



UNDERSTANDING THE SCIENCE OF READING FOR MULTILINGUAL LEARNERS

DDOE POLICY BRIEF

CONNECTING RESEARCH TO INSTRUCTION AND LEARNING FOR MULTILINGUAL LEARNERS

Executive Summary

The purpose of this document is to clarify implications, recommendations, and actionable resources for Delaware Educators to navigate new legislation at the intersection of the Science of Reading and High-quality Instructional Materials (HQIM) for Multilingual Learners (MLLs). Three sections present (I.) Recommendations that tie the Science of Reading to effective Tier I literacy instruction and interventions for MLLs in grades K-3; (II.) Highlights for Delaware educational policies related to the Science of Reading, implications, and criteria to assist in the selection and/or analysis of high-quality instructional materials (HQIM) for MLLs, and (III.) A glossary of terms and references.

DELAWARE MULTILINGUAL LEARNERS (MLLS)

The DDOE honors students' language abilities as an asset and values the many languages Multilingual Learners (MLLs) bring to enrich Delaware classrooms. Using the term Multilingual Learner (MLL) emphasizes the importance of respecting home language as students are simultaneously learning English in Delaware schools. While the term "English learner" may continue to be used in federal and state policy, DDOE Guidance and resources have already begun to reflect this shift.

MULTILINGUAL ENROLLMENT IN DELAWARE SCHOOLS

Multilingual learners are the state's fastest-growing demographic of students. Since 2016, the percentage of multilingual learners enrolled in Delaware schools increased by 42%, which is nearly 16,000 learners (*National Clearinghouse for English Language Acquisition & Language Instruction Educational Programs (NCELA)*)



Understanding The Science of Reading for Multilingual Learners | Grades K-3

Delaware's schools have approximately 16,000 current Multilingual learners (MLLs) which mirrors the nation's average of 10 percent. MLLs are a highly diverse group of students with cultural and linguistic strengths, including their home languages (DE Guidebook, 2022). Despite these many assets, MLLs continue to face significant opportunity gaps and obstacles imposed by systemic inequities throughout their educational careers.[1] The Delaware Department of Education (DDOE) is dedicated to ensuring that every MLL attains the highest level of academic success and language proficiency. Success is founded on the belief that all educators are teachers of language and literacy and that all MLLs have the opportunity to thrive (Delaware Design, 2019).

The DDOE firmly believes that explicit, systematic literacy instruction for Multilingual learners (MLLs) is essential for high-quality education. To be of high quality for MLLs, educators integrate and leverage the science-based elements of literacy (phonemic awareness, phonics, fluency, vocabulary, comprehension, knowledge, language, and writing), with daily structured practice in oral language development, and opportunities to practice applying new skills toward meaning-making and comprehension (August, D., & Shanahan, 2006).

With decades of research and evidence, educators now know what is needed to support MLLs' reading and literacy development. Comprised of three sections, this document serves as a resource for all Delaware educators to support early literacy for MLLs and provides three recommendations that are consistent findings about the features of instruction that lead to improved student learning, high-quality English Language Development (ELD), and literacy for MLLs (Delaware Design, 2019 & Goldenberg, 2013). [2]

Introduction: What is the Science of Reading?

The DDOE defines the Science of Reading as ‘a vast, interdisciplinary body of scientifically based research about reading and issues related to reading and writing. This research has been conducted over the last five decades across the world, and it is derived from thousands of studies conducted in multiple languages. The science of reading has culminated in a preponderance of evidence to inform how proficient reading and writing develop; why some have difficulty; and how we can most effectively assess and teach and, therefore, improve student outcomes through prevention of and intervention for reading difficulties’ (The Reading League, 2022).



While the Science of Reading helps educators understand what is essential for learning to read, it is important to note that **MLLs are learning to read at the same time they are learning a new language** – which requires specific and well-planned additional linguistic support, pedagogical considerations, and a deep understanding of language development (Richards-Tutor, Aceves, & Reese, 2016). Therefore, educators should be cognizant of the relationship between the Science of *Teaching* Reading and the Science of *Learning* and how each interplay when considering how learning to read takes occurs.

Multilingual learners learn to read in many of the same ways as monolingual learners (Non-MLLs), with consideration for additional instructional support (Verhoeven, L. & Perfetti, C., 2022). Research has shown that offering English Language Development (ELD) instruction produces better English proficiency outcomes than not offering it at all (Saunders & Goldenberg, 2010).

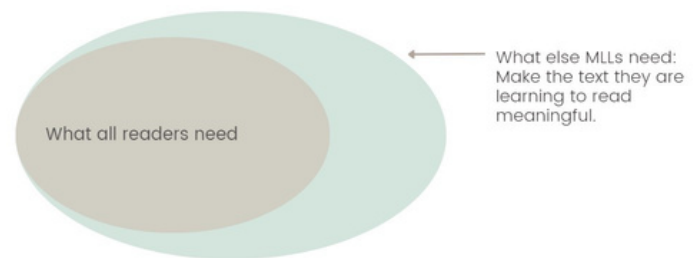


Fig 1. Goldenberg, C. 2020,

Systematic literacy instruction can be especially beneficial in the early grades (Pope, 2016) and both English literacy and English oral language proficiency must be priorities if MLLs are to have adequate and equitable opportunities for success in school and beyond (Vaughn et al., 2006, NAP Promising Futures, 2017; Walqui & Bunch, 2019; Goldenberg, 2020).

We also know, foundational skills – alone – are not sufficient for MLLs (or for any learner) learning to read in English. MLLs should have opportunities to practice and integrate listening, speaking, reading, and writing, which promotes meaning-making, language transfer, and metalinguistic awareness (Goldenberg, 2020, Li, G., Sun, Z., & Li, H., 2019). In other words, instruction that begins with successful evidence-based literacy practices and interventions for monolingual [English] speakers can be leveraged to provide explicit language support for MLLs.



Section I Three recommendations for effective Tier I literacy instruction & intervention for MLLs Grades K-3

The Importance of English Language Development (ELD)

High-quality ELD is planned instruction, contingent supports, and daily practices that are responsive to student needs, with an emphasis on the language needed to engage with rigorous standards-aligned content and participate in disciplinary practices (Saunders, Goldenberg, & Marcelletti, 2013). In Delaware, ELD (both Integrated and Targeted ELD) is shared between MLL teachers, content teachers, coaches, and leaders as a priority for all educators in every district, every school, and every learning environment (Delaware Design, 2019).

Three Recommendations

- Recommendation 1** Prioritize oral language practice and proficiency, academic language, academic discourse, assessment for learning, and rigorous grade-level opportunities to learn for MLLs (Delaware Design, 2019).
- Recommendation 2** Reinforce and sustain English Language Development (ELD) as part of high-quality Tier I instruction for Multilingual learners (See Fig. 2).
- Recommendation 3** Utilize the DDOE Criteria for centering MLLs in the Selection and/or Analysis of High-Quality Instructional Materials to meet the demands of State Policy for Reading K-3 (See Fig. 3).



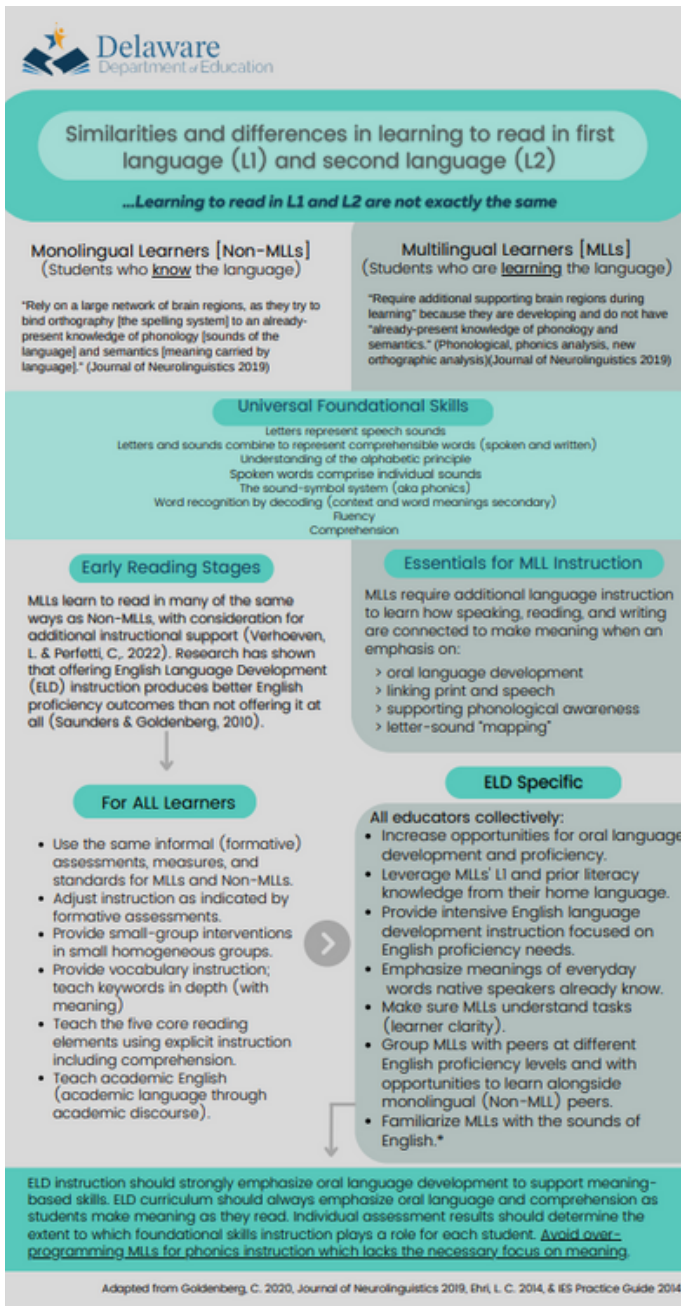
Section II Delaware Science of Reading Policies, Implications, & Criteria for Selecting (HQIM) for MLLs

Like many states across the US, Delaware has authored legislation to establish curriculum aligned with the Science of Reading. This section specifies DE legislation as well as research-and-evidence-based criteria to use in the selection of HQIM for MLLs.

Science of Reading & Implications for Multilingual Learners

Implications for MLLs include Local Education Agencies (LEAs) continued attention to MLLs' Civil Rights, understanding of what to look for in evidence-based HQIM, and how to provide high-quality professional learning grounded in HQIM that centers MLLs' content and literacy learning.[4]

Fig. 2. Similarities and differences in learning to read L1-L2



Delaware Science of Reading Policy

Delaware's Senate Bill (SB4, an act to amend Title 14 of the Delaware Code Relating to Evidence-Based Reading Curricula) requires the DDOE to maintain a published list of evidence-based reading instruction curricula K-3 that aligns with the essential components of literacy known as the 'science of reading'. Additionally, by the 2027-2028 school year, Delaware school districts and charters serving students in grades K-3 must:

- Adopt reading instruction curriculum from the department list;
- Demonstrate that all educators who teach reading complete professional development aligned with the essential components of evidence-based reading instruction;
- Identify a school-based supervisory position responsible for assisting with the implementation of the adopted curriculum and reporting.

Understanding how MLLs learn to read can help educators leverage oral language and language-based skills that develop prior to attending school. These linguistic assets support literacy development. All educators should build upon these skills with HQIMs anchored in the Science of Reading and utilize criteria that leverage literacy for MLLs. Supporting MLLs' English language development, requires consideration of what is the same and different about teaching reading to MLLs (Fig. 2). **ELD instruction should be integrated throughout the school day and strongly emphasize oral language development routines to support meaning-based skills with a focus on – receptive (listening, reading) and productive (speaking, writing) skills that lead to comprehension.** (Ehri et al., 2007, p. 424, Goldenberg, C., & Vaughn, S et.al. 2006).

Additionally, the *curriculum* should always emphasize oral language practice, and embed routines for students to make meaning as they read. Individual assessment results should determine the extent to which foundational skills instruction plays a role for each student. Avoid over-programming MLLs for phonics instruction which lacks the necessary focus on meaning [5].

Fig 2 Adapted from Goldenberg, C. 2020, Journal of Neurolinguistics 2019, Ehri, L. C. 2014, & IES Practice Guide 2014. [Download the Infographic](#)

DDOE Criteria for Selecting (HQIM) for MLLs: What to look for in Materials

The DDOE provides evidence-based criteria for both selecting and analyzing HQIM for MLLs. These criteria combine the Science of Reading and English Language Development (ELD) as part of high-quality Tier I instruction. Educators can use these criteria and the corresponding process to support MLLs, LEA Policy, school site policy, and family/caregiver communication.

Building from the research these criteria include explicit attention to oral language practice leading to proficiency as it relates to what students are expected to read and how they are to engage in literacy during classroom instruction (Fig. 3) These factors are especially important for MLLs because reading is not only skills-based but also a social activity. This necessitates the application of reading skills within authentic literacy interactions and oral language development alongside MLLs' monolingual peers [6].

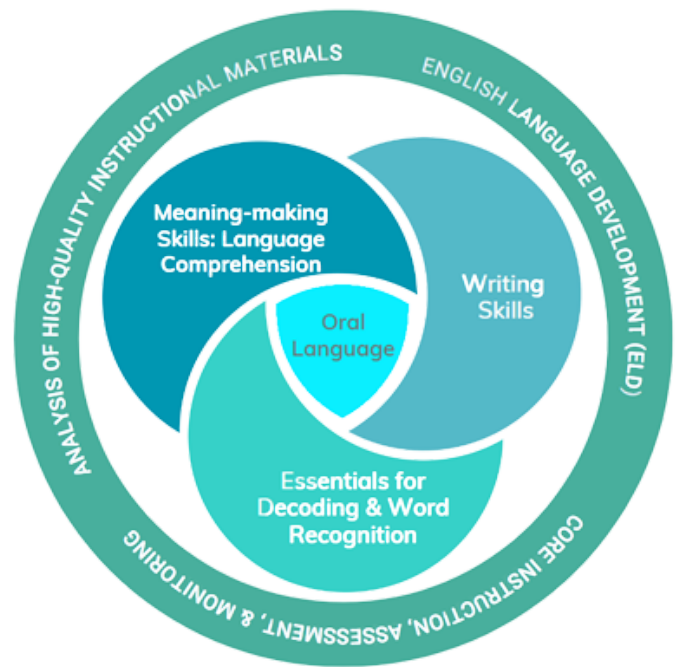


Fig. 3. Priorities for The Science of Reading, English Language Development (ELD), and High-Quality Instructional Materials (HQIM) for Multilingual Learners, DDOE (2022). Access the resource [here](#).

Features of High-Quality Instructional Materials for MLLs: Learning Foundational Literacy Skills in English

We know that literacy, learning to read (and write), is multidimensional and includes knowing the sounds and symbols of the language (phonemic awareness, decoding, automaticity), using letters and sounds to read and spell words, vocabulary, background knowledge, syntax, and semantics to make meaning (National Reading Panel, 2000). However, this does not constitute all literacy. Literacy involves additional components such as verbal reasoning (oracy), metacognition (thinking about thinking), metalinguistic (thinking about language), word recognition, and language comprehension. Without all these components working together for MLLs, literacy is not possible because the print will lose its meaning [7].

Additionally, access to HQIM is a priority for MLLs and the educators who serve them. We know MLLs are capable of engaging in rigorous grade-level content and learning, but schools and districts are often choosing curricula without explicitly considering the needs of MLLs. Therefore, the DDOE has created guidance and resources to help schools and districts select (or analyze) their HQIM to deepen educator understanding, communicate with the school community, and focus on skillful implementation.

Overview: Features of High-Quality Instructional Materials for MLLs: Learning Foundational Literacy Skills in English

The Indicators

To be of high quality for MLLs, HQIM in K-3 should have these criteria known to support MLLs in literacy development present (either curriculum-embedded or intentionally designed) throughout the materials. These criteria amplify the standards-based intentional connections between ELD, literacy, and content instruction [Fig. 4]. Each *Review Area* specifies indicators necessary for language development, full access to rigorous grade-level instructional content, integrated scaffolding [without compromising rigor or concepts], and access to text that increases in complexity. All HQIM should utilize meaningful, linguistically valid assessments and accurately inform educators about what MLLs know while offering ample opportunities to monitor oral language development.

Fig. 4. What to look for in High-Quality Instructional Materials (HQIM) to support science -based reading for Multilingual learners, DDOE (2022).

WHAT TO LOOK FOR: With your team, familiarize yourself with these DDOE-approved Criteria. Think holistically about how your HQIM embeds each one of these components. What are the HQIM strengths and gaps? Collectively summarize the quantity and quality of these indicators.			
REVIEW AREA I	REVIEW AREA II	REVIEW AREA III	REVIEW AREA IV
Oral Language Development	Decoding & Word Recognition	Language Comprehension	Writing Skills
<p><i>What to Look for:</i></p> <ul style="list-style-type: none"> → Oral language routines → Opportunities to practice speaking and listening (informally & formally) with peers → Use of increasingly complex academic language → Leverage home language (L1) 	<p><i>What to Look for</i></p> <ul style="list-style-type: none"> → Alphabetic Principle → Phonological & Phonemic Awareness → Phonics → Sight Words → Fluency 	<p><i>What to Look for</i></p> <ul style="list-style-type: none"> → Verbal Reasoning (inference, metaphor, etc) → Content & Background Knowledge → Language Structure (syntax & semantics) → Vocabulary → Morphology 	<p><i>What to Look for</i></p> <ul style="list-style-type: none"> → Text Structure & Plan of Development → Awareness of Task, Audience, & purpose → Encoding → Language Structure (syntactic awareness, sentence elaboration & complexity) → Cohesion

The Process

Analyzing HQIM helps all educators ask deeper questions about what works for MLLs and how materials can support high-quality instruction and a deeper understanding of HQIM. Participants identify what strengths and gaps are present in the materials to determine the components of HQIM that effectively meet the needs of diverse MLLs, **or** decide if additional instructional enhancements will be necessary [8]

A Call to Action: Continuous Improvement for Multilingual Learners

Seeing multiple languages as an asset, rather than a liability to be remediated, is necessary. Emerging themes in the application of the Science of Reading for MLLs reveal the importance of taking an asset-based approach, to build language and literacy that adds to the asset of language MLLs already have, and to broaden the understanding that learning to read is similar across languages, and explicit systematic instruction of reading is not a singular construct but a multifaceted process.

Meeting these demands requires collective accountability among educators to prioritize MLLs in professional learning, in the selection of HQIM, and in the skillful implementation of the HQIM. We need to de-clutter early reading instruction for MLLs, while we continue to learn more about the nuances of learning to read. Now is the time to ensure that all Delaware learners are able to benefit from a high-quality education.

Section III Glossary of terms, Resources, & References

Glossary of Terms & Extended Resources

Phonemic awareness: Phonemic awareness is the understanding that words are composed of sounds. Teachers show students how to hear the individual sounds in spoken words, identify the sounds in words, and manipulate these sounds. They can prepare students to learn to read by showing the sound combinations found in English. The National Reading Panel found phonemic awareness works best when teachers show students how to manipulate phonemes with letters, focus on just one or two types of phoneme manipulations at a time, and teach in small groups. This needs to be taught as part of an explicit plan leading to phonics.

Phonics: Phonics builds on phonemic awareness. Using phonics, teachers show students how to break down a word to connect the sounds in words to combinations of letters so they can read and spell words. Studies show systematic phonics can improve students' ability to decode (sound out) and spell words, especially for those in kindergarten and first grade. Teachers should not just use phonics as a way to show students how to sound out words but have a structured plan to teach the phonemes and the possible letter combinations for each.

Fluency: Reading fluency is the ability to read accurately, rapidly, and with expression, so the reader can process and comprehend what has been read. Readers who lack fluency struggle so much with decoding that they cannot focus on the meaning. Teachers can help students build fluency through "guided repeated oral reading."

Vocabulary: Vocabulary is the range of words a student understands. Students have both an oral vocabulary—words they understand when they hear them—and a print vocabulary. Teachers can show students how to use phonics to decode a word and, if it is in the student's oral vocabulary, understand it. Readers who understand more words can read faster with a greater understanding of the content. Instead of requiring students to memorize lists of words, teachers can build vocabulary by teaching vocabulary words as they appear in the student's reading. Research shows the best instructional methods for increasing vocabulary depend on the reader's age and ability.

Reading Comprehension: Reading comprehension is the process of determining the meaning of the text. This is an interactive process between the student and the written content. Students comprehend meaning more easily when they can link it to something they know. This is especially true of content not designed for the classroom that assumes the reader has a basic background in the content. Teachers can help students improve their comprehension by teaching reasoning techniques and systematic strategies to assist the recall of information, asking and answering questions about the text, and summarization.

The Delaware Design (2019) Delaware's Multilingual Learner (MLL) Guidance defines Integrated and Targeted English Language Development (ELD) with accompanying definitions for the components of high-quality education for MLLs.

The National Reading Panel determined that the most promising strategies were: comprehension monitoring, cooperative learning, graphic and semantic organizers including story maps, question answering, question generation, and summarization (pp. 4-42). Teachers not only need to understand these various comprehension strategies but also when and how to teach them.

Section III con't - Resources, & References

1. *Systemic Inequity: A system that follows unjust practices based on known or unknown prejudice.* (IGI Global)
2. *Effective instruction; including but not limited to; clear goals and objectives; appropriate and challenging material; well-designed instruction and routines; modeling; feedback; application of new learning and transfer to new situations; frequent assessments, with reteaching as needed* (Goldenberg 2013).
3. *DDOE Research and Evidence Base, Delaware Design, (2019) archives*
4. *Fact Sheet, Ensuring English Learner Students Can Participate Meaningfully and Equally in Educational Programs (Jan. 2015)* <https://www2.ed.gov/about/offices/list/ocr/docs/dcl-factsheet-el-students-201501.pdf>
5. *English Learner Success Forum (2022) New National Research Raises Teachers' Voices about Instructional Materials for English Learners* <https://www.elsuccessforum.org/blog/new-national-research-raises-teachers-voices-about-instructional-materials-for-english-learners>
6. *Goldenberg, C. Reading Wars (2020); In addition to a need for structured academic discourse practice, there is a tendency to overemphasize English-language proficiency (ELP) and over-prescribe interventions which often remove MLLs from engaging heterogeneous groupings and grade-level learning alongside their monolingual peers. and Papastefanou T, Marinis T, Powell D. Development of Reading Comprehension in Bilingual and Monolingual Children—Effects of Language Exposure. Languages. 2021; 6(4):166. <https://doi.org/10.3390/languages6040166>*
7. *English Learner Success Forum, Benchmarks of Quality (2022), Instructional Partners (2023) Early Literacy Playbook.*
8. *Prior to the selection of HQIM (or to analyze current materials) use this criteria to guide review to understand where and when criteria are embedded within the materials. Be sure to mark which criteria are present and when they are not to inform intentional instruction of language to support MLLs. Ask deeper questions about your students and materials. What language support needs are not currently being met? Where are integrated language supports missing in the curriculum? What materials might be blocking access for MLs? Tackle a few priority areas at a time: oral language development and routines, essentials for decoding, and language comprehension. involve core and content teachers alongside MLL specialists to review work together. Remember: instruction that is intended for MLs is good for everyone, but what is intended for everyone may not be good enough for MLLs (Gonzales, C. (2020). ELlevation website blog <https://ellevationeducation.com/blog/evaluating-instructional-materials-english-learners>*
9. *Access a list of full references [here](#).*

The DDOE Multilingual Learner (MLL) Department & English Language Arts (ELA) Department would like to thank the following colleagues for their support, research, and contribution to this document: Dr. Claude Goldenberg, Dr. Joanna Yip, Carlene Thomas, Steven Weiss, and Melissa Lambert.

Maria Rodriguez, Education Associate, Multilingual Learners

Cary Knight, Education Specialist, Multilingual Learners

Paige Morgan, Education Associate English Language Arts

Kathy Kelly, Director, Curriculum, Instruction, and Professional Development · Delaware Department of Education