllabic words can be segmented into syllables. The awareness of syllables enables students to generate words that rhyme.</li> <li><i>Phonemic awareness</i> refers to the understanding of how the smallest units of spoken language — phonemes — work together to make words and how phonemes can be substituted and rearranged to create different words.</li> </ul>
Print Knowledge	<p><i>Print knowledge</i> refers to knowing that print carries a message, and that print in English has conventions, such as directionality (left to right, top to bottom, etc.). This is also related to letter knowledge, the knowing of the names and sounds of the letters of the alphabet.</p>

Table 3. Critical Components Emphasized in a Comprehensive and Connected Approach

Component	Description
Decoding and Phonics	<i>Decoding and phonics</i> build on students' phonological and phonemic awareness to gain knowledge of the predictable relationship between phonemes and graphemes (grapheme-phoneme correspondence) and apply this knowledge to decode or read words.
Early Writing	<i>Early writing</i> involves understanding that writing conveys meaning. Students demonstrate this understanding through attempts to communicate information through scribbles, symbols, marks, letters, words, or sentences.

## A Vision and Theory of Action for Foundational Skills Instruction Addressing the Needs of English Learners

School districts must establish a clear vision for how foundational literacy skills instruction will address the non-concordance between English learners' home languages and the language of school (English) that will maximize the ways in which ELs can transfer their oral language and broad-language skills to support their development of foundational literacy skills in English. The language non-concordance between students' homes and schools elevates the role of teachers and the specialized knowledge necessary for instruction to build on the linguistic assets from home.

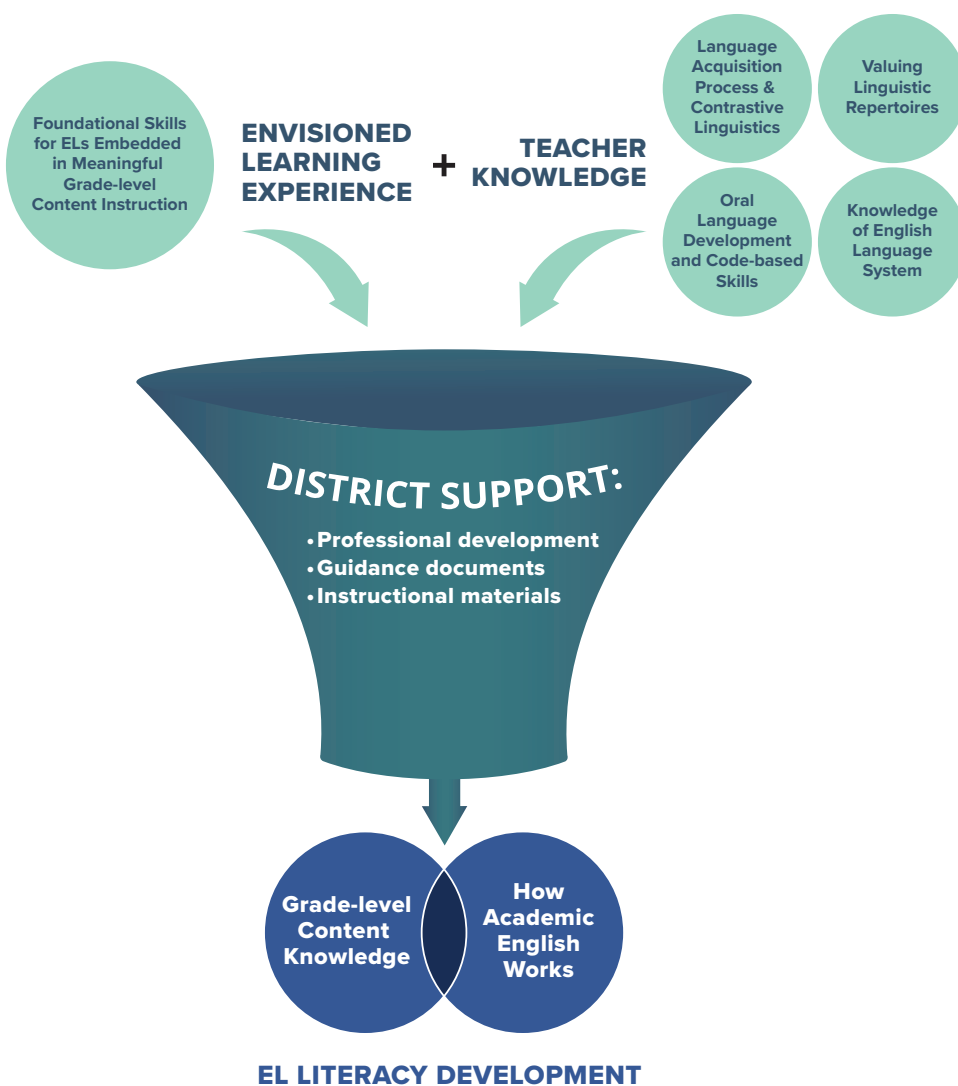
The Council's vision for foundational literacy skills instruction that addresses the needs of ELs is a *comprehensive and connected* approach to designing and teaching foundational literacy skills that simultaneously builds—

- a) **language-based skills** that are key to make meaning of grade-level content and gain insights to understand the English language system and
- b) **code-based skills** that equip ELs to decode written forms of English successfully.

The following sections describe the elements that comprise the Council's theory of action for teaching foundational literacy skills to English learners shown in Figure 2.

When teachers value and leverage the linguistic repertoires that ELs bring to school and are equipped with knowledge about (a) how the English language system works, (b) how ELs acquire English as a new language, and (c) comprehensive approaches to literacy instruction, teachers can create learning experiences that build content knowledge, foundational literacy skills, and an understanding of academic English.

Figure 2. Supporting Literacy Development for English Learners Using a Comprehensive and Connected Approach



### *Teacher Knowledge and Outlook on Diverse Linguistic Repertoires*

To play an active and central role in foundational literacy instruction that builds on students' existing knowledge, teachers need to recognize and value the linguistic repertoire and insights that ELs bring from their home language. By doing so, teachers can help ELs leverage existing knowledge of language to support meaning-making about how the English language system works. Additionally, teachers need a sufficient understanding of how English works as a system of rules and conventions that govern the formation of words, phrases, and sentence constructs in order to explain and model this understanding for students. Teachers' validation of students' oral language, recognition of student educational needs, and knowledge of how English works—all together—help teachers determine learning targets and implement appropriate instruction (i.e., knowledge of oral language development and code-based skills, language acquisition processes and contrastive linguistics).



## How Schools Can Support Home Language Development

When the district or school does not offer bilingual or dual language instruction in which the home language is deliberately developed, EL families will be principally responsible for nurturing the home language as their children learn English. Schools and districts, nonetheless, can support the ongoing development of home languages in many ways, even when bilingual or dual language instruction is not offered. These ways include —

- ***Informing parents about the processes of English language acquisition and language development, including the simultaneous development of the home language.*** Parents are usually eager for their children to learn English. Many may be unaware that, unless continuously nurtured, students can “lose” the language of family and home as they learn English. Schools can help parents to understand the English language acquisition process in schools and that the continued use and development of the home language outside of school can be beneficial. Myths about the “interference” of home language development in learning English prevail in many communities, and schools can help counter these myths.
- ***Encouraging and supporting parents in fostering home language use.*** With the support of the school and district, the parents of English learners can play an active role in teaching their children age-appropriate speech at home, engaging with oral storytelling or reading texts in the home language, and connecting the home language to their cultural background. Family engagement efforts for EL families should recognize that parents provide important models of proficient use of the home language, and therefore, incorporate support for home language development.
- ***Reinforcing with educators the value of home language development outside of school.*** Educators need to understand that home language development enhances overall literacy development and does not interfere with English language acquisition. It is ill-informed to advise parents of English learners to NOT speak their home language with their children learning English. Parents of ELs tend to be most proficient in their home language, making it the best conduit to establish meaningful communication with their children. If EL parents are in the process of learning English, asking them to communicate in this yet-to-be-acquired language will not only hinder communication with their children; it may also undermine the English being learned in school.

### *District-aligned Instructional Supports and Resources Explicitly Addressing EL Needs*

Teacher-designed and -led instruction anchored in grade-level content that dynamically responds to the evolving learning needs of ELs requires the following targeted and multi-layered district resources and supports—



**Professional learning.** Teachers need high-quality, relevant, and ongoing professional learning that continues to build their capacity around providing foundational skills instruction to students whose home language is not English, equipping them to respond to the educational needs of ELs (California State Board of Education, 2012). Professional development must also be aligned with (and/or complement in a coherent way) the district's overall professional development plan, particularly around foundational skills and literacy.



**District guidance.** Any district guidance and resources provided to teachers for developing literacy and grade-level content knowledge should also be coherently articulated or aligned to meet the needs of ELs.



**Instructional materials.** The central role that teachers play is supported by quality instructional materials that facilitate engaging learning experiences. These learning experiences build grade-level content knowledge and simultaneously develop oral language and foundational skills for ELs. District-adopted materials, approved lists of texts, or guidance for the adoption of instructional materials to support foundational skills instruction should explicitly include features that address the needs of English learners.

### **EL Literacy Development: What Students Learn about How Academic English Works**

English learners face a dual learning task of acquiring grade-level content knowledge as they learn the corresponding academic English language. They do so within a compressed timeline, developing oral language in English and simultaneously learning about the print forms of English related to the grade-level content. Thus, a comprehensive and connected approach teaches English learners to develop the following—



**Oral language and broad-based language skills.** ELs attain sufficient familiarity with the English sound system to be able to hear and differentiate sounds in English, not only in isolation, but also in various positions within syllables and in words (oral language). Developing a foundational inventory of words and phrases enables ELs to gain the basic oral communication skills (oral language and word knowledge) for reading and writing to be meaningful and to access content learning through listening and speaking.



***Understanding of the English language and how it may differ from their home language.***

ELs in the upper elementary grades and beyond (more so than very young learners) acquire meta-linguistic awareness of how the English language system differs from their home language, helping them to generate new expressions and self-correct. Knowledge about the basics of English grammar enables ELs to make meaning of text, once they have learned to decode and to “read” at the word level (broad language, text-level fluency, and comprehension), and to produce written work of their own (early writing).



***Code-based skills to engage with texts in service of learning grade-level content successfully.***

Phonemic awareness, a capacity to recognize and decode phonics patterns, including increasingly complex and irregular letter-feature patterns (phonemic awareness, decoding, phonics), enables ELs to read grade-level texts critical for content learning.



***How academic English works to convey meaning.***

In addition to decoding words, ELs develop an understanding of language that enables them to “break the code” of complex, connected text to understand grade-level content and to use similar complex structures in expressing their ideas. This includes developing reading accuracy and comprehension of connected text, beyond single words (Catts et al., 1999; Geva & Wiener, 2014).

## Guiding Principles for the Foundational Skills Development of English Learners

Foundational literacy skills instruction must not be designed as an instructional intervention, but rather as a critical component of Tier I literacy instruction to meet the needs of all students and the unique age- and grade-level needs of students whose first language is not English. To this end, English learners require a comprehensive and connected approach to foundational literacy skills development that involves grade-level instruction by knowledgeable teachers who build on the linguistic repertoire of ELs and can teach ELs how the English language system works to convey meaning.

Quality Tier I instruction is realized by teachers who are equipped with knowledge and resources to develop learning activities that model the use of the English language—especially disciplinary academic language—and center on meaning-making to build students’ understanding of grade-level content and how the English language works.

The interdependence of the various components of foundational literacy skills development results in overlapping principles for a comprehensive and connected approach to teaching these skills. Just as the expanded set of foundational literacy skills components build on one another and contribute in various ways to developing literacy, the six principles that follow also build on one another to guide the creation of engaging and well-tailored learning anchored in grade-level content. The resulting instruction cultivates an understanding of how the English language system works while building new knowledge and the related academic language.

### *Principle 1: The linguistic repertoire of ELs and registers of English are valued and leveraged.*

ELs are not monolithic. They speak over 400 different languages (U.S. Department of Education, 2017) and enter schools at varying grades with differing levels of literacy in their home language and levels of English proficiency. Children typically can hear and produce most of the sounds that are phonemically part of their first language (L1), depending on where they are in their L1 development. Effective foundational literacy skills instruction for ELs builds on the following assets —

- **Home language literacy.** Some English learners begin U.S. schools already literate in their first language, and thus, are familiar with the cognitive process and the mechanics of reading and writing. Instruction for these students, therefore, is not to learn how to read, but rather, to develop familiarity with the sounds of English and the ability to distinguish sounds that are different between their first language and English so they may successfully transfer their reading abilities to English.
- **Prior formal and informal learning experiences.** While the majority of ELs are U.S.-born and enter U.S. schools in kindergarten or the early elementary grades, a sizable number of ELs arrive in the U.S. and enroll later. English learners who enroll in the later elementary or secondary grades bring a wealth of informal knowledge and varying levels of literacy in their first language as well as varying levels of familiarity with English. By the time children learn to read, they usually have mastered most of the phonotactic characteristics of their L1 (i.e., the rules governing the possible phoneme sequences in that language). Prior formal and informal learning experiences can be leveraged when foundational literacy skills instruction is age-appropriate for students.
- **Vernacular dialects.** Like other languages, English has dialects associated with geographical regions, ethnic groups, and social classes. These dialects are distinguished by their sound system, grammar, and lexicon. Vernacular dialects, mostly used in oral communication and usually outside of school settings, are integral to children's sense of self. These dialects are the language of their homes and of the individuals with whom they may feel most connected. Foundational literacy skills instruction can leverage children's knowledge of vernacular dialects by facilitating knowledge transfer—helping children to distinguish differences in sounds, grammar, and lexicon to develop their ability to read academic English. (See related discussion under Principle 4.)
- **Metalinguistic awareness.** Learning more than one language system is a cognitively demanding metalinguistic process. Instructional approaches and teaching practices that recognize the metalinguistic process are better able to leverage the linguistic knowledge that ELs bring to school to develop foundational literacy skills in English. While young children in grades K-2, for example, can learn relatively easily how a new language works, it would not be reasonable to expect them to articulate meta-level grammatical explanations. Older students might be able to explain the linguistic differences, but the more important instructional goal should be for ELs to internalize and successfully use the conventional structures of the English language.

### So, what does this look like in a classroom?

- Teachers foster learning environments that support literacy and social-emotional development by being attentive to the sounds that ELs already know from their home language and in English through formal and informal observation of students' oral language production.
- Teachers, using their knowledge of the sounds that students know, plan opportunities to build on the repertoire of sounds, attending to the ways in which English differs from a student's home language (L1), as much as possible.
  - Teachers introduce or teach sounds in English that are familiar to students differently from sounds that are unfamiliar to students, recognizing that knowledge can be transferred between languages without “reteaching.”
  - Teachers help ELs to notice and make sense of the differences in how sounds combine to form the elements of words in English compared to the home language and recognize when students need additional processing time. For example, Spanish-speaking children might need more time to pronounce English words like “school” and “split” that begin with consonant clusters, or to hear words like “fourths” and “fifths” that end in consonant clusters.
- Teachers determine whether ELs know how to read in their home language and use this knowledge to plan opportunities for transfer to reading in English.
- Teachers recognize that ELs familiar with sound-symbol correspondence in their home language do not need to relearn this skill in English.
- Teachers recognize other English varieties as equally valid ways to communicate—not grammatically incorrect or improper forms of “standard” English—and use students' knowledge of these varieties as a bridge to develop literacy.
- When possible, students draw on their oral home language to convey their thinking.
- Students begin to internalize how English works as they become more familiar with English and try to convey their thoughts in English.



*Principle 2: Grade-level content serves as the anchor for foundational literacy skills development in service of mastering spoken and written academic language.*

In school, ELs begin developing receptive and productive oral English language skills in service of learning grade-level content. Oral language development involves learning how the English language system works in its oral and print forms and builds an understanding of how text conveys meaning. As ELs advance to engage with written forms of English, foundational literacy skills instruction must continue to be anchored in grade-level content to build content knowledge and students' capacity to understand and use the related academic English language in spoken and written forms. Teachers must not lose sight of the need to support students in learning academic content and expanding their background knowledge—moving toward comprehension of complex text. These knowledge-building activities cannot be delayed until children can decode, nor should they be subordinated to code-based skills; foundational literacy skills and content learning must be emphasized simultaneously (Fillmore & Snow, 1998). This means that teachers need to support ELs to acquire the content-associated academic English, enabling them to engage with grade-level content in both oral and written forms successfully.

**So, what does this look like in a classroom?**

- Teachers model using academic language or discourse when speaking and writing while leading instructional activities that build students' understanding of the grade-level content.
- Teachers orchestrate vocabulary instruction focused on words and their meanings within the context of academic content—not in isolation—to motivate language use in meaningful interactions that build an understanding of both content and the language used to express ideas. For example, teachers can teach the meaning of the word digestion alongside similar forms and concepts (e.g., *digest*, *ingest*, *digestive*, *indigestion*) and show how each word can be used within the grammatical conventions of English as part of a lesson about nutrition and the digestive system (Fillmore & Snow, 2018).<sup>9</sup>
- Teachers plan and implement sustained and in-depth instructional activities for students to play actively with ideas, ask questions that develop more complex understandings of concepts, and connect new learning with existing knowledge.
- Students use productive forms of language—speaking and later, writing—to interact with teachers and peers, using words within the context of grade-level content.
- Students have ample opportunities to practice decoding texts connected to the unit of study and grade-level content, helping them to understand how English works.
- Students apply newly learned words to form phrases and sentences to express thinking and new knowledge about grade-level content in spoken and written forms.

9 This approach allows ELs to learn individual words deeply for comprehension as well as precise usage.

### *Principle 3: Meaning-making and comprehension are prioritized.*

Comprehension is central to the English learning experience in schools because ELs are working to make meaning of peer interactions and of the newly acquired academic language related to grade-level content. It is key to both receptive and productive language development and use. Well-designed foundational skills instruction develops comprehension that equips learners to understand written and spoken language (Wexler, 2019, 2021). Familiarity with sounds should be developed in meaningful words, which should be developed in meaningful phrases embedded in meaningful sentences, connected to grade-level content (Fillmore & Snow, 2018). Learning about the English language system is facilitated through explicit instruction that reveals and explains how different elements of language connect to convey meaning and illuminates the connections between the oral and written forms of language.

Thus, learning decoding skills should be connected to understanding words, including those with multiple meanings. For students to learn the multiple meanings of any word, they need to encounter the word in a meaningful context, such as within phrases and sentences in the texts that they are reading to learn grade-level content. Learning the multiple meanings or uses of words requires students to learn how a word relates to similar forms, how it relates to other words and concepts, and how it can be used grammatically in meaningful phrases and sentences. This is particularly the case for Tier II words that can appear in multiple content areas, with very different meanings. In contrast, decontextualized teaching of Tier III words that are technical or “unusual” in texts with superficial definitions from students or teachers, is insufficient and ineffective for English learners (Fillmore & Snow, 2018).

#### **So, what does this look like in a classroom?**

- Teachers create instructional experiences that enable ELs to connect the learning of decoding skills to the understanding of words within the context of grade-level text.
- Teachers demonstrate explicitly how words in grade-level texts, connected to academic content, form meaningful phrases and sentences.
- Teachers introduce new vocabulary in related groups (i.e., word families) connected to the same general topic of grade-level content to facilitate meaning-making beyond a single word.
- Teachers incorporate activities or checks for understanding after students read to assess the extent to which students are making meaning and comprehending text.
- Teachers use a variety of texts (i.e., text sets) based on topics or themes pertinent to the grade-level content and facilitate meaning-making and comprehension among the texts.
- Teachers model for students and provide the linguistic resources needed to make connections between texts.
- Students learn how phrases convey meaning and begin to see that phrases and sentences are formed by distinct words.

### So, what does this look like in a classroom? (cont.)

- Students are reading along a continuum of increasingly complex text at the word and sentence level, all related to learning grade-level content.
- Students apply word formation strategies to generate new words using their understanding of how words are formed in English.

### *Principle 4: Mastery of academic English expands student linguistic identities.*

Foundational literacy skills instruction should foster students' linguistic identities through the development and acquisition of academic English. A comprehensive and connected approach to foundational literacy skills instruction for ELs intentionally develops the associated academic English language as part of students' evolving identities, enabling ELs to engage with grade-level content successfully. Students should not feel or believe that mastering academic English means that they must disparage or abandon other informal modes of communication, including distinct dialects of English or code-switching/translanguaging among multiple languages. "Standard" English (also referred to as mainstream American or academic English) is the language of academic texts and is used in schools, news broadcasts, and other formal settings.

Teachers usually are the main resource that English learners have for learning and using the multiple, complex features of academic English required for "long-term success in public school, completion of higher education, and employment with opportunity for professional advancement and financial rewards" (Rumberger & Scarcella, 2000, p. 1). They play an important role in leveraging students' linguistic assets and fostering an extension of their students' linguistic identities through acquiring and using the English required for academic and professional endeavors.

### So, what does this look like in a classroom?

- Teachers foster an understanding of the types of English registers used in different settings and build the capacity of ELs and other students to use academic English—not as a replacement but as an additional variety.
- Teachers build students' capacity to use academic English by noticing distinctions between vernacular and standard English and provide opportunities to practice appropriately applying their English language knowledge and skills to different contexts (e.g., social, academic, informal, formal) (Scarcella, 2003).
- Students who speak English varieties understand how to apply their linguistic assets to acquire academic literacy to comprehend complex grade-level text.
- Students view mastery of the "standard English" used in formal settings as an expansion of their linguistic repertoire and are empowered to leverage all of their linguistic knowledge to comprehend and make meaning of grade-level texts.
- Students practice and use the newly learned academic English to communicate their thinking about the grade-level content, which may be formulated initially in the other languages that they know.

### *Principle 5: Language-based and code-based skills are developed simultaneously.*

Language-based skills instruction provides students with an understanding of how the formation of English words, phrases, and simple clauses creates larger structures to convey ideas in both spoken and written form. This enables children to recognize sequences of words that function as meaningful units while decoding them; only then can they “hear” (in their heads) what they are reading and imagine themselves voicing the words (Fillmore, 2017). For students who first hear English in schools, instruction focused on language-based skills means intentionally attending to the immediate need to build oral language skills in English through meaningful interactions and activities emphasizing listening and speaking—for purposes of learning grade-level content—that build an understanding of the structures and syntax of English. Connecting oral language development, other language-based skills, and content learning to code-based skills (decoding, phonemic awareness, etc.) development deepens English learners’ understanding of how English works.

ELs benefit from language-based skills instruction to build new vocabulary and develop phonological sensitivity, regardless of the age at which they begin to learn English. Teaching ELs to decode print forms of English requires contextualized and connected code-based skills instruction. Specifically, instruction in print concepts and phonological awareness supports phonics knowledge, while morphological instruction extends students’ word recognition and fluency instruction automatizes text reading and builds comprehension.

#### **So, what does this look like in a classroom?**

- Teachers model for English learners and enable them to practice listening and speaking in English, building their capacity to distinguish English sounds within syllables and words, and ultimately, to develop oral language skills.
- Teachers attend to oral language development, whether ELs are in the early grades or in the secondary grades, to teach its connection to written forms of English, revealing how words form phrases and sentences to convey ideas.
- Teachers strategically use read-alouds to expose ELs to the language of academic texts and to make evident the connection between spoken language and written text, especially when ELs cannot yet read complex grade-level texts independently.
- Teachers support ELs through interactive and shared reading activities that highlight important connections for using decoding skills to understand words, sentences, and text connected to grade-level content.
- Students develop familiarity with the sounds of English through observation and communicative interactions with their teacher and English-speaking peers.
- Students engage in conversations about text connected to grade-level content while receiving explicit instruction on how spoken words are represented in written form.

### So, what does this look like in a classroom? (cont.)

- Students use words to form phrases and sentences to convey ideas about complex texts connected to grade-level content.
- Students engage with early writing activities that build their ability to —
  - write letters,
  - write their name, and
  - use phoneme-grapheme relations or orthographic rules to write words (spelling).

*Principle 6: Comprehension of text is signaled by students' ability to read with the proper expression to convey meaning, not solely speed and accuracy.*

Fluency to accurately convey meaning beyond a single word requires ELs to apply all their newly acquired knowledge about English—sentence structures, vocabulary, and phonemic awareness. Foundational literacy skills instruction also aims to develop English learners' appropriate use of prosody and intonation patterns when reading aloud, which reflects their ability to decode with fluency and to chunk linguistic information into meaningful phrases or connected text (Geva & Ramírez, 2016). Because English learners need to play catch-up with their English oral language skills development, foundational literacy skills instruction focused on developing fluency must intentionally include learning about phrases (i.e., meaningful grammatical units) and learning how intonation patterns and text-level fluency convey meaning.<sup>10</sup>

### So, what does this look like in a classroom?

- Teachers model how to read with proper expression to convey the meaning of phrases and other connected text.
- Teachers provide opportunities for ELs to practice prosody and intonation, building their understanding of how differences in intonation result in conveying different meanings.
- Teachers listen to how students read text with a focus on proper expression to convey meaning as a preliminary indicator of comprehension.
- Teachers apply checks for understanding to determine whether a student who has read aloud understands the meaning of the text, even when speed and accuracy approach the expected levels for English-proficient students.
- Teachers are able to discern children's reading ability (decode and understand text), despite difficulties with pronouncing certain sounds or sound combinations in English.
- Students notice and begin to internalize the intonation and language patterns used to convey meaning when speaking and when reading text.

<sup>10</sup> The National Reading Panel (2000) indicated that reading fluency also involves "the ability to group words appropriately into meaningful grammatical units for interpretation" (p. 3-6).

## CHAPTER III

# What Teachers Need to Know about Language: A Linguistics Primer

Foundational literacy skills instruction for ELs—encompassing the necessary early literacy, oral language, and code-based skills—is multi-faceted and requires specialized knowledge in a variety of areas, including second language acquisition, linguistics, literacy foundations and development, and early childhood development. Teachers who have not experienced learning a second language may, as a result, be unfamiliar with the associated metacognitive and metalinguistic skills ELs use to learn English. The knowledge of how English works in relation to other languages, including understanding how English sounds are produced, and the unique features of English phonology, phonics, and syntax, are important to structure the learning experiences ELs need.

The central role of teachers should be supported by comprehensive curriculum and curated teacher resources relevant to addressing the linguistic complexities of foundational literacy development for ELs.

While individual teachers might not have expertise in all areas, cross-disciplinary teams of experts in English language development, early literacy, and English language arts can help ensure all relevant aspects are considered in planning effective foundational literacy skills instruction for ELs. The central role of teachers should be supported by a comprehensive curriculum and curated teacher resources relevant to address the linguistic complexities of foundational literacy development for ELs. Teachers will benefit from understanding the important role that comprehension and meaning-making play in the development of oral language and foundational skills for literacy.

Knowledge of the English language structure, linguistic distinctions from other languages, and an understanding of common linguistic challenges for ELs—in addition to the next instructional move required to teach how English works—are key for teachers to design effective foundational literacy learning experiences. Language experts have explained how a fundamental knowledge of linguistics can be helpful for teachers to spot and understand issues of language use that need to be addressed through their instructional practice (Fillmore & Snow, 2018). If educators lack the awareness or understanding of how early literacy within the context of second language development occurs or are not provided with the research-based tools and resources to gain this awareness and understanding, they might not address the unique developmental needs of ELs or may erroneously assume students have language and speech development challenges (Fillmore, 2017).

In this section, we elaborate on the specific topics<sup>11</sup> teachers and other educators should know. Information is organized around the two critical components for literacy development—(1) language-based skills (including oral language) and (2) code-based skills.

<sup>11</sup> Reference Fillmore and Snow (2018) for complete descriptions of the listed topics.



## Language Development

Generally, children develop their understanding of language through exposure to larger units of language (e.g., phrases, sentences). For example, families/caregivers typically speak with children using larger units of language. When students who speak another language hear English for the first time, they seek to understand the meaning of phrases and sentences. In school, ELs interact with their English-speaking peers and teachers and work to understand English phrases, sentences, and discourse.

### The Units of Language

Language is composed of units of different sizes. From small to large, they are—

- **Sounds:** Units of speech, also called *phonemes* if they are a unit of sound that does not have any inherent meaning alone. For example, the word *hat* has three different phonemes /h/, /a/, and /t/.
- **Morphemes:** The smallest unit of meaning in a language (e.g., the word *hat* or the -s at the end of *hats* that indicates “more than one hat”).
- **Words:** A sound or combination of sounds, or one or more morphemes, that has meaning when spoken or written.
- **Phrases:** A group of two or more words that forms a meaningful unit within a clause or sentence.
- **Clauses:** A group of words that contains a related subject and verb. Clauses can, but do not always, function as independent sentences.
- **Sentences:** A set of words that form a basic unit of language that expresses a complete thought. Sentences can contain one or more clauses.
- **Discourse:** Connected speech or writing that is longer than a single sentence (e.g., paragraphs).

In school, teachers guide English learners to learn how the smaller units of language in English work to support comprehension and to generate words, phrases, and sentences in English, as well as engage in discourse. Teachers are better able to design and lead learning activities to develop oral language when they understand what can be challenging for ELs, such as making meaning of structures and sounds that are different from their home language.

## Cross-linguistic Comparisons and Metacognitive Processes

Knowing that young children, including infants, exposed to and learning multiple languages are capable of remarkable levels of differentiation, control, and subsequent communicative competence between languages (Byers-Heinlein et al., 2017; Lanza, 1992; Paradis & Genesee, 1996) can mitigate the often-expressed concern by educators that ELs will be confused when learning the new language system of English. Children as young as two years of age can discern “switches” between languages (Byers-Heinlein et al., 2017). Furthermore, bilingual children around this age can recognize communication breakdowns due to language differences (as opposed to not speaking clearly or audibly enough) and make appropriate corrections by switching to another language to the extent possible given their language skill (Comeau, Genesee, & Mendelson, 2007). When teachers observe ELs switching between languages, they are witnessing the metalinguistic process to find the applicable language structures to communicate.

Teachers need to know how to support their students’ cross-linguistic exploration and learning, even when they do not know a student’s primary language. Exploration of cognates, for example, extends beyond merely providing cognates. Cognate exploration can be extended to highlight morphological structures in Spanish and English for Spanish-speaking children in order to expand their English vocabulary. For example, Spanish speakers could benefit from learning that a Spanish noun that ends in *-idad* almost always has an English cognate that ends in *-ity* (e.g., *natividad* and *nativity*, *pomposidad* and *pomposity*, *curiosidad* and *curiosity*). Understanding these patterns and rules provides a way for Spanish-speaking children to transfer their knowledge of vocabulary in Spanish to cognates in English. Ideally, teachers would have enough knowledge about the history of English or the roots of English words to be able to determine whether an English word is likely to have a cognate in Spanish or other languages (i.e., make basic cross-linguistic comparisons). Because it is unrealistic for teachers to know the cognates and the morphological structures of every major language spoken by ELs, instructional materials can help teachers to leverage students’ home language (L1) knowledge (e.g., as related to cognates) and facilitate transfer for building language and literacy skills in English.

## Sentences and Discourse

The larger units of language are sentence and discourse structures, which teachers can demystify for English learners who are learning these new structures of the English language.

- **Sentence structure** is defined by a set of rules and patterns for combining words. The pattern in which words are organized into sentences depends on the category to which the words belong — *word class* or *parts of speech*. Teachers help students to understand sentence structure by talking about how sentences are constructed, the types of words and word groups that make up sentences, and the functions of these words and word groups within sentences and in larger contexts (DeCapua, 2010). For example, the order of multiple adjectives is not random. Typically, native English speakers intuitively know the order in which multiple adjectives should occur (DeCapua, 2010). English learners, however, need teachers to explain this order and provide ample practice to internalize the rules that will allow them to clearly convey their thinking in well-formed sentences. The focus should be on the function of the words in the sentence (e.g., to name, describe, etc.) and not on what they are called (e.g., noun, adjective, etc.).

- **Discourse structure** includes linguistic forms and meanings, as well as norms defined by culture or discipline that contribute to coherent communication. For example, in speech, knowledge of discourse enables a student to start a conversation by using appropriate greetings, such as, “Hi! How are you?” (Scarcella, 2003). For students new to English, teachers need to teach the unique discourse of the English language explicitly to help students communicate in ways that are easily understood and to make meaning of what they hear and read. The discourse component not only includes knowledge of the basic discourse devices used in ordinary English but also specific introductory features and other organizational signals. In reading, these discourse features help students to gain perspective on what they read to understand relationships and to follow logical lines of thought. In writing, these discourse features help students to develop their theses and to provide smooth transitions between ideas.

## Stress Patterns

Speech is heard as a continuous stream of sounds without clear-cut borderlines between them. People do not speak in separated words; they speak in logically connected groups of words. Distinguishing each word can be a challenge for English learners. Stress and rhythm are key to understanding the English spoken language and being understood when speaking English. Every word of two or more syllables, when said alone, has a stress on one of its syllables—this is called *word stress*. In connected speech, however, some words lose their stresses while others keep their stresses. It is important for teachers to make English learners aware of how stress influences meaning in sentences (Cai, 2008; Sanders & Neville, 2000).

**Sentence stress.** The first function of sentence stress is to indicate the important words in the sentence, from the point of view of grammar, meaning, or the speaker’s attitude (Cai, 2008). The second function of sentence stress is to serve as the basis of the rhythmical structure of the sentence. The rhythm of English speech is formed by the recurrence of stressed syllables at more or less regular intervals of time and by the alternation of stressed and unstressed syllables. Differences in this stress pattern can signal the importance of a particular word. For example, in the phrase, “every white house,” the words *white* and *house* receive roughly equal stress. However, when we refer to the official home of the U.S. president, “the White House,” the word *White* is usually stressed more heavily than *House* (Nordquist, 2019). By changing the stress pattern of words in phrases and sentences, the meaning changes. Teachers will need support materials to explain and make evident to English learners these word stress patterns within larger units of language—

- Words usually stressed in unemphatic speech are *content words* (e.g., nouns; adjectives; numerals; notional verbs; adverbs; demonstrative, interrogative, and indefinite pronouns; and possessive pronouns functioning as nouns).
- Words that are usually unstressed in unemphatic speech are *form words* (e.g., auxiliary and modal verbs; forms of the verb ‘to be;’ monosyllabic prepositions; monosyllabic conjunctions and articles; personal pronouns; possessive pronouns—except absolute pronouns: mine, hers, etc.; reflexive pronouns; reciprocal pronouns; and relative pronouns).
- To convey special emphasis or contrast, any word in a sentence may be logically stressed.

The set of sentences in Table 4 illustrates the changing meaning given the specific word stressed (marked by `) in the sentence. Native English-speaking children typically learn these patterns in their early years before school.

Table 4. Influence of Stress Patterns on Meaning

Sentence with specific words stressed ( <b>bold</b> )	Implied meaning
We <b>heard</b> <b>John</b> <b>talking</b>	Plain statement of fact
We <b>heard</b> John talking	Implied contrast — “but we didn’t see him”
We heard <b>John</b> talking	Implied contrast — “but didn’t hear Mary”
<b>We</b> heard John talking	Implied contrast — “but others didn’t”
We heard John <b>talking</b>	Implied contrast — “but we didn’t hear him singing,” for example

English learners need to practice hearing spoken English with these different stress patterns to make meaning and produce language.

Similarly, teachers can help English learners understand the instances in which (a) auxiliary and modal verbs and (b) prepositions are stressed, and the cases in which (c) content words are not stressed by providing practice through activities and conversations that allow ELs to internalize the logic of the patterns (Cai, 2008).

**Word stress.** Word-level stress is influenced by the context and characteristics (and function) of the word to inform meaning (Nordquist, 2019). Pointing out and explaining these varied stress patterns can help students distinguish the meaning of these related words that may otherwise appear to be the same. For instance, in the statement, “We are going to **record** a **record**,” the two highlighted words are spelled exactly the same, yet the words are stressed differently resulting in different meanings. The first **record** is stressed on the second syllable (representing a verb), whereas the second **record** is stressed on the first syllable (representing a noun). In some languages, stress is fixed and always falls on the same syllable position within words. (See further explanation of syllable stress patterns in the next section.)

## Vocabulary: Principles of Word Formation

Word formation in English follows regular principles or patterns for how word parts (morphemes) can be combined. Teachers need to know these principles to help students parse or decode newly encountered words into their component parts (Fillmore & Snow, 2018), thereby helping ELs and less fluent readers understand the language irregularities that may pose challenges. This includes building knowledge about *words*—

- **semantics**—the ability to both understand and produce words; and
- **syntax**—*word order* and *grammatical rules*, which will allow teachers to accelerate vocabulary acquisition as students learn about *patterns* among several words.

**Comprehension.** Meaning-making remains central to vocabulary instruction, as vocabulary acquisition happens most easily in context and when related to topics of interest to children. Vocabulary instruction can be more effective if it recognizes the importance of holding conversational interactions with students about the written language. The teacher’s role, then, is to create learning experiences that expose how the

language works to create meaning in a vivid way, encouraging students to read texts on compelling topics. For second-language learners, Fillmore and Snow (2018) recommend staging exposure to new vocabulary in related groups (i.e., word families) because many words are more meaningful when they are understood in connection with other words related to the same general topic. Moreover, learning about connected words ensures that meaning-making exists beyond a single word. This also allows ELs to learn several words at once. For instance, discussion about vocabulary related to *buying* should include vocabulary about related concepts, such as *selling*, *paying*, *money*, and *getting change*.

**Morphemes.** The morpheme is the smallest unit that expresses a distinct meaning. *Bound morphemes*, because they do not occur alone, can be —

- an **independent or free unit**, such as *jump*, *dog*, or *happy*; or
- a **prefix or suffix attached to another morpheme** to modify its meaning, such as *–ed* or *–ing* for verbs (e.g., *jumped*, *jumping*), plural *–s* or possessive *–s* for nouns (e.g., *dogs*, *dog’s*), or *–ly* or *–ness* added to adjectives to turn them into adverbs or nouns (e.g., *happily*, *happiness*).

The rules of the free and bound morphemes in English do not apply to languages that use other structures to show meaning, including plurality or past tense. Teachers need to understand that grammatical units, such as bound and free morphemes, words, phrases, and clauses operate quite differently across languages. The differences can be significant. For example —

- In Hungarian, the noun endings express locative meanings, which in English are expressed through prepositions, such as *in*, *on*, and *between*. In other words, the Hungarian bound morphemes perform the function of prepositions in English.
- In Chinese, plurality and past tense are typically expressed by separate words, such as *several* and *already* rather than bound morphemes (*–s* and *–ed* in English). These words may be omitted if these meanings are obvious in context. A native Chinese speaker who treats plurals and past tense as optional rather than obligatory in English would be applying the rules of Chinese. It would be important for teachers to recognize missteps like this as logical.

**Syllable stress patterns.** Students can learn groups of words together, allowing teachers to point out the stress patterns of word formation and the rhythms of English speech created by the degree of emphasis (or lexical stress), given a sound or syllable in speech (Cai, 2008). Examples include: SYNonym, syNONymy, synoNYMic; PHOtograph, phoTOgraphy, photoGRAPHic; ANalog, aNALogy, anaLOGic, etc. English learners have internalized the stress patterns of their own home language. Therefore, teachers need to know how the lexical stress patterns in students’ home languages may differ from the lexical stress patterns in English. In English and Spanish, for example, word stress can vary freely and convey lexical distinctions (e.g., English: *discount* [ /’di-,skaʊnt/ or /diskant/] versus *discount* [/di-’skaʊnt /]; Spanish: *sábana* (sheet) versus *sabana* (savannah)). In other languages, however, stress is fixed and always falls on the same syllable position within words (e.g., French, Hungarian). For instance, Hungarian words are stressed on the first syllable; Swahili words are stressed on the penultimate syllable. Therefore, learning English stress patterns might be more challenging for some ELs, depending on their home language (Skoruppa et al., 2011).

## Syllabic System

The linguistic knowledge that ELs have about syllabic structure from their home language (L1) enables the syllabic system to be a key entry point to new languages, including English. At the heart of any meaningful comparison of sound systems is the syllable. Depending on the L1, syllables may be similar to those in English, or they may be very different, influenced by the constraints on allowable syllables. Nonetheless, **the syllable is a valid unit of comparison across the languages spoken by ELs.**

Teachers should know that English has many more combinatorial possibilities of syllabic structure compared to Japanese, Spanish, Korean, and especially Hawaiian. For instance, Spanish has, in addition to the syllables listed for Japanese, a limited set of consonant-consonant-vowel (CCV) and consonant-consonant-vowel-consonant (CCVC) structures. In the case of CC onsets, the first can be a stop: /p, t, k, b, d, g, f/. The second C is either /l/ or /r/ (e.g., *planta, pronto, tren, frito, clima, crema, brinca, drástica, grande*). The consonant codas are even more limited: /s, z, r, n, d/ (e.g., *otros, alto, carta, ciudad, grande*). Very rarely are CC codas found, and in those rare cases, the second C is always /s/ as in *trans-crip-ción*.

For Spanish-speaking children, the /pl/, /pr/, /tr/, /fr/, /cl/, /gr/, and /dr/ blends may pose less of a challenge compared to other CC blends in English. For additional information about the syllabic system of English compared to other languages, see Appendix A.

## Phonemes and Sounds

Sequences of sounds have no inherent meaning. Accepted *language-dependent* conventions determine the meaning associated with the sequence of sounds. In other words, a sequence of sounds that is meaningful in English may mean nothing at all—or something quite different—in another language. As teachers teach these conventions, they help students to discern meaning from the sounds. Each language has an inventory of phonemes that differ from other languages.

- Phonemes can be identified by whether a change in sound makes a difference in meaning. For example, in English, *ban* and *van* are two different words with distinct meanings. Therefore, [b] and [v] are different phonemes in English. In Spanish, however, the difference between [b] and [v] does not change the meaning; [b] and [v] are not Spanish phonemes.
- Dialects of English show different phonemic patterns as well. In southern U.S. varieties, for example, the vowels in *pin* and *pen* sound the same, but in northern varieties, they sound different and orally indicate the different meanings of the two underlying words. Contrasting phonemic patterns across languages and dialects can impact what words children understand, how they pronounce words, and how they might spell them.



## CHAPTER IV

# Considerations for Selecting Instructional Materials to Teach Foundational Literacy Skills to English Learners

Oral language development facilitates literacy acquisition. English-proficient children, in English-based instruction, can directly transfer their knowledge of English sounds as they learn to map sounds to print in early literacy development. Because English learners may have no or limited exposure to English prior to entering school, they need to develop critical oral language and code-based skills in English that will facilitate their development of foundational literacy skills. Foundational literacy skills development requires systematic and explicit instruction of both oral language and code-based skills, anchored in grade-level content with a focus on developing students' meaning-making and comprehension of content as well as how the English language works.

## EL-related Considerations for Instructional Materials to Support Foundational Literacy Skills Instruction

Instructional materials can support teachers in designing and delivering effective foundational literacy skills instruction to English learners. For students, materials should be connected in coherent ways to grade-level curriculum, to ensure that ELs develop literacy in service of learning new content knowledge, regardless of the grade at which they begin U.S. schools. For teachers, materials should include relevant information, supports, and flexibility for decision-making to address the different experiences and needs of EL students.

The specific ways instructional materials can support teachers to develop foundational literacy skills among ELs, aligned with the six principles for a comprehensive and connected approach, include—

- ✓ **Supporting receptive and productive oral language skills development.** ELs need to distinguish the sounds in English within syllables and in words to communicate proficiently. Teacher-led classroom activities are the main opportunity for ELs to practice listening and speaking in English, particularly in academic English. Instructional materials can support teachers in planning both receptive and productive language practice opportunities for oral language development.
  - **Receptive (listening, reading) skills** help students to understand what is said to them, what is being read to them, and what they will eventually read independently.
  - **Productive (speaking, writing) skills** enable students to form English words, phrases, and simple clauses to communicate in spoken or written form.
- ✓ **Anchoring learning in the meaning-making of the grade.** Grade-level materials that support code-based skills development, such as phonemic awareness, phonics, and decoding, help ELs to understand how English works to communicate concepts that they are learning in content classes. Foundational skills materials need to be age-appropriate, especially for ELs who arrive in the later grades.

- ✓ **Implementing purposeful activities connected to academic content and responsive to student needs.** Activities in instructional materials should purposefully aim to move students along in their learning of content as well as literacy development.
- ✓ **Defining a scope and sequence.** Materials should provide a general scope and sequence by grade and experience with literacy (in any language) for the overall development of language- and code-based skills. If possible, resources should include recommendations for sequencing foundational skills instruction to address specific challenges posed by contrasts between English and a student's home language (i.e., contrastive linguistics).
- ✓ **Highlighting key linguistic differences between major languages.** Teachers unfamiliar with the home languages of ELs can be supported by materials that indicate the key linguistic differences that require attention to help students learn the sounds, letter patterns, and the structure of English (e.g., as informed by contrastive analysis) in addition to the instructional implications related to these differences. For example, guidance should help teachers recognize which skills may require continued practice and clarification and, in contrast, which cross-linguistic sounds or conventions are more easily transferable to English, and thus require less practice.
- ✓ **Providing strategic and ample opportunities for ELs to apply, within the context of the grade-level content, the developing foundational skills.** These opportunities relate to the following components —
  - **Word knowledge.** Materials support instruction of word meaning, word formation, and word generation within the context of phrases and sentences.
  - **Phonological and phonemic awareness.** Materials help build phonological awareness for recognizing and decoding phonics patterns through systematic phonics instruction that strategically builds phonemic awareness of increasingly complex and irregular letter-feature patterns, informed by contrastive linguistics.
  - **Knowledge of phonics and decoding.** Materials support the learning of the predictable relationships between phonemes and graphemes — and that these relationships can be used to decode or read words in English.
  - **Print knowledge.** Materials include brief yet effective activities about print knowledge specific to English and guidance for teachers to know distinctions from other languages.
  - **Early writing skills.** Materials include ample opportunities, early on, to begin practicing the skills to write.

## Overview of Selection Process for Foundational Skills Instructional Materials

Most of the features listed above are helpful in teaching foundational literacy skills to all students, especially in the early grades. Thus, selecting materials for ELs may be part of an existing selection process for general instructional materials. The selection process described in this section recognizes that materials for teaching foundational skills may be acquired as part of a comprehensive literacy program or as supplementary materials to support ELs specifically, in compliance with district- and/or state-required procurement and text adoption procedures. The processes for the review and evaluation of instructional materials for foundational literacy skills that are responsive to EL needs should include —



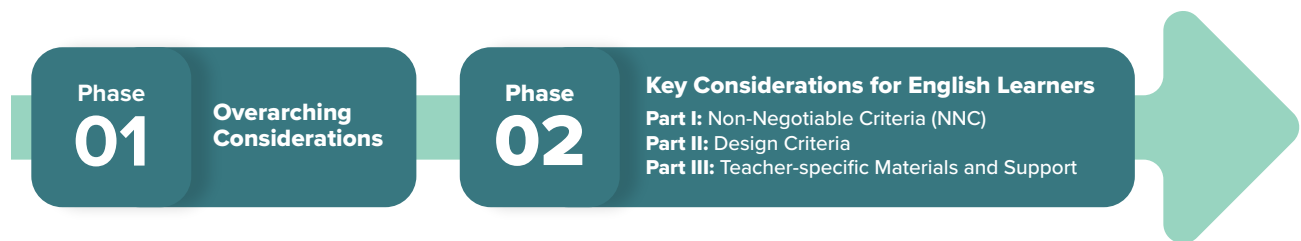
Establishing a review and selection committee that is multi-disciplinary, comprising EL instructional staff (e.g., classroom teachers, coaches, and instructional leaders), literacy educators, and other relevant staff, such as professional development coordinators.



Creating an evaluation rubric that integrates the criteria of the RFP or procurement call, district-identified needs, and elements from the criteria matrix presented in this document.

The evaluation of instructional materials entails two general phases of review, each of which can be considered a gateway through which materials are winnowed down to a manageable number that can be examined against the rubric (i.e., criteria matrix) to determine the materials that best meet the needs of English learners. (See Figure 3.)

Figure 3. Phases of the Instructional Materials Review Process



## Phase I: Overarching Considerations

The process begins with clearly establishing the programmatic context within which the instructional materials will be used to support foundational literacy skills instruction for English learners. Establishing this context entails defining the overall approach for English language development (ELD) and English language arts (ELA), as these shape the curricular context for foundational literacy skills instruction.<sup>12</sup> Overarching considerations also include programmatic factors that determine *by whom* and *how* foundational literacy skills instruction will be provided to ELs.



**Step 1: Define the district context.** To select and implement instructional materials appropriately for ELs, the selection committee needs to define the context within which the materials will be used. This context includes —

- **the school district's vision and desired or intended outcomes** for English language development or English language acquisition, including in foundational skills;
- **the instructional context** for the types of educators implementing the materials — classroom teachers, ESL/ELD teachers, interventionists, tutors, etc.;
- **how foundational skills instruction fits into ELD instruction** for ELs as well as the English language arts curriculum; and
- **how the foundational literacy skills materials are expected to work or align with instructional materials** for ELD and ELA instruction.



**Step 2. Define the program features or approach for foundational literacy skills instruction (in general and specifically for ELs).** Programs for foundational literacy skills instruction — part of an EL's language instructional program or English language arts curriculum — are defined by a number of considerations that influence the purpose, uses, and users of instructional materials. These considerations are —

- **Program model for ELs or instructional approach for ELD.** What is the program model and instructional approach for ELD?
- **Integration of foundational skills.** How does foundational skills instruction fit into the overall literacy and/or English language development program?
- **Student grouping.** How will students be grouped for foundational literacy skills instruction — by grade level, English proficiency level, home language, etc.?
- **Duration.** How many minutes of instruction are allocated for foundational skills instruction? How does it fit into the overall literacy and/or English language development program?
- **Instructor(s).** Who will teach foundational skills — bilingual teachers, ESOL teachers, general education teachers with ESOL endorsement, content/support specialists, tutors, etc.?
- **Assessment.** What evidence of learning will be collected? What is the type, purpose, and time needed for assessments; and what structures exist for collecting, analyzing, and using assessment data, and supporting teachers in responding to assessment results?

<sup>12</sup> This framework for foundational skills development is most suitable for districts that have implemented ELA and ELD approaches consistent with the Council's *Re-envisioning English Language Arts and English Language Development for English Language Learners* framework.



**Step 3. Define district needs.** Building on information from Steps 1 and 2, the district needs to determine the type of instructional materials necessary to implement effective foundational literacy skills instruction within the district's context. Based on the instructional context, the selection committee needs to consider —

- **materials required to meet the intended objectives** for foundational skills instruction for ELs;
- **materials required for specific grade levels and learning needs** (e.g., K-2 ELs arriving in the early grades, older ELs enrolling in the secondary grades, ELs with disabilities, ELs with limited/interrupted formal education (SLIFE), etc.); and
- **resources needed for successful implementation** of the materials or programs (e.g., professional development, coaching, consumable supplies, technology, etc.).



**Step 4. Assess the underlying approach for EL instruction and the validity of proposed materials.** The district also needs to examine whether the proposed materials reflect the adopted theory of action and guiding principles for foundational skills development—and whether the materials were designed specifically for English learners.

Review committees will want to understand the approach for EL instruction and confirm claims that materials have been designed and validated for use with ELs by considering the following types of questions from Council of the Great City Schools (2017)—

- Do materials and their approach reflect an understanding that ELs need to develop foundational skills within the context of building content knowledge?
- Do materials acknowledge that ELs bring linguistic knowledge that can be leveraged to learn new language systems?
- Does the underlying approach acknowledge and address ELs' need for explicit instruction around additional components of foundational literacy skills, or does the approach only include components recommended for monolingual English speakers? (See Chapter II for the components of foundational skills in a comprehensive and connected approach.)
- Which researchers were included in the design phase of the materials, and what was their level of involvement (e.g., authored portions of the materials, wrote commissioned papers, supplied the research, etc.)?
- Who wrote and reviewed the materials, and what was the contributor's level of expertise with second language development and foundational literacy skills development specifically for ELs?
- Were the materials validated for use with ELs? Were ELs included in pilots conducted during the course of development? For which types of students and learning needs were the materials developed?



**Step 5. Determine alignment with the district’s approach to ELA/ELD and foundational skills instruction for ELs and student needs.** Materials can more effectively support foundational skills development for ELs when they are aligned or consistent with the district’s ELA/ELD and foundational literacy skills instructional approaches defined in **Steps 1 and 2 of Phase I**. Questions to consider include —

- Is the theory of action about second language acquisition and foundational skills development for ELs underpinning the materials aligned with the district approach?
- Are the expectations for English learners aligned with district expectations?
- Are the characteristics and needs of ELs in the school or district like those for whom the materials were designed?



**Step 6. Decide which materials advance to Phase II.** Materials that are deemed by the selection committee to meet the considerations in Steps 4 and 5 would advance to Level II of the review process based on the key considerations for ELs articulated in the design criteria matrix.

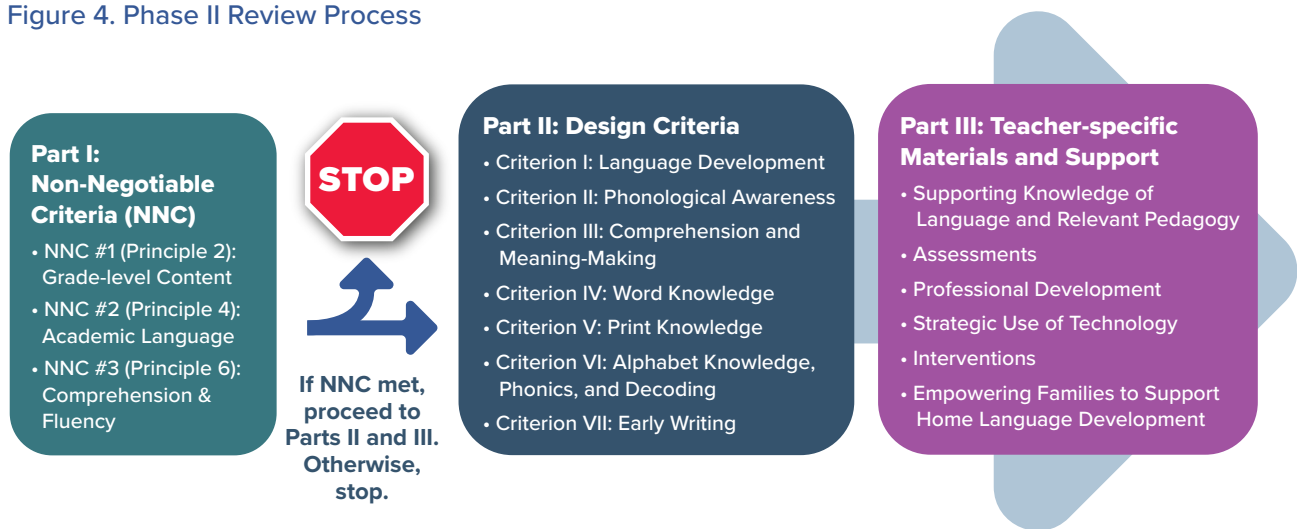
## Phase II: Key Considerations for English Learners

The criteria for selecting instructional materials reflect the six principles described in Chapter II of this document. (See Figure 4.)

- **Part I.** Principles 2, 4, and 6 comprise the non-negotiable criteria (Part I) that are critically and uniquely important for English learners. Materials that fail to meet the non-negotiable criteria would be considered incomplete or insufficient to address the important aspects of foundational literacy skills development for English learners.
- **Parts II and III.** Materials that meet the non-negotiable criteria would advance to the subsequent in-depth evaluation focused on the components of foundational skills identified in the framework — Parts II and III. In the design criteria matrix for Part II, the correspondence of the criterion indicators to Principles 1, 3, and 5 is shown in the columns beside each indicator. Finally, Part III includes considerations for the review of teacher-specific materials and support based on the principles of the framework.



Figure 4. Phase II Review Process



## Design Criteria Matrix

### Part I: Non-Negotiable Criteria (NNC)

The illustrative considerations corresponding to each non-negotiable criterion provide examples of the ways that materials can meet the criterion. Publishers and reviewers should note that —

- the illustrative considerations are not comprehensive and
- satisfying all of the listed considerations does not necessarily mean the materials optimally satisfy the criterion.

Non-Negotiable Criterion and Illustrative Considerations	Rating (Meets or Does Not Meet)
<p><b>Non-Negotiable Criterion 1 [Principle 2]:</b> <i>Grade-level content serves as the anchor for foundational literacy skills development in service of mastering spoken and written academic language.</i></p> <ul style="list-style-type: none"> <li>• Materials are comprised of activities that are designed to connect to grade-level content coherently.</li> <li>• Materials feature targeted literacy skill exercises that are strategically and purposefully placed.</li> <li>• Materials incorporate strategic timing (i.e., when they occur and the duration of activities) for targeted literacy skill-building exercises to avoid these becoming decontextualized, rote exercises.</li> <li>• Materials do not focus on pre-teaching a list of words for vocabulary development, and instead, recognize vocabulary development as an integral and deliberate part of grade-level instruction across content areas that must be connected to grade-level content. [Word Knowledge]</li> <li>• Materials emphasize, as the main purpose, understanding content of the grade level in sentence-level activities and fluency exercises for learning to read both literary and informational text. [Decoding and Phonics, Comprehension]</li> <li>• Materials remain of high interest for students of all ages, containing content and activities that are age- and grade-appropriate to ensure ELs are not delayed in accessing grade-level content, even when they enroll in U.S. schools at the secondary level.</li> </ul>	

## Non-Negotiable Criterion and Illustrative Considerations

## Rating (Meets or Does Not Meet)

**Non-Negotiable Criterion 2 [Principle 4]: *Mastery of academic English expands student linguistic identities.***

- Materials recognize and explicitly emphasize more than just the Tier III vocabulary and include the Tier I and II words, which may be easier for English speakers and more unfamiliar or confusing for ELs. [Word Knowledge]
- Materials explicitly teach the format of textbooks and informational text, which may be unfamiliar to ELs, within the context of a particular lesson or unit. This is particularly relevant for ELs who arrive in later grades. [Print Knowledge, Early Writing]
- Materials familiarize students who have differing levels of familiarity with the various genres and types of books (e.g., picture books, novels, non-fiction, textbooks, etc.) with the key parts/features of the genres/books based on what is grade- and age-appropriate and necessary for the type of book/s used for a particular lesson. [Print Knowledge]
- Materials build on oral storytelling traditions and provide opportunities for students and families to share with the class. [Oral Language]
- Materials encourage inventive spelling as a means of practicing and refining phonological awareness and phonics skills with support for teachers to help students transition from inventive spelling to formal spelling. [Print Knowledge, Decoding and Phonics]
- Materials incorporate works by a diverse array of authors, representing many cultures, linguistic backgrounds, and perspectives, to allow students to see themselves in the characters, stories, histories, and language.

**Non-Negotiable Criterion 3 [Principle 6]: *Comprehension of text is signaled by students' ability to read with the proper expression to convey meaning, not solely speed and accuracy.***

- Materials support the development of BOTH word-level and text-level fluency, providing examples that clearly distinguish between these two. [Decoding and Phonics]
- Materials provide repeated opportunities to listen to and practice fluent reading of grade-level text with an emphasis on comprehension without an overemphasis on speed or accuracy. [Oral Language, Comprehension and Meaning-Making, Decoding and Phonics]
- Materials include visually supported explanations and activities for students to practice word and text-level fluency. [Oral Language, Decoding and Phonics]
- Materials, when incorporating sentence-level activities and learning to read text connected to grade-level content with fluency, build understanding of both literary and informational texts across content areas. [Oral Language, Comprehension and Meaning-Making]
- Materials include, as part of fluency instruction, resources that reveal explicitly and explain stress and prosody for reading and for comprehension. [Oral Language, Decoding and Phonics, Early Writing]
- Materials include activities, such as choral reading, paired reading, and audio-assisted reading, in which fluent reading is modeled by teachers or other more proficient readers. [Oral Language]

## Part II: Design Criteria

<b>Criterion I: Language Development —</b> The materials provide plentiful and varied opportunities to use language at the word, sentence, and discourse levels, both orally and in writing, while oral and written language are taught simultaneously with an emphasis on meaning-making.	Principle 1: Linguistic Repertoire & Metalinguistic Awareness	Principle 3: Meaning & Comp.	Principle 5: Lang. & Code Skills	Rating
<b>CONCEPTUAL</b> <ul style="list-style-type: none"> <li>Materials focus on thinking about and understanding ideas and concepts related to the grade-level content, many of which may have been developed in the home language.</li> </ul>	X			
<b>SYNTACTIC (SENTENCE LEVEL)</b> <ul style="list-style-type: none"> <li>Materials include relevant and strategically-placed information to facilitate comparing and contrasting sentence-level (syntactic) features of the home language and English.</li> <li>Materials focus on structure (e.g., word order, grammatical rules, word functions) to develop familiarity with the basics of English grammar needed to comprehend the spoken word, and to produce language to convey thinking.</li> <li>Materials emphasize the function of words in a sentence (e.g., name, modify, connect, etc.), not part-of-speech labels (e.g., noun, adjective, conjunction, etc.).</li> </ul>	X		X	
<b>SEMANTIC (WORD LEVEL)</b> <ul style="list-style-type: none"> <li>Materials focus on the meaning of words, sentences, and discourse in the receptive modalities (listening and reading).</li> <li>Materials foster opportunities for students to <i>encounter words in meaningful contexts</i>—grade-level texts that they are reading and to which they are being exposed.</li> <li>Materials support production of oral language using the newly acquired vocabulary.</li> <li>Materials support contextualized vocabulary study embedded in the grade-level content that reveals how words relate to similar forms, how they are used grammatically, and how they relate to other words and concepts.</li> </ul>		X	X	
<b>NARRATIVE</b> <ul style="list-style-type: none"> <li>Materials focus on the comprehension of basic narrative elements and structure (e.g., characters, settings, sequence of events, etc.).</li> <li>Materials focus on meaning in the productive modalities (speaking and writing), represented by narrative structures and elements.</li> </ul>	X	X		

<b>Criterion I: Language Development —</b> The materials provide plentiful and varied opportunities to use language at the word, sentence, and discourse levels, both orally and in writing, while oral and written language are taught simultaneously with an emphasis on meaning-making.	<b>Principle 1:</b> Linguistic Repertoire & Metalinguistic Awareness	<b>Principle 3:</b> Meaning & Comp.	<b>Principle 5:</b> Lang. & Code Skills	<b>Rating</b>
<b>DISCOURSE STYLES</b> <ul style="list-style-type: none"> <li>Materials provide opportunities to compare and contrast L1 and L2 in their organization and cultural norms/considerations for oral discourse (e.g., conversational openers and closers, turn-taking, timing, volume, use and role of silence, etc.).</li> </ul>	X			
<b>GRAMMATICAL</b> <ul style="list-style-type: none"> <li>Materials provide multiple opportunities to explore similarities and differences in “how language works” (grammar) between English and other languages (e.g., gender, subject-verb agreement, etc.).                – For example, French, Italian, and Spanish are gendered languages with two genders, while Greek has three genders—masculine, feminine, and neuter.</li> <li>Materials provide multiple opportunities to explore similarities and differences in how words and phrases are arranged to form sentences (syntax) between English and other languages (e.g., how the article and noun endings change according to the number, gender, and way the word is used in a sentence, etc.).</li> </ul>	X		X	
<b>Criterion II: Phonological Awareness —</b> The materials support the development of sufficient familiarity with the English sound system for students to be able to hear and differentiate sounds in English, not only in isolation, but also in various positions within syllables and in words. Furthermore, the materials recognize that students developing two or more languages may need additional time to learn and manipulate sounds and facilitate the transfer of phonological awareness from their home language(s).	<b>Principle 1:</b> Linguistic Repertoire & Metalinguistic Awareness	<b>Principle 3:</b> Meaning & Comp.	<b>Principle 5:</b> Lang. & Code Skills	<b>Rating</b>
<b>SYLLABIC KNOWLEDGE</b> <ul style="list-style-type: none"> <li>Materials provide activities and resources connected to grade-level content for students to practice verbally separating words into syllables and blending syllables to form words, building on knowledge from their home languages, when possible.</li> </ul>	X		X	

<b>Criterion II: Phonological Awareness —</b> The materials support the development of sufficient familiarity with the English sound system for students to be able to hear and differentiate sounds in English, not only in isolation, but also in various positions within syllables and in words. Furthermore, the materials recognize that students developing two or more languages may need additional time to learn and manipulate sounds and facilitate the transfer of phonological awareness from their home language(s).	<b>Principle 1: Linguistic Repertoire &amp; Metalinguistic Awareness</b>	<b>Principle 3: Meaning &amp; Comp.</b>	<b>Principle 5: Lang. &amp; Code Skills</b>	<b>Rating</b>
<b>ONSET AND RIME</b> <ul style="list-style-type: none"> <li>Materials incorporate familiar words in instruction and practice of phonological skills, ensuring meaningful engagement with the sounds of English.</li> <li>Materials support awareness of rhyming words using the knowledge of rhyming students may already possess in their home language.</li> </ul>	X		X	
<b>PHONOLOGICAL AND PHONEMIC AWARENESS</b> <ul style="list-style-type: none"> <li>Materials support ample opportunities to explore speech and letter sounds, prioritizing instruction of sounds that are different from the home language while building on and reinforcing sounds that exist in both languages.</li> <li>Materials support the modeling of sounds in English in the context of words and phrases, such as in poems, word play, short expressions, and dialogue — not in isolation.</li> <li>Materials provide multiple opportunities to separate, blend, and manipulate sounds in words in the home language, when relevant, and in English.</li> <li>Materials acknowledge and build on phonemic awareness developed in the home language.</li> <li>Materials promote positive transfer of skills and support teachers to teach sounds that do not exist in the home language explicitly.</li> </ul>	X		X	

<b>Criterion III: Comprehension and Meaning-Making —</b> The materials support foundational skills instruction that ensures meaningful access to grade-level concepts, discourse, and literacy to facilitate comprehension and development of content-area conceptual understanding.	Principle 1: Linguistic Repertoire & Metalinguistic Awareness	Principle 3: Meaning & Comp.	Principle 5: Lang. & Code Skills	Rating
<ul style="list-style-type: none"> <li>Materials reinforce meaningful access to grade-level content throughout all the components and elements of foundational skills instruction, ensuring that skills are not taught in isolation or out of context.</li> </ul>		X	X	
<ul style="list-style-type: none"> <li>Materials encourage meaning-making through language, promoting the use of a student's entire linguistic repertoire, including the home language, if possible.</li> </ul>	X	X	X	
<ul style="list-style-type: none"> <li>Materials promote fluency that is taught and practiced in the service of understanding grade-level content and conveying meaning.               <ul style="list-style-type: none"> <li>Materials provide repeated opportunities to listen to and practice fluent reading of grade-level text with a greater emphasis on comprehension than speed or accuracy.</li> <li>Materials support teachers to provide fluency instruction that reveals and explains stress and prosody for reading and comprehension.</li> </ul> </li> </ul>		X	X	

<b>Criterion IV: Word Knowledge —</b> The materials focus on meaning, orally and in print (i.e., in both receptive and productive modalities), to help students build a foundational inventory of words and phrases that permits comprehension of oral communication about reading and writing connected to grade-level content.	Principle 1: Linguistic Repertoire & Metalinguistic Awareness	Principle 3: Meaning & Comp.	Principle 5: Lang. & Code Skills	Rating
<ul style="list-style-type: none"> <li>Materials support vocabulary instruction and practice in the receptive and productive modalities to build a foundational <i>inventory of words and phrases</i> that support meaning-making of what students read and write.</li> </ul>		X		
<ul style="list-style-type: none"> <li>Materials present vocabulary in the context of more complex grade-level text (i.e., phrases and sentences), not just individual words in isolation.</li> </ul>			X	
<ul style="list-style-type: none"> <li>Materials recognize and explicitly emphasize more than just Tier III vocabulary and facilitate building knowledge of Tier I and II words that tend to be unfamiliar or confusing to ELs in service of meaning-making and comprehending grade-level text.</li> </ul>		X		



<b>Criterion IV: Word Knowledge —</b> The materials focus on meaning, orally and in print (i.e., in both receptive and productive modalities), to help students build a foundational inventory of words and phrases that permits comprehension of oral communication about reading and writing connected to grade-level content.	Principle 1: Linguistic Repertoire & Metalinguistic Awareness	Principle 3: Meaning & Comp.	Principle 5: Lang. & Code Skills	Rating
<ul style="list-style-type: none"> <li>Materials provide opportunities to compare and contrast the home language with English relative to —               <ul style="list-style-type: none"> <li>word parts that are the same or different (e.g., <i>ism/ismo</i>; “s” for plural);</li> <li>cognates (e.g., <i>lenguaje</i> [Spanish]/<i>language</i> [English]; <i>director</i> [Spanish, Romanian]/<i>direktor</i> [Estonian, Croatian, Bosnian]/<i>director</i> [English]);</li> <li>false cognates (e.g., <i>choke/chocar</i> [Spanish for “hit”]; <i>gift</i> [German for “poison”]; and</li> <li>syllabic and word structures of L1 and L2 (e.g., which letter or vowel/consonant combinations exist or do not exist in each language, such as the fact that Spanish words start with “es” — <i>special/especial</i> — and not /s/ before a consonant).</li> </ul> </li> </ul>	X		X	

<b>Criterion V: Print Knowledge —</b> The materials support explicit instruction on book-handling behaviors and conventions of print often developed at home and may transfer from other languages to English, regardless of age or grade.	Principle 1: Linguistic Repertoire & Metalinguistic Awareness	Principle 3: Meaning & Comp.	Principle 5: Lang. & Code Skills	Rating
<b>BOOK-HANDLING BEHAVIORS</b> <ul style="list-style-type: none"> <li>Materials facilitate instruction on book-handling skills (e.g., holding a book, turning pages, etc.), recognizing that some languages do not have written forms and that some ELs may not have been exposed to books prior to school.</li> <li>Materials support students adapting to the directionality of print from left to right and top to bottom (from home languages that use different conventions).</li> </ul>	X		X	

<b>Criterion V: Print Knowledge —</b> The materials support explicit instruction on book-handling behaviors and conventions of print often developed at home and may transfer from other languages to English, regardless of age or grade.	<b>Principle 1:</b> Linguistic Repertoire & Metalinguistic Awareness	<b>Principle 3:</b> Meaning & Comp.	<b>Principle 5:</b> Lang. & Code Skills	<b>Rating</b>
<b>LOOKING AND RECOGNIZING</b> <ul style="list-style-type: none"> <li>Materials show how, in English, letters form words, particularly for students whose home language is orthographically different (i.e., character-based, etc.) or does not have a written form.</li> <li>Materials include clarifying information in recognition that in alphabetic languages, where each symbol (letter) represents a speech sound, some sound-symbol associations may differ greatly from English (e.g., the symbol “P” in Russian or Greek sounds like the /r/ in English).</li> <li>Materials incorporate environmental print (e.g., signs, logos, labels, posters, etc.) and support teachers to use it as a resource for developing print knowledge.</li> <li>Materials support explicit instruction on how words convey meaning.</li> </ul>	X	X	X	
<b>FAMILIARITY WITH FEATURES OF DIFFERENT GENRES</b> <ul style="list-style-type: none"> <li>Materials provide opportunities that encourage students to share stories in their home language, with peers and adults who know the language, about pictures, symbols, illustrations, and text.</li> <li>Materials support the teaching of the basic structure of stories (e.g., “once upon a time,” etc.) and how the structure of stories in English might differ from those in their home language, providing sentence frames/starters as a scaffold when needed.</li> <li>Materials demonstrate how pictures and illustrations convey meaning.</li> </ul>	X	X		
<b>WRITING CONVENTIONS</b> <ul style="list-style-type: none"> <li>Materials explicitly identify similarities and differences in pragmatic/conventional features, such as the Spanish use of an inverted question mark (exclamation point) at the beginning of a question (exclamation) — and the Greek use of a semicolon “;” to signify questions instead of “?” in English.               <ul style="list-style-type: none"> <li>Differences may exist geographically or culturally. For example, British English varies slightly from American English in its use of punctuation. Required capitalization also varies from language to language and between dialects.</li> </ul> </li> </ul>	X		X	

<b>Criterion VI: Alphabet Knowledge, Phonics, and Decoding —</b> The materials build knowledge of letter names and sounds and of the predictable relationship between phonemes and graphemes.	Principle 1: Linguistic Repertoire & Metalinguistic Awareness	Principle 3: Meaning & Comp.	Principle 5: Lang. & Code Skills	Rating
• Materials build on the phonemic and phonological knowledge that ELs have in English and in their home language, when possible.	X	X		
• Materials emphasize meaning-making in the decoding of words, connected to grade-level content learning.		X		
• Materials do not include nonsense words in decoding activities.	X	X		
• Materials connect writing (encoding) to the development of alphabetic and phonological knowledge.			X	

<b>Criterion VII: Early Writing —</b> The materials emphasize writing as a medium for communicating meaning, even in the early stages of learning to write.	Principle 1: Linguistic Repertoire & Metalinguistic Awareness	Principle 3: Meaning & Comp.	Principle 5: Lang. & Code Skills	Rating
• Materials support attempts to communicate information via scribbles, symbols, marks, letters, words, or sentences, perhaps while mixing elements of home language and English orthography, syntax, etc.	X	X	X	
• Materials provide opportunities to ensure that foundational literacy skills and writing skills are developed simultaneously in purposefully connected ways.			X	
• Materials support teachers to use inventive spelling to help students refine phonological awareness and phonics skills to transition from inventive spelling to formal spelling.	X		X	
• Materials use writing as a diagnostic tool for assessing foundational skills development.			X	
• Materials include guidance, strategies, and activities for teachers to teach orthographic rules (spelling) explicitly.			X	
• Materials include mentor texts that can function as models to help guide students in their early writing attempts.	X		X	
<b>DISCOURSE STYLES</b> • Materials provide opportunities to compare and contrast L1 and L2 in their organization and cultural norms/ considerations for written discourse (e.g., argumentation style, directness, symmetry, formality, etc.).	X		X	

### *Part III. Considerations for Teacher-specific Materials and Support*

Materials and support specifically for teachers are essential to actualizing the *comprehensive and connected* approach to English foundational skills instruction for English learners presented in this document. Quality instructional materials can facilitate an effective implementation of the comprehensive and connected approach. However, materials alone are insufficient to create learning experiences that are responsive to what English learners already know and where they need to go next to acquire foundational skills in English and achieve literacy in the English language.

The following sections discuss considerations for the design of teacher-specific materials and support resources. Readers should note that these considerations are not comprehensive and that the design criteria in Part II may call for additional teacher-specific materials and support to be implementable. Additionally, technologies and the ways that teachers and students work are ever-evolving. Materials designers need to be aware of how their materials are used and continually adapt to make them more useful for achieving instructional goals while harnessing new possibilities from advancements in technology and learning science.

Finally, teacher support should always incorporate conversations about the perceptions of English learners. When considering the skills and ability of English learners, expectations for student mastery of grade-level content and learning outcomes should not be diminished by perceptions that a non-English home language or a “non-standard” English dialect is inferior. While linguists generally agree that “standard” English is not inherently better than any other variety of English (Scarcella, 2003), unfortunately—due to social convention alone—English dialects are perceived as subordinate to “standard” English. Moreover, this artificial subordination has resulted in individuals experiencing discrimination based on language, whereby those who use standard English tend to receive respect and access to social advantages, thus increasing their academic, career, and social opportunities (Scarcella, 2003).

#### **Supporting Knowledge of Language and Relevant Pedagogy**

Teachers need to be supported and empowered to implement a comprehensive and connected approach to foundational skills with readily-accessible resources, both to bolster their knowledge and to facilitate their instruction with students. Specifically, teacher-specific resources would include additional information about important topics related to the foundational literacy skills development of English learners, and suggestions and guides to address the unique needs of English learners. Suggestions for instructional responses should be informed by assessments of student work to determine literacy needs as well as the linguistic knowledge that ELs bring. The examples that follow illustrate the information that would be helpful to teachers—

### *Leveraging Linguistic Repertoires and Support for Metalinguistic Awareness*

- Materials support teachers in understanding that the ongoing development—whether formal or informal—of the home language is not detrimental to learning the English language system.
- Materials provide teachers with information and resources to understand the differences between English and the languages most commonly spoken by ELs. Information could be provided for language groups (e.g., Latin-based (Romance) languages, Indo-European languages, etc.).<sup>13</sup>
- Materials provide guidance to facilitate the transfer of knowledge and skills from a student's home language to English, thereby supporting the metalinguistic process in which ELs are engaged.
- Materials include tools to help teachers work with students to recognize the scope of their linguistic repertoire and know what they can transfer to English learning and what they need to develop further with the support of their teacher.
- Any materials related to home languages (or partner languages in dual language programs) should be developed in accordance with how such language systems work and develop. In other words, materials should not be direct translations from English materials for developing foundational literacy skills in English.

### *Comprehension and Meaning-Making*

- Materials provide resources and guidance to support teachers to check for understanding regularly and strategically when providing feedback on text-level fluency.
- Materials help educators prepare to teach students about the unique conventions of the English language and how to convey ideas in this new language.

### *Word Knowledge*

- Materials include sample instructional conversations to guide teachers in explaining word formation and using cognates strategically to deepen knowledge about word generation.

### *Phonological Awareness*

- Materials support teachers in leveraging students' pre-existing linguistic skills, in any language, to separate words into syllables and blend syllables to form words.
- Materials explain how rules governing syllables may vary between languages and include illustrative examples for the major language groups.
- Materials help teachers compare and instructionally respond to the differences in syllabication patterns between English and other languages.

<sup>13</sup> The number of languages spoken by English learners in U.S. schools makes it implausible that developers would provide this information for all languages. Due to the varying distribution of top languages in states and districts, publishers will need to identify the specific language groups in the geographic area for which materials are being developed.

### *Alphabet Knowledge, Phonics, and Decoding*

- Materials guide teachers in using contrastive analysis to promote the transfer of knowledge from a student's home language and develop metalinguistic awareness.
- Materials recommend a sequence of phonics instruction based on phonemes and blends that may be most challenging for particular language groups.

### *Print Knowledge*

- Materials provide user-friendly resources about the similarities and differences in writing conventions between the major languages spoken by ELs and English (e.g., the punctuation mark used to signal questions).
- Materials support teachers in discerning differences in conventions that may exist based on geographic/cultural dialects of English. For instance, British English varies slightly from American English in its use of punctuation.

### *Early Writing*

- Materials include guidance on using inventive spelling as a means of practicing and refining phonological awareness and phonics skills in addition to guiding teachers on how to transition students from inventive spelling to formal spelling.

## **Assessments**

Assessments, both summative and formative, are critical to measure and guide student progress. Beneficial assessments and related resources to facilitate foundational skills instruction using a comprehensive and connected approach would include —

- Scoring guides, rubrics, and feedback guidance that help teachers identify when “errors” reflect conventions from other languages and support teachers in facilitating the transfer of linguistic assets to teach literacy in English.
- Materials (e.g., texts, tasks, etc.) for foundational skills that are connected to grade-level and age-appropriate academic content that simultaneously provide insights on students' comprehension of grade-level content (from the text/s<sup>14</sup>) and progress in developing foundational literacy skills.
- Tasks, especially for formative purposes, that focus on students' demonstration of meaning-making and comprehension (i.e., ability to express ideas)—and help teachers recognize which foundational skills need development to further students' meaning-making and comprehension. For example, assessments would not screen for foundational skills abilities in ways that are disconnected from grade-level content.<sup>15</sup>

<sup>14</sup> Teachers of foundational skills are not expected to be content experts or content-area teachers, though this may be the case in some districts or schools. However, reading materials used for foundational skills instruction should be aligned with grade-level content standards. Teachers would be responsible for knowledge of the content to the extent conveyed in the texts. Teachers' materials can provide additional background, as necessary, to enable teachers to grasp the content/themes sufficiently in order to gauge student comprehension and facilitate instructional activities focused on comprehension and meaning-making.

<sup>15</sup> As discussed in the document, ELs can become highly proficient decoders of text that they do not comprehend. Thus, an assessment focused on decoding would not yield sufficient insights into comprehension ability and what teachers might do to improve comprehension based on the skills that students already have.



- Feedback tools, whether facilitated by digital assessment platforms or teachers, that are culturally-responsive and reaffirm students' linguistic identities, enabling them to understand the ways that their home language/s can be transferred to learn how English works or how languages work in general.
- Tasks that enable, when relevant, students to communicate ideas through multiple modalities and, as part of the feedback and teachers' instruction based on assessment results, provide students with opportunities to communicate (i.e., produce language), refine ideas, and express their refined thinking.
- Materials and feedback guidance that prioritize proper expression to convey meaning, not just speed and accuracy, in measuring oral reading ability.

### Professional Development

The comprehensive and connected approach relies heavily on the role of teachers as models of academic English and designers of instructional experiences that transfer not only their knowledge to students, but also help students leverage their linguistic knowledge and repertoire. Therefore, sustained professional development will be essential to ensure teachers have the necessary skills and knowledge to provide high-quality instruction to English learners. Considerations include professional development that—

- Helps teachers to understand the foundations of the English language system, how it works to convey ideas, and how a new language is acquired, with the goal of building teacher capacity to explain this to students to enable them to recognize aspects of language (e.g., syllabic structure, etc.) that can be helpful in learning English.
- Provides sustained and differentiated support to teachers, coaches, and administrators to understand the principles of the comprehensive and connected approach along with the relevant knowledge of language acquisition to inform a common understanding of how effective foundational skills instruction for ELs should look in the school/district.
- Supports judicious use and application of research findings about foundational skills development by highlighting updated and relevant research regarding foundational skills instruction for English learners, as well as the limitations of research that does not incorporate ELs or omits their linguistic needs. The careful selection of the research helps educators and administrators understand the importance of a comprehensive and connected approach to developing the foundational skills of English learners.
- Helps teachers understand the inseparable nexus between language and culture for identity-formation in children and recognizes and responds to misunderstandings or societal perceptions of the “value” of other languages, including dialects of English, relative to academic English.

## Strategic Use of Technology

Instructional technologies have developed substantially in recent years, expanding the possibilities for engagement and instructional personalization. The strategic use of technology in a comprehensive and connected approach to foundational skills instruction for ELs would involve technologies that —

- Recognize students’ emerging ideas, as expressed through their current knowledge of English and pre-existing knowledge of other languages, and provide scaffolds to help them convey and develop their ideas in academic English.
- Support metalinguistic awareness, helping students to recognize similarities and differences between English and the other languages they know in addition to using this knowledge to produce academic language. Scaffolds and supports expand upon word-to-word dictionaries to include multimedia that includes visualization, sound, and text to help ELs hear, see or visualize, and understand the newly acquired vocabulary and concepts.
- Help teachers explain and show how English works to support EL development of English in all four domains—listening, speaking, reading, and writing—and support teachers in discerning the language- and code-based areas which may require instructional attention.
- Enhance teachers’ ability to recognize opportunities for the transfer of linguistic knowledge in service of developing foundational skills and content knowledge and assist them to work with students and design activities connected to grade-level content to facilitate this transfer.
- Adapt and respond to students’ linguistic knowledge across languages to facilitate acceleration of foundational skills instruction such that time is strategically allocated to teach aspects of language that are troublesome or less familiar to students.
- Develop students’ foundational skills by providing constructive feedback on productive language (spoken and written domains) in real time to build students’ understanding of the English language and to internalize its structures and conventions.

## Interventions

Foundational skills instruction, especially for older English learners, is commonly perceived to be a remedial “intervention.” The comprehensive and connected approach recognizes foundational skills as part of the core Tier I instruction for English learners, including older English learners. Nevertheless, some students may need additional support, that if provided through interventions, must carefully address the learning needs of English learners in a connected way. Appropriate intervention materials would —

- Directly correspond to the core foundational skills instruction that is connected to grade-level content, not isolated “skill-building” materials.
- Have clearly defined purposes and indicators of when goals have been met that consider the developmental needs of English learners (e.g., not overly focused in the early stages of language development on accurate spelling and conventions when students can otherwise demonstrate a developing understanding of academic English and express thinking/ideas).
- Help students accelerate their learning of foundational skills through personalization, to the extent possible, based on their linguistic repertoire and help teachers continue developing foundational skills once the intervention is finished.

## Empowering Families to Support Home Language Development

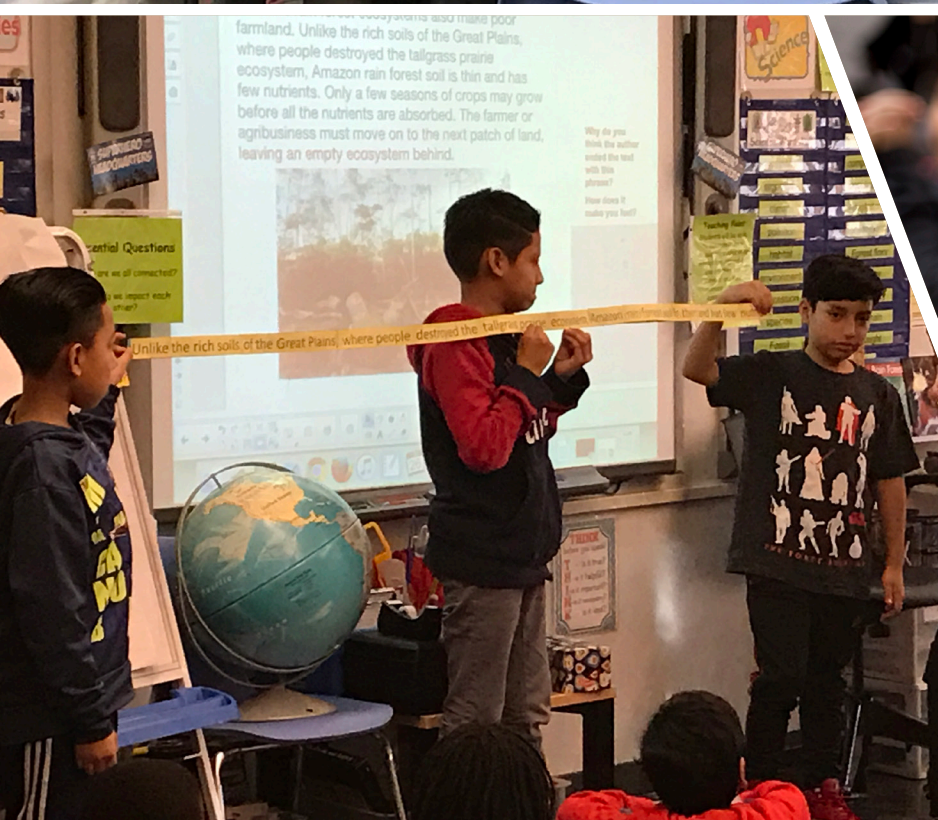
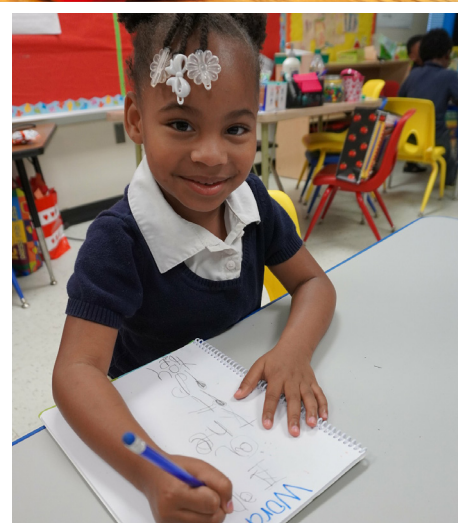
Skills in any language are beneficial to learning new languages, such as English, in school. Therefore, families should be encouraged and supported to engage with children using languages spoken in the home. Many families and educators mistakenly believe that home language reinforcement as students begin to learn English is counterproductive. Promoting home language development also helps to mitigate the home “language loss”<sup>16</sup> and the associated loss of connection to the home and culture that often occurs as students learn English. This is especially important when schools only offer English language instruction. Materials that schools and educators can use to empower families to support home language development would —

- Explicitly convey to educators, families, and students the benefits of home language development alongside English development in school.
- Encourage students to communicate in their home language outside of school and deepen their knowledge of the characteristics of their home language through activities focused on meaning-making and communication.
- Convey, to the extent possible, to family members in their home language the similarities and differences between the language they know and English—and how they can use this knowledge to support their students in learning English while reinforcing the home language.
- Encourage families to find time to engage in activities of cultural importance, such as speaking, reading, oral storytelling, etc., in their home language—using increasingly complex and mature language (i.e., the language used by older members of the community) as students get older.
- Help families and educators to be aware of traumatic and emotional experiences that may arise as children attempt to fit into the school environment, straddling two cultures.

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<sup>16</sup> See Fillmore (2000) for a discussion of the impacts of language loss and how educators can respond.







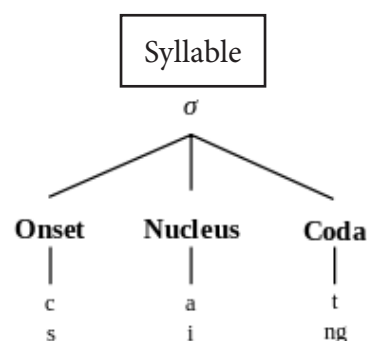
## APPENDIX A

# Illustrating the Importance of Contrastive Linguistics through a Syllabic Structure Analysis

Using syllabic structures as the focus of discussion, this appendix provides concrete examples from various languages to illustrate how contrastive linguistics can be leveraged when teaching English learners. Helping ELs to recognize distinct syllabic structures between languages they know or are learning facilitates their learning of structures in different languages. Most teachers do not have the sufficient knowledge of linguistics to do this, especially in languages other than English, but support and professional development can help cultivate a fundamental awareness and understanding of the contrastive linguistics necessary to leverage student knowledge of distinct language structures. These supports can include in-depth, discipline-specific knowledge of linguistics, such as presented in this appendix, integrated into teacher resources, the teacher's edition of instructional materials, and lesson preparation guides for building foundational skills in English.

## Syllable Structure

Syllables consist of vowels and consonants and can be split into an onset, nucleus, and coda.



### Nucleus — Consonant-Vowel-Consonant (CVC)

In English, if a vowel is present, it must be in the nucleus of the syllable. Some languages, however, do not require a vowel in the nucleus, and instead, permit certain consonants. Languages have different rules for determining what occupies the nucleus position. For example, in languages, such as Nuxálk (Bella Coola, spoken by native peoples in Canada) and Berber (spoken in Morocco), there are entire words and phrases without vowels.

### Onset — CVC

The onset is the beginning of a syllable boundary and is the strongest consonantal position. *The onset is required in many languages and is optional or restricted in others.* Onsets are almost always preferred to codas in English.

### Coda — CVC

The coda is optional in most languages. In some languages, it is restricted or even prohibited. The syllabication (dividing a word into its syllables) depends on the rules governing onsets and codas. (See Table 5.)

Table 5. Onset and Coda Rules Related to Syllabication in Old Bulgarian and Persian

Language	Onset and Coda	Syllabication
Old Bulgarian	Does not permit codas	CVCCCV = —V—CCCV
Persian	Does not permit complex onsets but allows complex codas	CVCCCV = CV—C—CV

## Syllable Types, Restrictions, and Sonority

All syllables have a nucleus. Onsets and codas are optional. Syllables without codas are *open syllables*, and syllables with codas are *closed syllables*. Table 6 shows the acceptable syllable structures in English.

Table 6. Acceptable Syllable Structures in English

Syllable Structure	Example	Syllable Structure	Example
V	eye	VCC	ink
CV	bay	CVCC	husk
CCV	fry	CCVCC	crust
CCCV	scree	CCCVCC	strings
VC	in	VCCC	amps
CVC	meat	CVCCC	camps
CCVC	treat	CCVCCC	tramps
CCVC	screech	CCCVCCC	strengths

Based on: de Lacy (2007), ELT Concourse (n.d.), and Roach (2009).

English allows CC and CCC clusters in addition to codas. Also, there are many more combinatorial possibilities than found in Japanese, Spanish, Korean, and Hawaiian, as shown in Table 7.

Table 7. Allowable Syllable Structures in Selected Languages

Language	Syllable Structures
Hawaiian	V, CV
Japanese	V, CV, CVC
Spanish	V, CV, CVC, CCV, CCVC
Korean	V, CV, CVC, VCC, CVCC

Some languages have more constraints on specific sound sequences in syllable structures. (See Table 8.)

**Table 8. Constraints on Syllable Structure in Selected Languages**

Language	Constraints and Implications for ELs
Arabic	<p>Arabic is a macro-language or language group containing a variety of phonotactic rules. That is, geographically, modern Arabic varieties are classified into six groups: Maghrebi; Sudanese; Egyptian; Mesopotamian; Levantine; and Peninsular Arabic. Across these groups and their dialects, the possible sound sequences and constraints vary.</p> <p>Nonetheless, with some rare exceptions, there typically are no consonant clusters.</p> <p>Therefore, Arabic speakers tend to insert vowels when pronouncing English words. For example, <i>scratch</i> may be pronounced as <i>sekaratesh</i>.</p>
Spanish	<p>/s/ plus a consonant is not permitted at the beginning of words; however, the combination may occur elsewhere in words. In the case of CC onsets, the first can be a stop: /p, t, k, b, d, g, f/. The second C is either /l/ or /r/ (e.g., <i>planta, pronto, tren, frito, clima, crema, brinca, drástica, grande</i>). The consonant codas are even more limited: /s, z, r, n, d/ (e.g., <i>otros, alto, carta, ciudad, grande</i>). Only rarely are CC codas found, and in those rare cases, the second C is always /s/ as in <i>trans-crip-ción</i>.</p> <p>Consequently, Spanish speakers will tend to insert a sound (usually /e/) before the consonant cluster and pronounce, for example, <i>strike</i> as <i>estrike</i> and <i>school</i> as <i>eschool</i> (/estraik/ and /esku:l/).</p>
Chinese	<p>Chinese only allows a very restricted set of clusters. For example, all the consonant clusters in the word <i>clusters</i> (/kl/, /st/, and /rs/) are not permissible.</p> <p>The tendency of speakers of Chinese languages is to insert a vowel, often something like a schwa or /e/ between the elements of many clusters. The result is that a word like <i>screw</i> may be rendered as <i>sekeru</i>.</p> <p>Additionally, there are no final consonants except for /ŋ/ in most dialects. Thus, speakers of these languages typically will not produce final consonants at all (e.g., plural forms, regular past-tense endings). Final consonant clusters in English, which may consist of up to four consonants, can be problematic for these speakers.</p>

Based on: de Lacy (2007), ELT Concourse (n.d.), and Roach (2009).

**Sonority.** In an ‘optimal syllable,’ sonority—or relative loudness of a speech sound—increases towards the nucleus, forming a peak in sonority, and then decreases away from the nucleus towards the coda. This is known as the *Sonority Sequencing Principle* (SSP) (Parker, 2011). Sonority plays an important role in the development of phonological patterns, and it supports the intelligible transmission of speech. However, depending on the complexity of the syllable structure and a student’s primary language, the student may make modifications that affect sonority, such as: deleting one of the segments of a consonant cluster; substituting a voiced consonant with an unvoiced consonant at the end of a word (final obstruent devoicing); and replacing one segment with another that has a different place of articulation. For example, with regard to voiced (the sounds [b], [d], and [g]) and voiceless (the sounds [p], [t], and [k]) stops (Eckman, 1991; Yavas, 1994), these stops can occur in all positions within a word in English, which may not be the case in other languages. (See Table 9.)



Table 9. Permissible Stops in English and Other Selected Languages

Language	Permissible Stops
English	All positions within a word
Russian, Turkish, German	Voicing contrast restricted to word-initial and word-medial positions
Spanish, Mandarin Chinese	No stops in final position

Therefore, the speakers of languages that do not permit stops in all the positions in a word, as English does, may be challenged to produce these sounds in English and benefit from purposeful instruction to build awareness of this challenge.

## APPENDIX B

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## APPENDIX C

# Contributors

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#### Dallas Independents School District

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#### Los Angeles Unified School District

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#### New York City Department of Education

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#### Omaha Public Schools

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#### San Antonio Independent School District

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#### Tulsa Public Schools

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### Experts and Independent Consultants

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Tamara Alsace, *Independent Consultant*

Edynn Sato, *Independent Consultant*





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