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Resources and Training for Effective Multilingual Education

U.S. education has experienced a push and pull regarding the language of instruction for Multilingual Learners (MLs), as evidenced by the 1998 passage of the "English-only law" with Proposition 227 in California in 1998 and its subsequent repeal with Proposition 58 in 2016. The idea that one language must be learned fully (or not at all) before a second language (English) can be introduced has led many schools to either teach native Spanish speakers exclusively in Spanish during early primary education or adhere entirely to English instruction without fully leveraging appropriate instructional practices for language acquisition.

However, learning language is not an either/or endeavor: As discussed in this paper, key research has established that the human brain can learn to read, write, and speak in two or more languages at the same time. In fact, MLs show increased metacognitive and metalinguistic skills along with strengthened executive function, which includes the skills of attention switching, cognitive flexibility, and working memory.¹

Even when English is the language of instruction and content-area mastery or skilled reading is the educational target, MLs can cultivate their heritage language assets. When effective instructional practices make the most of cross-linguistic transfer and integrated language instruction with ample spoken language practice, Structured Literacy approaches can support MLs in becoming proficiently multilingual and multiliterate.

The Multilingual Brain and Second-Language Acquisition

While all students who speak more than one language are considered MLs, the distinction in how language is acquired depends on whether the learner is a simultaneous or sequential bilingual.

Simultaneous bilinguals acquire two languages from birth; extensive research has shown that babies as young as 6 months old can distinguish between languages and their sounds, and are thus primed for learning multiple language systems.² Brain studies on simultaneous bilinguals show that they have increased blood flow to certain areas of the brain and form multiple pathways among areas.3

Sequential bilinguals acquire one language before age 5, then learn a second language after age 5. Students federally labeled English Learners

are often sequential bilinguals who acquire English in the school setting. While simultaneous bilinguals move from no language to initial language (one or more languages), sequential bilinguals go from initial language (their first language) to an additional language (their second language). This distinction does not mean we must keep a learner's language systems separate—like any other type of learning, successful second-language acquisition relies on effective, explicit instruction and extensive practice, all while leveraging background knowledge (i.e., the first language).4 When MLs can make cross-linguistic connections, they forge new neural pathways, gain access to additional cognitive resources, and develop proficiency in both of their languages as they learn academic content and the process of reading.

"Key research has established that the human brain can learn to read, write, and speak in two or more languages at the same time."

Arredondo, et al., 2018; Marks, et al., 2022

⁴ Goodall, 2021; Deans for Impact, 2015; Bransford, Brown, & Cocking, 2000

As previously mentioned, parents and caregivers were once advised to halt the use of the home language once children entered school because Multilingual Learners were seen as being language-delayed. This perception was based both on some MLs' behavior during language assessments and on screening tools that did not provide a comprehensive understanding of linguistic assets. In one study, MLs demonstrated longer wait times in identifying an object that had been presented with a novel name⁵—but while this difference was once perceived as a delay, cognitive scientists have since concluded that it demonstrates flexible thinking, with MLs using that time to integrate novel information into their internal language framework. Meanwhile, when a young ML's word knowledge is assessed in English alone, the student may appear to have a significantly smaller vocabulary than their monolingual peers, but they are on par with peers when both languages are assessed.6



Genesee & Nicoladis, 1995; Pearson et al., 1993

The Science of Reading and Its Relevance to Multilingual Learners

In addition to supplying educators with insights into the "bilingual brain," cognitive science and neuroscience have also given rise to the science of reading—a comprehensive body of research developed over nearly five decades that explains how the human brain learns to read.

The human brain has dedicated areas for language and literacy, particularly in the left hemisphere. Specifically, the occipital lobe shows activation when print is in front of us, the temporal-parietal lobe activates as we put together letters and sounds to decode

words, the frontal lobe shows activity when we pronounce words, and the temporal lobe activates when we are comprehending language. From the science of reading, we know that reading instruction includes five components that are equally necessary for skilled reading: phonemic awareness, phonics, fluency, vocabulary, and comprehension. The science of reading supplies a holistic understanding of these skills and their interactions, and the research is applicable not just to English-only speakers but also to Multilingual Learners.





Some key takeaways from research on the science of reading as it applies to Multilingual Learners are summarized here:⁷

- 1. Explicit instruction on the five essential components of reading is necessary for all learners—including MLs—to become skilled readers.
- 2. On average, MLs with strong native language and literacy skills perform better on measures of English reading proficiency and demonstrate greater success when instruction builds on first language background knowledge and culture. In essence, strong literacy begets strong literacy.
- 3. Effective instruction of MLs should include key practices such as systematic opportunities for meaningful English oral language development across listening, reading, speaking and writing; integrated English language instruction across content areas; targeted yet varied approaches for instructing academic vocabulary; visual and verbal scaffolds to make content comprehensible; peerassisted learning opportunities; and screening (early and often) for language and literacy challenges with tools that fairly represent learners' language assets.

Structured Literacy and Multilingual Learners

Structured Literacy in itself is not a program; it is a science of reading-based approach to instruction that can be utilized by all educators, including English Language Arts and content-area teachers, small-group instructors, and specialists. The ultimate goal of Structured Literacy is reading comprehension, as learners gain necessary automaticity with decoding to understand and proficiently interact with text. In the International Dyslexia Association's 2023 Structured Literacy Infomap that provides an illustration of the "Why," "What," and "How" of Structured Literacy, the science of reading itself represents the "Why." Although the infomap targets the reading process as its content ("What") and approach ("How"), each component can be effectively leveraged for MLs' English language development in service to the ultimate goal of multilingualism and multiliteracy.

The "What" of Structured Literacy

The "What" of Structured Literacy is an intertwining of language components and literacy skills, much like Scarborough's Reading Rope.8 Instructional content should include the domains of language—phonology (sounds), morphology (words and their meaningful parts; e.g., affixes and roots),

semantics (language meaning, often associated with vocabulary), syntax (sentence structure and grammar), and pragmatics (how language is used)—with the addition of orthography (how spoken language is conveyed via text, including spelling and writing conventions). For MLs, the ultimate goal of English acquisition is, in fact, Structured *Multiliteracy*.9

The areas of language named earlier in this paragraph can be known across two or more languages, which is necessary for MLs to comprehend and proficiently produce spoken and written discourse. Rather than targeting each of the areas individually, integrating the areas will better facilitate the goal of building competency across listening, speaking, reading, and writing.¹⁰

Educators are best equipped to help MLs make connections between English and their home language(s) when they build their own background knowledge in two ways. First, they must learn about the English language and how it works across the five language domains. Second, they must learn about the home languages of their students and how these students interact with English. When a brain thinks about language, this activates the metalinguistic function that helps students notice and modify their own language output, thereby allowing them to develop advanced English proficiency over time.11

Cross-linguistic transfer: Letters and sounds

English and Spanish have 19 overlapping sounds, which means Spanish-speaking MLs will bring transferable knowledge of these sounds as they learn to read in English. A difference between these languages, however, is that Spanish has only five vowel sounds and transparent orthography, meaning each sound has a single letter correspondence. Meanwhile, English has opaque orthography, with short and long vowel sounds both represented by a single letter. While English and Spanish both can break words into syllables, English relies on syllable patterns for determining whether the short or long vowel is at play. Explicit instruction on how syllable patterns influence vowels in English will facilitate the mastery of vowel sounds for MLs.

This example, then, illustrates the "What," "Why," and "How" of Structured Multiliteracy: Syllable patterns are the "What," the fact that sounds change according to these patterns is the "Why," and teaching the patterns explicitly and systematically is the "How" for MLs to acquire English at the same time as learning to read in English.

¹⁰ Cárdenas-Hagan, 2024

¹¹ Ellis, 2000; Swain, 2000

Knowing our own language well and making connections to other languages equips us to help MLs do the same by facilitating their own cross-linguistic transfer. Even without full proficiency in another language, we can expedite the language and literacy success of our learners by giving them the gift of multilingualism and multiliteracy.

The "How" of Structured Literacy

The "How" of Structured Literacy resurfaces effective instructional practices, including those named in the research detailed earlier. Instruction of both literacy and a second language should be direct, systematic, and mastery-oriented, with a basis in planned purposeful instructional

decisions. It includes targeted and specific language instruction, with deliberate frontloading of vocabulary and sentence structures.¹² Effective instruction for MLs also provides structured and repetitive spoken language practice with the expectation of verbalizing complete sentences so students can internalize vocabulary and increasingly complex syntax.13 Other "core effective practices" worth integrating from the American Council on the Teaching of Foreign Languages (ACTFL) include using scaffolds, designing communicative tasks, teaching syntax/grammar as a concept, and providing oral corrective feedback that activates the metalinguistic function.14



How You Can Support Learner Mastery

With a growing body of evidence on multilingualism and multiliteracy but only emergent implementation science, practitioners can feel overwhelmed about how to use new information to make a positive impact. One benefit to Structured Literacy as an approach is that its "How" principles can be adopted by any educator to support English language development. Because school success is reliant on having a command of standardized English and academic language along with being able to read to learn, all teachers can increase language and literacy instruction for stronger content-area achievement.

Cross-linguistic transfer: Morphology

ontent area teachers can support language development by explicitly teaching morphology, or words and their parts. Science uses numerous words from Greek, and social studies uses many words from Latin, and both of these ancient languages have influenced modern languages. This potentially gives MLs transferable cross-linguistic knowledge. Some studies have explored an increase of language and literacy instruction in content area classrooms, with improved content outcomes.

Some actionable steps toward increased effectiveness in language and literacy instruction are detailed next. Many more practical suggestions for educators can be found in the guidebook *Literacy Foundations for English Learners*. ¹⁵

- Build your own background knowledge: Identify cross-linguistic connections to the language spoken by your learners and use this knowledge to enhance their own learning.
- 2. Become informed on the "Why" behind the "What": This includes the evidence base for instructional content, as well as research around learners and their assets.
- 3. Examine the balance of student talk and teacher talk during instructional time: When students are talking, they are learning and gaining the necessary practice to internalize advanced language structures.
- 4. Identify evidence-based practices that can be used across content areas: These should weave in spoken practice and exploration of language.

- 5. Extend your current practices by delving into a new language area: For example, if you are strong in vocabulary and comprehension instruction, how can you expand your knowledge of syntax and grammar? If you are strong in letters and sounds, how can you build understanding around words and their parts, functions, and use?
- 6. Look for ways to establish explicit, spoken-language routines: Routine helps students know what is expected of them and allows you to focus their attention on the skill, strategy, or language component they are practicing to master.
- 7. Set short-term goals for yourself: These include using more gestures or visual aids to support comprehension and increasing opportunities for meaningful English spoken language practice.

¹⁵ Cárdenas-Hagan, 2020

How CORE Learning Can Support You

With strong multilanguage proficiency and decoding skills, MLs can recognize more words and language structures while reading, which allows them to comprehend and delve more deeply into the world of print. They can then gain exposure to expansive concepts and rich language across content areas and subjects. Teachers have the opportunity to become ever more knowledgeable as they make decisions around language scaffolds and bring evidence-based practices to their instruction. regardless of their content area. CORE Learning aims to deepen your knowledge of effective instructional practices and of Structured Literacy as an approach. We empower you to be impactful in your instruction of English because language underpins all academic learning and informs successful literacy. Join CORE's Online Language and Literacy **Academy** to learn more about how to build up students' linguistic assets so that you, the knowledgeable professional, can have the greatest impact on your Multilingual Learners.



Additional Resources

<u>MyLanguages.org</u> – A website which explores connections between English and many other languages of the world, including phonology, morphology, semantics, syntax, and orthography.

CSELcenter.org – A national project on adolescent literacy for Multilingual Learners in grades 6-12.

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