Building Systems of Opportunity in Language Acquisition: The Three Necessary Shifts

In <u>Shift 1</u> we challenged the familiar saying, "In K–3, children are learning to read, and in 4–12, they're reading to learn." Instead, we proposed a new paradigm: combining "Learning to Read" and "Reading to Learn" as early as possible for lifelong literacy success.

Shift 2 emphasizes the interconnected nature of language, coding, meaning, and knowledge-building in literacy development. It challenges the idea that decoding and word recognition should be taught in isolation. Instead, it advocates for a reciprocal approach, where early reading instruction simultaneously develops strong word-reading skills, sustained language comprehension, and content-area learning.

Children, birth to eight, from homes in which a language other than – or in addition to – English is used are referred as dual language learners (DLLs). According to the Migration Policy Institute (2021), approximately 7.4 million emerging bilingual children represent about 33% of all children under age six in the United States. Over 80% of dual language learners (DLLs) are children of color, and nearly 60% live in homes where Spanish is spoken (Herrera et al., 2022). Given the growing attention to code-based literacy, the rapid growth of this population, and the critical role early childhood education (ECE) plays in their academic success, it is essential to examine broader research findings, clarify confusions and misconceptions surrounding code-based skills for DLLs in order to address the unique linguistic and educational needs of DLLs effectively.

Early Language and Reading Success

The science of early literacy starts with language and builds on language-based skills as well as code-based skills. It is also closely linked to children's earliest experiences. 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).

Cervetti and colleagues (2020) found a robust link between a child's language abilities and subsequent reading comprehension. In fact, young children with more developed oral language skills often become better readers, as a broader vocabulary helps them decode text more easily, thereby conserving cognitive resources for comprehension (Byrnes, 2021).

If students don't understand a spoken word, they'll struggle to understand it in print, even if they can decode it accurately. The payoff depends on whether they know the word meanings of what they managed to pronounce. Children who grow up immersed in English can automatically associate meaning to speech sounds through countless interactions. This familiarity with sounds and language structures forms a foundation for learning to read. For these children, early decoding usually leads directly to comprehension because they are familiar with most of the words they encounter.

DLLs bring similar foundational language knowledge from their home languages. As such, when entering schools in the US, they must also learn the structure of the English language. This learning is best supported through engaging, interactive experiences to hear and engage with language that reflect natural language acquisition. For DLLs "who don't know the meanings of English words, decoding provides pronunciation, but not comprehension." In other words, phonics is a necessary but insufficient condition for reading comprehension (Shanahan, 2018).

Dual Language Development and Code-Based Instruction



"The continued development of the child's home language—with an explicit emphasis on the development of strong oral language—is a direct source of support for the child's acquisition of English and successful reading in English later on. Attention to dual language development throughout literacy education is needed for all emerging bilingual students."

DLLs, especially those in the early stages of English acquisition, need targeted support in both language and code-based skills. They can develop language simultaneously by absorbing and internalizing the structures, rhythms, sounds, and vocabulary of two (or more) specific language systems. Research shows that programs with the most enduring effectiveness for DLLs are those that incorporate instruction in the home language or, at a minimum, provide home language instruction alongside English Language Development (Arias & Fee, 2018; Genesee, 2018; Lindholm-Leary, 2016; Mohist & Genesee, 2015; Soltero, 2016, 2011). Literacy skills developed in a student's home language can aid English literacy through cross-linguistic transfer, strengthening both phonological and semantic understanding in English.

- Bouchereau and Gort (2012) and Jarvis and Pavlenko (2007) demonstrate that
 metalinguistic awareness, including the ability to recognize that other languages exist and
 have different characteristics, is important for reading development and is heightened in
 bilingual children.
- Cárdenas-Hagán & Carlson, (2007); Collier & Thomas, (2017); Lindholm-Leary, (2012) demonstrate that proficiency in a first language promotes literacy and school achievement in a second language. The effect is greatest when initial literacy exposure and instruction occur in the child's dominant language, where they have the strongest base of oral language and where text will have the strongest meaning.
- Lems et al., (2017) shows that emergent literacy skills in the home language can help facilitate parallel skills in English referred to as cross-linguistic connections, transfer, or bridging.

A Comprehensive and Simultaneous Approach

"Given the absolute necessity of foundational word reading skills, it is tempting to think that instruction should begin with a focus on developing those and later turn to comprehension. However, research has supported a simultaneous, rather than sequential, model of reading instruction. Along with the development of phonological awareness, print concepts, and alphabet knowledge, young learners in preschool and early elementary school benefit from efforts to develop oral language comprehension, including efforts to develop oral comprehension of written language (i.e., through read-alouds)."

— Cervetti, 2020; Swanson et al., 2011)

A comprehensive and simultaneous approach recognizes the need for DLLs 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 on phonemic awareness, decoding skills, and encoding skills. A major challenge is presented when reading programs focus heavily on phonics-centered instruction and assessments with English-only measures for identifying instructional needs. This presents a serious problem as assessment results often inform instruction. DLLs are negotiating more than one language, so without a concerted effort to ensure that language comprehension is prioritized and becomes a standard component of assessments, the knowledge base on how to best support students' language comprehension development – which directly impacts word recognition – will remain limited.

In Early Literacy Development and Instruction for Dual Language Learners in Early Childhood Education, 2022, the authors suggest that classroom-based language learning opportunities can be further strengthened, especially for DLLs, and call for a comprehensive and simultaneous instructional approach to early literacy that includes "attention to literacy socialization and active engagement with books in both languages, creating a language-rich and print-rich classroom environment, building oral language and wide vocabulary in both languages, building phonological awareness in and through both languages, attending to cross-language connections, and emergent skills in writing. All of this is enhanced and made more effective in contexts where literacy development is integrated with content learning, high-quality culturally inclusive/responsive materials are used, and an overall assets-oriented, affirming, and inclusive climate is present. (Page 18)

- Fillmore (2017) highlights the unique challenges faced by ELs, particularly the inconsistencies in English sound-symbol relationships. While decoding skills are essential, they alone do not ensure comprehension, as multilingual learners often need additional language support to make sense of text (Fillmore, 2017).
- Hiebert & Martin (2010); Lindsay, J. (2010); Wylie, Hodgen et.al. (2006) pose that print immersion is one of the aspects of early childhood education with the greatest effect size in supporting later literacy skills.

- Mesmer (2020) underscores the need for a multifaceted literacy approach. Phonics instruction, while foundational, must be complemented by broader language instruction. Teachers play an instrumental role in helping students, especially multilingual, not only decode words but also grasp linguistic units like syllables and words, as well as develop phonological awareness for sound manipulation (Mesmer, 2020).
- Storch & Whitehurst, 2002 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.,), since language-based skills typically develop much earlier than code-based skills.

Instructional Reciprocity

"Rather than adding together completely separate skills, reading foundational skills function in harmony with one another as readers simultaneously apply information about print, phonemic awareness, phonics, and word recognition." Duke, 2023

A key challenge in early literacy education is the limited time available to address all the instructional goals, programs, and practices recommended by research. To tackle this issue, we advocate for integrating multiple foundational reading skills within the same instructional activities, combining language, reading, writing, speaking, and listening and blending literacy with content-area instruction.

Instructional Reciprocity and Foundational Skills

A sequential-like conceptualization of code-based skills has led some to advocate for less contextualized and more isolated instructional approaches -- teaching each component in isolation to lead to proficiency. However, this does not fit with research findings regarding the development of reading foundational skills. Research suggests that reading foundational skills are reciprocally related. This is essential not only for reinforcing learning but also for maximizing time efficiency.

Reciprocity has been found in longitudinal correlational studies and in instructional studies. They have revealed the impact of decoding, spelling, and word reading on phonemic awareness; the impact of morphology and oral reading fluency on decoding ability; and the impact of writing on reading comprehension. Instructional reciprocity can support children's development in a range of foundational skills, including phonemic awareness, spelling, sound-spelling knowledge, and print concepts.

Instructional reciprocity also underscores the importance of integrating explicit vocabulary instruction into word reading and spelling lessons, particularly for low-frequency or academic words (Kearns & Al Ghanem, 2019; Duff & Hulme, 2012). This need is especially pronounced for DLLs, whose home languages may feature more predictable sound-letter correspondences than English. English orthography's complexity, characterized by variable sound-spelling relationships and inconsistencies in pronunciation, poses unique challenges for DLLs.

For example, similar spellings like "though," "through," and "bough" can represent entirely different sounds, while vowel sounds may be spelled in diverse ways ("ate," "eight," "say," "they"). Reciprocal instruction where teaching vocabulary happens alongside decoding skills enables DLLs to leverage word meaning knowledge to bridge these challenges, fostering both accurate decoding and deeper comprehension of unfamiliar words.

- Duff & Hulme, 2012; Taylor et al., 2011; Wang et al., 2013 found that when children encounter novel or irregularly spelled words, their understanding of word meanings helps them decode unfamiliar spellings and enhances word recognition accuracy.
- Erickson & Thiessen (2015) explored how *statistical learning*—the brain's ability to detect patterns in language—affects language acquisition, particularly in terms of vocabulary and syntax. They demonstrated that when language learners are exposed to repeated language patterns, they become better at predicting word order and sentence structure. This implicit learning helps multilingual learners acquire syntax without explicit instruction.
- Kearns & Al Ghanem (2019) demonstrated that in addition to phonological decoding, semantic knowledge—or understanding word meanings—supports reading, particularly for multisyllabic and irregularly spelled words or the knowledge of word-specific meanings can significantly boost multisyllabic word reading skills
- Parish-Morris & Tager-Flusberg, (2007) Explored how statistical learning contributes to language processing and vocabulary building, highlighting practical implications for English Learners. They examined the likelihood of sound combinations in a language and the number of words that sound similar to a given word in how children learn new words.
- Ricketts et al., 2007; Taylor et al., 2015 showed that for irregularly spelled words, word meaning knowledge acts as a scaffold, enabling learners to navigate inconsistencies and build a set for variability to recognize and adapt to pronunciation differences.
- Seidenberg (2017) posits that students acquire and use statistical regularities in language
 to become more proficient readers. Readers build connections between phonemes and
 graphemes through encounters with patterns in the words that they read. The more that
 students read, the more frequently they will encounter common and consistent patterns.
 This frequency, in turn, leads to increased automaticity in recognizing words with
 patterns when they encounter them in words.
- Share, 1995; Tunmer & Chapman, 2012 studies indicated that knowledge of word meanings facilitated decoding by helping learners interpret partially decoded words and refine their pronunciation and understanding

 Venezky & Johnson (1974) showed that presenting young students with a reading diet emphasizing consistency over diversity may have unfortunate long-term decoding consequences.

Instructional Reciprocity: Literacy and Content Learning

"Instructional reciprocity is not limited to foundational skills – reading, writing, speaking, listening, viewing, and visually representing are also reciprocally related and can be taught concurrently." Duke, 2023

There is growing agreement about the importance of integrating content and literacy learning starting early on. This focus on integration aligns with the theory of Kintsch's (1988) text comprehension construction-integration model which states that knowledge is critical for comprehension.

Rather than separate strands of Language Arts, science, and social studies innovative comprehensive approaches could be embraced to provide all children, including DLLs, with a coherent learning experience across disciplines that also boosts their language and literacy skills.

- Duke, Halvorsen, Strachan, Kim, and Konstantpoulos (2021) examined the impact of instructional reciprocity between literacy and content area instruction using project-based units to compare to business-as-usual social studies and literacy instruction, finding statistically significant impacts on both literacy and social studies.
- Gonzalez Coal. (2010) used shared reading, which has a long record of fostering literacy development, to develop knowledge of specific science and social studies concepts/vocabulary words (e.g., water, fluid, frozen), finding positive effects on both receptive and expressive vocabulary knowledge.
- Hwang, Cabell, and Joyner (2022) identified 35 studies in kindergarten through fifth grade in which integrated instruction was compared to instruction in which literacy and a content area were taught separately. Studies found statistically significant impacts on both literacy and content knowledge.
- Monteira & Jiménez-Aleixandre (2016) demonstrate learning gains for young children in science and literacy when they engage in rich science learning experiences that include opportunities to engage in disciplinary literacy practices.
- Sarama, Lange, Clements, and Wolfe (2012) found that a mathematics intervention designed to incorporate intentional use of language fostered not only mathematics development but also development of oral language on several measures.

Instructional Implications for Multilingual Learners

During the recent English Learner Success Forum in Atlanta on October 29-30, 2024, discussions highlighted opportunities to enhance code-based instruction for multilingual learners. Key recommendations emerged with a focus on bolstering early literacy development. Below are expanded insights based on these recommendations, underscoring the importance of a starting with a multilingual perspective:

1. Oral Language Development

Materials should provide ample opportunities for oral language development, aligned with formative assessment data to ensure targeted support. Creating varied opportunities for conversation and articulation is essential—not to correct accents, but to help students understand and use English confidently. This practice allows multilingual learners to become familiar with sounds that may not exist in their home language. Focused, repetitive articulation activities in meaningful context support the oral language skills necessary for strong language development and word recognition.

2. Cross-Linguistic Connections

Materials should explicitly highlight cross- linguistic connections, capitalizing on students' existing language knowledge to facilitate literacy development. By showcasing similarities and differences between home languages and English, instructional materials can empower students to leverage their linguistic assets for decoding. Teachers can support students by being aware of these sound correspondences and offering explicit instruction in target sounds, avoiding marking influence of home language as reading errors.

3. Attaching Meaning to Code-Based Skill Instruction

Materials for code-based reading skills should include opportunities to connect phonemes and graphemes to the meaning of words. If children are unfamiliar with the words they encounter in print, decoding will not lead to comprehension. In the context of authentic reading and writing experiences and conversation, instructional materials can enhance students' ability to purposefully apply their knowledge of letters and sounds to understand a text's meaning. Without a focus on meaning, multilingual learners—especially those still building oral language skills in English—may struggle to create the neural connections necessary for word recognition. Without attaching meaning to code-based instruction, multilingual learners who are still developing an oral language foundation in English will likely face obstacles to orthographic mapping as all three forms of a word – phonemic, orthographic, and semantic -- must come together to create a neural connection that helps them recognize and recall words more efficiently.

4. Aligned Formative Assessments

Materials incorporate consistent formative assessments that identify students' strengths and areas for growth to plan targeted support. These assessments help pinpoint where students may need additional support or practice, ensuring continuous growth through targeted practice opportunities.

5. Metalinguistic Awareness

Materials should foster metalinguistic awareness by explicitly drawing students' attention to sound patterns and relationships within words. This metacognitive approach empowers students to become independent readers and problem-solvers.

Note: This is especially important when multilingual learners are already literate in their home language and don't need a full dose of phonics because of the overlaps and transference of these kinds of skills from one language to another. In such situations, acceleration is key and instruction directed to the differences or to the spelling patterns of sound-symbol relations that aren't like those in their home language can be sufficient. This approach ensures they can engage in grade-appropriate, content-rich instruction while simultaneously building literacy skills.

6. Advanced Phonics and Morphological Patterns

Materials provide advanced phonics opportunities that encourage students to analyze patterns in words and strengthen their ability to decode multisyllabic words and develop vocabulary. Instruction should provide opportunities for students to explore word morphology—examining prefixes, suffixes, and root words. This analysis helps them decode unfamiliar words, expand vocabulary and deepen their content knowledge by connecting word structure to meaning. Cross-linguistic connections and explicit cognate instruction also supports multilingual learners' leverage their existing language knowledge, supports word study skills, problem-solving with multisyllabic words, and orthographic mapping.

7. Fluency

Materials provide explicit fluency instruction that is informed by multilingual learners' unique process of English language development. – alongside reading comprehension and oral language development. For example, students might be reading at varied rates due to reading in a new language versus decoding ability (e.g., cognitive load, taking time to make cross-linguistic connections or mentally translate as they read, a student's language comprehension needs, or missing vocabulary/background knowledge).

Building Systems of Opportunity

Although theoretical models such as the Simple View of Reading (Gough & Tunmer, 1986) may serve as a starting point for understanding reading development in that reading comprehension abilities are dependent on decoding skills and language comprehension abilities, it is critical to remember the strong interdependence between word recognition and language comprehension. Shift 2 highlights the interconnectedness of language, code, meaning, knowledge building and communication in literacy development. We challenge the notion that teaching word recognition and decoding skills should happen in isolation and call for reciprocity with early reading instruction that simultaneously attends to building well-developed word reading skills in the context of sustained language comprehension and content area instruction. Such simultaneous and comprehensive learning empowers students to read with fluency, understanding, and

confidence, transforming them into proficient readers who not only decode words but also grasp their significance.

Creating these Systems of Opportunity cultivate agentive readers who can decode and also engage with a text's meaning with peers as the ultimate purpose of building word recognition. These practices encourage students to see words as more than isolated symbols, but as conveyors of meaning, interconnected with other words and ideas. This should be emphasized from the very start of literacy development.

Helpful Resources

Instructional strategies and materials selected for the classroom need to be effective, efficient and user-friendly for both teachers and DLLs. The goal is to balance instructional complexity with practical implementation to ensure high-impact learning experiences that don't overwhelm teachers or students but drive meaningful learning outcomes. Helpful resources include:

- Early Literacy Development and Instruction for Dual Language Learners in Early Childhood Education, 2022
- Presents a research-based description of effective early literacy instruction and how literacy develops for dual language learners differ greatly from prevalent current tendencies to double-down on foundational skills instruction in the preschool years.
- <u>A Framework for Foundational Literacy Skills Instruction for English Learners</u>, has four major parts—an overview of the research, a section envisioning optimal instruction, a summation of what teachers need to know about language, and considerations in selecting instructional materials.
- <u>Learners Guidelines for Improving English Language Arts Materials for English Learners</u> were developed to provide specific research-informed EL strategies and best practices necessary for the simultaneous development of disciplinary knowledge, language and literacy for multilingual learners.
- Instructional Materials for Code-based Reading Skills: Design Challenges and
 Opportunities for Multilingual Learners: Based on a review of instructional materials
 specifically for code-based skills, ELSF make recommendations around key design
 features to support multilingual learners' early literacy development

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