



Pre-K Curriculum Evaluation Guidelines

Guidelines to evaluate how well a Pre-K curriculum's language and emergent literacy components align with findings from the research evidence and the science of early language and literacy development.

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Early Language and Literacy

Important Preliminary Statements

Pre-K curricula are typically comprehensive, addressing not only language and emergent literacy but also social-emotional learning, mathematics, science, and social studies. These guidelines focus specifically on the language and literacy components of a Pre-K curriculum. A curriculum need not address every guideline in this document to be considered evidence-aligned for language and literacy purposes; reviewers should evaluate the language and literacy components on their own terms, recognizing that other curricular domains are evaluated separately.

In early childhood, children acquire expressive language through meaningful social interaction, and this oral language forms the foundation for later reading and writing. Reading and writing, however, require children to map expressive language onto print and to use language in new symbolic ways. These skills are not acquired through casual exposure alone (Dehaene, 2009; 2020; Gough, 1996; Lyon, 1998; Piasta & Wagner, 2010). Most children, including those who begin at risk, reach expected levels when instruction is systematic and sufficiently intense (Vellutino et al, 1996). These guidelines have been developed to assist educators and decision-makers in selecting Pre-K curricula and instructional materials that build strong language foundations and prepare children for later literacy success.

The foundation for reading and writing is language (Snowling & Hulme, 2025). Effective instruction is systematic, cumulative, and responsive, while remaining playful, motivating, and developmentally appropriate. Effective Pre-K instruction is deliberate and intentional, even when it occurs within child-centered and interactive experiences, rather than incidental or unstructured (Division for Early Childhood [DEC], 2014; National Association for the Education of Young Children [NAEYC], 2020; Snow et al., 1998). Instruction prioritizes the development of oral language, which constrains and enables later word recognition and comprehension, including vocabulary, syntax, discourse, verbal reasoning, background knowledge, and phonological sensitivity (Scarborough, 2001; Storch & Whitehurst, 2002). Instruction also includes planned and purposeful exposure to print concepts, letter knowledge, and speech sounds within meaningful contexts. These experiences support children's understanding of how language is represented in print, without requiring children to read words independently or demonstrate automatic word recognition (Justice et al., 2009; Piasta & Wagner, 2010).

Our focus needs to be on helping children build increasingly complex language so they have the foundation for word reading and reading comprehension in later school years. Thus, Pre-K curricula must not emphasize early code-based skills to the exclusion of language development. Instead, curricula should intentionally support rich oral language use that promotes language competencies such as vocabulary, sentence complexity (morphosyntax), narrative discourse, verbal reasoning (including inferencing), and world knowledge. These language competencies provide the foundation for both word recognition and the comprehension of increasingly complex texts (Dickinson & Porche, 2011; Dickinson et al., 2010).

For more information, please read [The Six Areas of Language](#).

As is true of all complex human behaviors, children vary in their language and emergent literacy development. Some children will require additional instruction and support to develop foundational language skills, while others will require less. Instruction should be adjusted based on formal and informal assessment information, providing increased support for children who demonstrate language vulnerabilities and expanded opportunities for complex language use for those who demonstrate more advanced skills (Connor et al., 2006; Greenwood et al., 2013; 2015).

If a large proportion of children are not demonstrating expected progress in foundational language and emergent literacy skills within a whole class Pre–K curriculum, the first assumption should be that essential elements of instruction, curriculum design, or implementation are missing or misaligned, not that the children are deficient (Greenwood et al., 2013; Vaughn & Fuchs, 2003; Vellutino et al., 1996; Wackerle et al. 2021).

These guidelines also serve as an overview. For a fuller treatment of preschool curriculum quality, see the National Academies' consensus report on preschool curriculum (National Academies of Sciences, Engineering, and Medicine, 2024). For detailed rating systems designed for preschool, see the EdReports Pre–K review criteria (EdReports, 2025) or Michigan's early childhood curriculum review rubric (Michigan Department of Lifelong Education, Advancement, and Potential, 2026).

What is Early Language Development and How Does it Contribute to Literacy?

The Reading Is Language (RIL) model (Snowling & Hulme, 2025) is a developmental extension of the Simple View of Reading, which frames reading comprehension as the product of word recognition and language comprehension. The RIL model reframes reading not as the interaction of two separate components, but as a unified, language-based process in which oral language provides the foundational system for both word reading and comprehension across development.

The model describes four developmental phases. In the prereading years (birth through Pre–K), language functions as a single, unified foundation - the sole precursor from which all later literacy ability emerges. As children enter formal schooling (kindergarten through Grade 1), this unified language foundation differentiates into two pathways: alphabetic (code) skills and continued language development, which interact with and support each other. Through the intermediate reading years, word reading and language development continue to interact bidirectionally, each strengthening the other. Through proficient reading, the code pathway culminates in reading fluency while the language pathway contributes to knowledge of the world, and both converge to produce reading comprehension.

Early language skills drive the emergence of alphabetic (code) skills and later reading comprehension, operating through both direct and indirect pathways (Connor et al., 2006; Whitehurst & Lonigan, 1998). Within this framework, language can be

organized into two interdependent domains:

- code-based language (phonological awareness, letter knowledge, letter-sound correspondence, decoding, and word recognition)
- meaning-based language (e.g., vocabulary, morphosyntax, narrative discourse, verbal reasoning, and world knowledge)

These domains do not develop in isolation but unfold in overlapping waves, where early language forms the foundation on which word reading and comprehension are built and consolidated across the school years.

What about children who speak multiple languages or English language varieties?

Oral language is foundational for all children in Pre–K. Within this universal foundation, children who are developing multiple languages or who speak English language varieties require particular attention to ensure their linguistic strengths are recognized and built upon.

Research points to the importance of young multilingual learners holding onto their home language as a rich asset that must be nurtured and developed. Children should be encouraged to engage in high-quality conversations, storytelling, and interactive read-alouds to help develop vocabulary, morphosyntax, narrative discourse, and listening comprehension, which are critical foundations for reading development (National Early Literacy Panel, 2008; August & Shanahan, 2006; NASEM, 2017). Doing so in both English and their home language supports, rather than impedes, future academic success due to cross-language transfer of vocabulary, conceptual knowledge, and literacy skills (Cummins, 1979; Goldenberg, 2008; NASEM, 2017). Pre–K curricula should explicitly support English Language Development (ELD) while simultaneously nurturing home language development rather than treating the two as competing priorities.

Equally important, young children who speak English language varieties such as African American English (AAE) should have their home dialect recognized and honored as a legitimate, rule-governed language system rather than treated as a deficit or as mainstream English spoken "incorrectly." These dialects follow predictable grammatical, phonological, and morphosyntactic patterns and serve as an important foundation for oral language development and identity (Labov, 1972; Wolfram & Schilling, 2016).

For both multilingual and bidialectal learners, classrooms should reflect and honor children's home language and dialect while providing instruction that helps them recognize the differences between their language and Mainstream American English (MAE) without stigmatization. It is also important to consider how differences in a child's spoken phonology, grammar, and morphosyntax may result in false positives on assessment measures, meaning children may appear to score below expectations due to linguistic differences rather than a language disorder. This also needs to be considered when interpreting scores in order to reduce the likelihood of disproportionate referrals for special education (ASHA, 2025; Washington & Craig, 1999; Charity Hudley & Mallinson, 2011).

What Do We Know From the Research?

Before reviewing instructional materials for content, several general principles from the learning sciences apply across developmental periods, including early childhood, and should be taken into consideration. Professional development, instructional time, selection of materials, and who delivers instruction all bear on learning outcomes (Burchinal et al., 2022; Herrera et al., 2021; Pelatti et al., 2014). Instructional quality and intensity are key elements that should align with research evidence to support learning (Justice et al., 2008; Schmitt et al., 2017). These considerations are especially pressing in preschool, where a recent National Academies review found that curricula often fall short in advancing early literacy learning and in supporting multilingual learners' emerging bilingualism (National Academies of Sciences, Engineering, and Medicine, 2024).

Children acquire much of their language, including phonology, vocabulary, morphosyntax, and narrative structure, through meaningful, rich, responsive, language-dense interactions (Hoff, 2006; Huttenlocher et al., 2010; Snow, 1983). The goal of curriculum should be to intentionally build instruction to facilitate such interactions. High-quality conversational interaction, narrative discourse, responsive caregiving, and rich language environments are therefore not supplementary to instruction; they are the context for instruction, and curriculum materials should reflect this understanding (Cabell et al., 2015; Whorral & Cabell, 2016).

Research also demonstrates the important role of intentionally spacing practice opportunities across time in the design of instructional materials (Vlach et al., 2008), particularly for children who require additional support (Leonard et al., 2019). In Pre–K settings, practice is most effective when it occurs through repetition and intentional variation within meaningful developmentally appropriate activities, rather than through isolated or rote exercises (DEC, 2014; NAEYC, 2020). Instructional experiences should be aligned across all systems (e.g., instructional contexts, tiers of support; Greenwood et al., 2013; 2015; Wackerle-Hollman et al., 2021).

Instructional materials should also include frequent opportunities for children to actively engage with language and content, accompanied by timely, responsive feedback that supports understanding and skill development (Greenwood et al., 1984; Watkins & Slocum, 2003). In early childhood, feedback often occurs within conversation and narration, helping children refine language, concepts, and emerging skills (Cabell et al., 2015; Girolametto & Weitzman, 2002; Dickinson & Tabors, 2001).

For more information, please visit [The Reading League Compass Pre–K Educators and Leaders](#) page.

Research Evidence

Major Red Flag: Lack of Research Evidence

High-quality literacy curricula should be grounded in research evidence showing positive impacts on learning. Strong evidence includes findings from well-designed and well-implemented studies that demonstrate statistically significant, educationally meaningful effects on relevant student outcomes, typically with moderate-to-large effect sizes.

For Pre–K curricula, appropriate evidence may include research demonstrating impacts on oral language development and emergent literacy skills, including vocabulary, syntax, discourse, phonological awareness, print knowledge, and related language-based outcomes. Ideally, evidence should reflect populations, settings, and instructional contexts similar to those in which the curriculum is intended to be used.

Major Red Flag

The curriculum lacks credible research evidence showing positive effects on language and/or emergent literacy outcomes, or relies solely on testimonials, unpublished internal analyses, or studies that do not meet established standards for rigor. In such cases, serious caution should be exercised before adoption, regardless of the program's other features of the program.

When reviewing research evidence, evaluators should consider the quality, relevance, and magnitude of effects, recognizing that meaningful impacts on foundational language and literacy skills are essential for supporting later reading and writing development.

Reviewer Instructions

Getting Started Checklist

1. Assemble a review team that has a base of knowledge in the [research evidence](#). It is important to include school/center and district leaders, educators, special educators, and specialists who have been trained in or have studied the research evidence of early language and emergent literacy and who understand the terms in each section's glossaries.
2. Familiarize yourselves with the curriculum materials to be evaluated, including their scopes and sequences, as well as several lessons for the targeted age. For the final section of this evaluation, the review team will need to access the suite of assessments from your school or early childhood center.
3. When reviewing curricula, it is very important to prioritize looking for **red flags, which are practices not aligned with the research evidence**. Search each section for red flags that indicate the presence of *misaligned* practices in the program. If the curriculum you are evaluating features a red flag, place an X in the adjacent red box.
 - a. If a red flag box is checked (including in the non-negotiables section), use the notes section to describe how educators will replace or address misaligned practices with supplemental curricular materials or evidence-aligned practices.
 - b. If many red boxes are checked in a section, it is likely that the overall program is not aligned with the research evidence. In this case, it is recommended that you search for a more suitable curriculum rather than trying to supplement such a program.
4. OPTIONAL: When you finish reviewing a program for red flags and decide there are not enough red flag components to remove it from consideration, you may choose to review it for instructional practices that are evidence-aligned.
 - a. These elements can be thought of as a wish list. There is no perfect curriculum, so a program should not be rejected if it doesn't have every possible evidence-aligned practice (including those in the non-negotiables section). Just as in the red flag section, use the notes section to address how educators will compensate for missing evidence-aligned instructional practices through supplemental curricular materials and/or evidence-aligned practices.
 - b. If many evidence-aligned instructional practices are included, it is likely that the curriculum is aligned with the research evidence—but remember, the primary decision-making mechanism for selecting a curriculum using these guidelines is the absence of red flags.

At the end of these guidelines, you will find sources to support the practices that are categorized as either aligned or not aligned with the research evidence. The numbers to the left of the “red flags” and the “aligned practices” are designed to help you find the corresponding source(s) in the reference section at the end of the guidelines.

IMPORTANT:

Evidence-aligned materials are an essential component of effective Pre–K language and literacy instruction; however, materials alone are not sufficient to produce positive outcomes. It is vital to build educator and leader knowledge of the research evidence and to develop a professional learning and coaching system that supports the implementation of the curricular resource. For the greatest positive impact, it is also essential to ensure practices are aligned across all systems (e.g., instructional contexts, tiers of support).

Optional Team Lead Pre-Work:

Every curriculum differs in its organization, setup, and keywords. It is recommended that your team lead completes a pre-work review of the curriculum to find general locations of where your review team should search for aligned or non-aligned components.

Curriculum Publisher/Title:	
Review Plan/Schedule:	
Guidance before beginning the review:	

Team leads should use this section to provide guidance to their team on where to locate evidence for specific sections ((e.g., oral language, early and emergent literacy, assessment).

Gather:

Gather and familiarize yourself with the materials to be evaluated:

- ☐ A copy of the Pre-K curriculum, including at minimum:
 - Teacher's Manuals
 - Examples of student practice materials
- ☐ At least five sample lessons that span from the beginning to the end of the school year
- ☐ Your school or center's suite of assessments for the final section of this evaluation
- ☐ (Optional) A digital subscription with virtual content so reviewers can use a "search" feature for particular words
- ☐ Assemble a review team that includes at least three individuals who have a base of knowledge in the science of early language and literacy development and who understand the terms in the glossaries. It is important to include a mix of school and district leaders, educators, special educators, and specialists.

Familiarize:

- ☐ Familiarize yourself with the structure of the curriculum by answering the following questions:
 - Are components of alphabet knowledge taught within the core block, or in a separate block?
 - Are language development lessons embedded into content and/or social-emotional learning lessons?
 - What information is given in a scope and sequence or unit overview? Are detailed objectives provided?

- What read-alouds and activities are included in the curriculum, and what are optional?
- Are there supporting materials provided for students?
- Are there aligned intervention materials that you intend to pull into core instruction that should be reviewed?
- ☐ Familiarize yourself with The Reading League's Pre-K Curriculum Evaluation Guidelines.
- ☐ Select a section to review as a group to calibrate the process of how to use the Pre-K Curriculum Evaluation Guidelines and the specific information that will be written into each field.
- ☐ Review each section either as a group or individually. If reviewed individually, reviewers should come together afterward to compare scores.

During the review:

- ☐ Use curriculum review worksheets on the following pages to capture information.

Process	Resource
1. Determine which section of the Pre–K CEGs you will be reviewing and for what grades. Read through the red flags you will be searching for.	The Reading League’s <i>Pre–K Curriculum Evaluation Guidelines (CEGs)</i>
2. Locate evidence of red flags within the curriculum (e.g., scope and sequence, individual lessons, ancillary materials). - Review the scope and sequences for evidence of components - Thoroughly examine modules/units and individual lessons - Review ancillary Tier I curriculum materials for evidence (e.g., assessment documents)	Curriculum Materials
3. As you review each component, determine the extent to which the corresponding red flag statement is true, then select the appropriate rating in the drop-down menu for that component as outlined below: 1 – Red Flag statement is false. 2 – Red Flag statement is minimally true, evidence is minimal or briefly mentioned. 3 – Red Flag statement is mostly true. If applicable, evidence is in multiple places throughout the curriculum. 4 – Red Flag statement is always true, pervasive, and/or integral to the curriculum.	Reviewer Worksheets
4. Use the notes section of each component as needed or as directed by your team lead. Examples of helpful notes to capture are keywords that describe a practice listed within the Pre–K CEGs, specific examples, and precise locations of evidence.	Reviewer Worksheets
5. Determine if you will be looking for optional aligned components, and if so, take notes in those sections.	Reviewer Worksheets

After the review:

1. Use the color-coded drop-downs as a big picture view of the number of red flags within the reviewed curriculum.
2. Discuss detailed notes to consider the impact of the red flags on your review (e.g., form a plan to address red flags, determining if the curriculum meets your school’s or district’s needs).

SECTION 0:

Design and Delivery

Design and Delivery Principles that Apply to the Entire Curriculum

NOTE: Learning sciences and empirical studies have yielded a set of clear design and delivery principles that apply across content and focus areas. Therefore, the entire curriculum under review should be considered in reference to these principles. It is a red flag if Pre–K curriculum does not adhere to key design and delivery principles in ways that support language development and emergent literacy.

To what extent is this red flag statement true? 1– Red Flag statement is false. 2 – Red Flag statement is minimally true, evidence is minimal or briefly mentioned. 3 – Red Flag statement is mostly true. If applicable, evidence is in multiple places throughout the curriculum. 4 – Red Flag statement is always true, pervasive, and/or integral to the curriculum.	Recording Evidence From Curricular Materials 1. Note the specific location (if applicable). Is this from the teacher’s manual? Student materials? Ancillary materials (e.g., student texts, workbooks, specific additional materials)? Please note the specific grade, section, lesson, and/or page number. 2. Justify your response by describing the practices that signal the presence of the red flag.
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Red Flags: Practices Not Aligned With the Research Evidence		Red Flag (Rate: 1-4)
0.1	No evidence of a combination of deliberate adult- and child guided instructional experiences. Direct and deliberate instruction (i.e., intentional teaching) involves the teacher clearly modeling skills and concepts, guiding the children’s practice with support, and intentionally scaffolding learning toward independence. The most effective Pre–K language and literacy curricula have thoughtfully, intentionally, and systematically combined both child-guided and adult-guided developmentally appropriate experiences (DEC, 2014; NAEYC, 2020; Schmidtke, 2025). No evidence of scaffolded support to reduce errors during lessons is a red flag, as is curricula that rely primarily on child-directed discovery, thematic exploration, or incidental exposure without systematic and intentional adult-guided learning experiences necessary for language and literacy development.	Rating ▾
Evidence:		

0.2	No evidence of language instruction occurring in meaningful contexts. Language components are only taught in isolation, through rote memorization, or absent authentic communicative purpose. Children acquire language through both instruction and meaningful use. Instruction that fragments language into isolated, decontextualized practice contradicts how language develops in early childhood and does not reliably transfer to meaningful comprehension and production (Justice & Kaderavek, 2004; Marulis & Neuman, 2010).	Rating ▾
Evidence:		
0.3	No evidence of deliberate and purposeful practice. “These two terms refer to practice that goes beyond rote repetition and involves practicing for a purpose (e.g., accuracy, fluent retrieval, generalization) with the deliberate goal of long-term improvement of skill performance” (Hughes & Riccomini, 2019, p. 406). Teaching that is unplanned or lacks intentionality is ineffective; therefore, it is critical that a curriculum provides the purposeful structure needed for deliberate instructional strategies.	Rating ▾
Evidence:		
0.4	No evidence of retrieval practice: Retrieval practice “consists of tasks requiring retrieval of targeted skills and knowledge from memory without prompts or cues” (Hughes & Riccomini, 2019, p. 407). “Retrieval practice is a strategy in which calling information to mind subsequently enhances and boosts learning” (Agarwal et al., 2020, p. 2). Active responding is necessary for learning, and effective curriculum guides children to engage in active retrieval practice (Godfrey et al., 2003; Greenwood et al., 1984; Heward et al., 1996).	Rating ▾
Evidence:		
0.5	No evidence of spaced or distributed practice. Spaced or distributed practice “involves taking a given amount of time devoted to learning and arranging that time into multiple sessions that are spread over time” (Carpenter & Agarwal, 2020, p. 3). Children learn best when teaching episodes are distributed across many sessions and days rather than concentrated within a narrow time frame (Ambridge et al., 2006; Cepeda et al., 2006).	Rating ▾
Evidence:		

0.6	No evidence of cumulative practice. Cumulative practice is “the systematic addition of a just-learned skill to previously learned and related skills, allowing them to be practiced together” (Hughes & Lee, 2019, p. 414; Archer & Hughes, 2011). “It requires that new (and usually related) skills are added to a practice activity as they are acquired, thus providing distributed practice for multiple skills within one session” (Hughes & Riccomini, 2019, p. 407). Incremental rehearsal, in which new material is repeatedly retrieved among already known material, has been associated with strong retention effects (Burns et al., 2012).	Rating ▾
Evidence:		
0.7	No evidence of interleaved practice for review. Interleaved practice “is similar to cumulative practice but involves mixing the order of skills and problems to be practiced by distributing them in a random fashion, causing the learner to have to discriminate” (Kirschner & Hendrick, 2020, p. 246). While new learning needs a clean, focused introduction with a systematic selection of examples (Twyman & Hockman, 2021), review of already-taught content benefits from intentional mixing (Hughes & Lee, 2019).	Rating ▾
Evidence:		
0.8	No evidence of building world knowledge or learning processes. Building world knowledge means giving children organized, repeated encounters with content such as the natural world, how communities work, how things happen, and why, so that new vocabulary attaches to concepts children actually understand rather than to isolated words (Neuman et al., 2016). Effective curriculum systematically integrates knowledge-building and learning processes like observing, exploring, predicting, and linking cause and effect (Greenfield et al., 2009; Neuman & Danielson, 2021).	Rating ▾
Evidence:		
0.9	No evidence that materials sustain children’s attention and participation during instruction. Children learn best when the material is relatable, understandable, and interesting. Curriculum materials that assume background knowledge that many children in the group are unlikely to have is a Red Flag. Effective instruction features materials and activities that sustain children’s attention and participation, as well as incite curiosity (Kaefer, 2018; Roberts et al., 2020; Vitiello et al., 2012).	Rating ▾

Evidence:

0.10

No evidence of cohesion across program components. Effective curriculum features shared themes across components, vocabulary that recurs between activities, and extension activities that reinforce the same targets in a different modality (Bierman et al., 2008; Greenfield et al., 2009; NAEYC & National Association of Early Childhood Specialists in State Departments of Education, 2003).

Rating ▾

Evidence:

0.11

No evidence of clear, usable guidance for teachers. Good materials say what the teacher does and says, and what children are expected to do and say (Twyman, 2021). Ambiguity is a curriculum design problem. Materials also have to be easy to follow and to use (Hamre et al., 2010; Justice et al., 2008). Materials that build teacher knowledge (i.e., educative curriculum) are a plus (Neuman et al., 2015).

Rating ▾

Evidence:

SECTION 1:

Oral Language

Language Comprehension and Language Production

To what extent is this red flag statement true?

- 1 – Red Flag statement is false.
- 2 – Red Flag statement is minimally true, evidence is minimal or briefly mentioned.
- 3 – Red Flag statement is mostly true. If applicable, evidence is in multiple places throughout the curriculum.
- 4 – Red Flag statement is always true, pervasive, and/or integral to the curriculum.

Recording Evidence From Curricular Materials

- 3. Note the specific location (if applicable). Is this from the teacher’s manual? Student materials? Ancillary materials (e.g., student texts, workbooks, specific additional materials)? Please note the specific section, lesson, and/or page number.
- 4. Justify your response by describing the practices that signal the presence of the red flag.

[Click here to jump to the glossary.](#) Please refer to the glossary as needed as you review.

Red Flags: Practices Not Aligned With the Research Evidence		Red Flag (Rate: 1-4)
1.1	Instruction relies only on unstructured or incidental learning experiences.	Rating ▾
Evidence:		
1.2	There is no evidence of an instructional language framework that includes direct modeling, guided practice, or intentional planning to support language development, including vocabulary growth, sentence complexity, pronunciation, and discourse skills.	Rating ▾
Evidence:		
1.3	Children are not regularly exposed to rich, conceptually meaningful vocabulary, increasingly complex sentence structures, or extended narrative or explanatory language through listening and speaking activities such as read-alouds, storytelling, explanation, or guided discussion.	Rating ▾

Evidence:

- | | | |
|-----|--|----------|
| 1.4 | Listening comprehension instruction focuses mainly on asking children questions after an activity or read-aloud, rather than explicitly supporting how children understand, interpret, organize, and talk about ideas in language. | Rating ▾ |
|-----|--|----------|

Evidence:

- | | | |
|-----|--|----------|
| 1.5 | Opportunities for oral language and listening experiences are not connected with emergent writing experiences (e.g., shared writing, dictation, drawing with explanation, labeling). | Rating ▾ |
|-----|--|----------|

Evidence:

- | | | |
|-----|---|----------|
| 1.6 | Questioning during read-alouds and discussions focuses primarily on literal recall or labeling, with limited attention to reasoning, inference, explaining reasoning, narrative, causal relationships, storytelling, retelling events, or participation in guided discussions, with teacher modeling and support. | Rating ▾ |
|-----|---|----------|

Evidence:

- | | | |
|-----|---|----------|
| 1.7 | Children have limited opportunities to produce extended oral language, such as telling and retelling stories, explaining ideas or processes, participating in guided discussions with teacher modeling and support, or using language to connect events over time, which reduces their readiness for later comprehension and writing demands. | Rating ▾ |
|-----|---|----------|

Evidence:

1.8	For multilingual learners, instruction does not build on children's home-language strengths, and there is no evidence of intentional support for English language development to promote language comprehension, language production, and participation in extended discourse	
Evidence:		
1.9	Instruction does not include multiple opportunities and scaffolds for conversational turn taking with all children.	Rating ▾
Evidence:		
Practices Aligned With the Research Evidence		
1.10	Instruction is delivered through intentionally sequenced learning experiences.	
Evidence:		
1.11	Instruction reflects a clear language framework, with explicit modeling, guided practice, and intentional planning that support language development across vocabulary growth, sentence complexity, and discourse skills.	
Evidence:		
1.12	Instruction explicitly supports language comprehension by modeling and scaffolding vocabulary, sentences, narratives, explanations, and informational language across interactive read-alouds, discussion, and play.	
Evidence:		

1.13	Instruction explicitly supports language production by giving children structured opportunities to use that language in retelling, explanation, and discussion, with teacher modeling and scaffolding rather than questioning alone.
Evidence:	
1.14	Emergent writing experiences are intentionally integrated with language production, allowing children to express ideas through drawing, dictation, shared writing, and early forms of print as extensions of spoken language.
Evidence:	
1.15	Instruction provides frequent, structured opportunities for children to produce extended discourse, such as storytelling, retelling events, explaining reasoning, and participating in guided discussions, with teacher modeling and support.
Evidence:	
1.16	For multilingual learners, instruction builds on children’s home-language strengths and includes intentional support for English language development to promote language comprehension, language production, and participation in extended discourse.
Evidence:	
1.17	Instruction includes multiple opportunities and scaffolds for conversational turn taking with all children.
Evidence:	

Vocabulary

To what extent is this red flag statement true?

- 1– Red Flag statement is false.
- 2 – Red Flag statement is minimally true, evidence is minimal or briefly mentioned.
- 3 – Red Flag statement is mostly true. If applicable, evidence is in multiple places throughout the curriculum.
- 4 – Red Flag statement is always true, pervasive, and/or integral to the curriculum.

Recording Evidence From Curricular Materials

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2. Justify your response by describing the practices that signal the presence of the red flag.

[Click here to jump to the glossary.](#) Please refer to the glossary as needed as you review.

Red Flags: Practices Not Aligned With the Research Evidence		Red Flag (Rate: 1-4)
1.18	Vocabulary instruction emphasizes brief activities or surface-level exposure (e.g., labeling, matching, isolated practice) with limited opportunities for children to develop a deep understanding and flexible use of words and relationships between words.	Rating ▾
Evidence:		
1.19	Instruction focuses on memorizing isolated words or definitions without meaningful context, discussion, or opportunities to apply them.	Rating ▾
Evidence:		
1.20	There is no evidence of instruction that builds a child’s underlying semantic system to support reading, including receptive and expressive vocabulary, concept and relational vocabulary, semantic organization, word learning, and word use in communication.	Rating ▾

Evidence:

1.21	There is no evidence of explicit teaching of words that convey spatial concepts (e.g., under, behind, beside), temporal concepts (e.g., before, after, first, next, last), quantity concepts (e.g., all, none, some, many, few), descriptive and comparative concepts (e.g., biggest, smallest, heavy, smooth), mental state and emotion words, abstract nouns, categories, attributes, functions, associations, synonyms and antonyms (later preschool), and multiple-meaning words (emerging).	Rating ▾
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Evidence:

1.22	Words that recur across activities and topics are not intentionally selected, explicitly taught, or revisited, and children have limited opportunities to hear, use, and practice these words in meaningful communication contexts.	Rating ▾
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Evidence:

1.23	Vocabulary instruction is disconnected from broader topics, experiences, or language-rich activities, limiting children's opportunities to build conceptual knowledge and content words across math, science, and social studies.	Rating ▾
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Evidence:

1.24	For multilingual learners, instruction does not build on children's home language knowledge or provide meaningful contexts, visuals, modeling, or opportunities for oral language use to support vocabulary development.	Rating ▾
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Evidence:

Practices Aligned With the Research Evidence

1.25	Vocabulary instruction emphasizes a range of word types, including verbs, adjectives, mental states, emotions, connectives, and abstract nouns, rather than relying mainly on concrete nouns, and supports children in understanding and using these words through discussion, play, storytelling, and repeated exposure.
Evidence:	
1.26	Instruction includes robust teacher–child and child–child conversations that explore word meanings through examples, non-examples, explanations, and elaboration.
Evidence:	
1.27	Vocabulary is taught deeply using multiple supports (e.g., visuals, actions, demonstrations, stories, and play) to help children build rich and flexible word knowledge.
Evidence:	
1.28	Children are given frequent opportunities to use newly learned vocabulary expressively, and when appropriate, to encounter it in shared writing, labeling, drawing with dictation, or other emergent literacy activities.
Evidence:	
1.29	There is evidence of explicit teaching of words that convey spatial concepts (e.g., under, behind, beside), temporal concepts (e.g., before, after, first, next, last), quantity concepts (e.g., all, none, some, many, few), descriptive and comparative concepts (e.g., biggest, smallest, heavy, smooth), or categories, attributes, functions, associations, synonyms and antonyms (later preschool), and multiple-meaning words (emerging).
Evidence:	

1.30	Vocabulary is introduced within broader topics, experiences, or language-rich activities, giving children opportunities to build conceptual knowledge and learn the content words that go with topics in math, science, and social studies
Evidence:	
1.31	For multilingual learners, instruction builds on children’s home language knowledge and supports vocabulary development through meaningful contexts, visuals, modeling, and opportunities for oral language use.
Evidence:	

Sentence Complexity

To what extent is this red flag statement true? 1 – Red Flag statement is false. 2 – Red Flag statement is minimally true, evidence is minimal or briefly mentioned. 3 – Red Flag statement is mostly true. If applicable, evidence is in multiple places throughout the curriculum. 4 – Red Flag statement is always true, pervasive, and/or integral to the curriculum.	Recording Evidence From Curricular Materials 3. Note the specific location (if applicable). Is this from the teacher’s manual? Student materials? Ancillary materials (e.g., student texts, workbooks, specific additional materials)? Please note the specific section, lesson, and/or page number. 4. Justify your response by describing the practices that signal the presence of the red flag.
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[Click here to jump to the glossary.](#) Please refer to the glossary as needed as you review.

Red Flags: Practices Not Aligned With the Research Evidence	Red Flag (Rate: 1-4)
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1.32	Instruction relies only on incidental exposure to language, with little intentional support for children's understanding and use of sentence structures, print conventions, or does not incrementally expand the child's use of more complex sentences when spelling.	Rating ▾
Evidence:		
1.33	There are no explicit templates or instructions on children's sentence production, such as PEER: Prompting, Evaluating oral responses, Expanding children's responses, Repeating prompts to check for understanding, or CROWD: Completing sentences, Recalling, Open-ended questioning, Wh- questions, Distancing for generalization.	Rating ▾
Evidence:		
1.34	Instruction provides limited teacher modeling of complex language or insufficient opportunities for children to hear, discuss, and use complete ideas and sentences in meaningful contexts.	Rating ▾
Evidence:		
1.35	Instruction largely consists of directive, corrective, and/or reactive responses.	Rating ▾
Evidence:		
1.36	Instruction provides little or no attention to how words work together in sentences to convey meaning, or it emphasizes isolated grammar instruction and formal grammatical terminology rather than supporting children's understanding of sentence meaning.	Rating ▾
Evidence:		

1.37	Instruction provides limited opportunities for children to hear and engage with a variety of sentence structures through oral language experiences, resulting in insufficient support for sentence-level comprehension.	Rating ▾
Evidence:		
1.38	Instruction provides limited time for guided discussion, with few opportunities for teachers to model complete ideas, expanded sentences, or language that supports comprehension.	Rating ▾
Evidence:		
1.39	Instruction does not help children distinguish between everyday conversational language and the more complex language commonly found in books, explanations, or informational texts.	Rating ▾
Evidence:		
1.40	There is no evidence that instruction intentionally supports children's use and understanding of increasingly complex sentence structures, including coordinating conjunctions (e.g., and, or, but, so) and causal and temporal connectors (e.g., because, so, when, after), through teacher modeling, recasting, or guided language practice.	Rating ▾
Evidence:		
1.41	For multilingual learners and speakers of English language variations, there is no evidence that instruction uses an asset-based approach or values home language patterns while supporting understanding and use of school-based language through modeling and meaningful interaction.	Rating ▾
Evidence:		

Practices Aligned With the Research Evidence

1.42	Instruction follows a clear and intentional progression for supporting children’s understanding and use of language structures, including sentence patterns and print conventions, through modeling, discussion, and repeated exposure.
Evidence:	
1.43	There is evidence of specific templates and instructional guides on children’s sentence production, such as PEER: Prompting, Evaluating oral responses, Expanding children’s responses, Repeating prompts to check for understanding, or CROWD: Completing sentences, Recalling, Open-ended questioning, Wh- questions, distancing for generalization.
Evidence:	
1.44	Instruction consistently includes teacher modeling of complex language and provides ample opportunities for children to hear, discuss, and use complete ideas and sentences in meaningful, engaging contexts.
Evidence:	
1.45	Instruction consistently includes intentional, responsive interactions that extend children's thinking and language through modeling, scaffolding, open-ended questioning, and meaningful feedback, rather than relying primarily on directive or corrective responses.
Evidence:	
1.46	Instruction draws attention to how words work together in sentences to convey meaning (i.e., understanding relationships among words), without requiring children to learn or use formal grammatical terminology.
Evidence:	
1.47	Instruction supports sentence-level comprehension by exposing children to a range of sentence structures through oral language experiences such as read-alouds, storytelling, explanation, and discussion.

Evidence:

- | | |
|------|--|
| 1.48 | Instruction includes sufficient time for guided discussion, with teachers modeling complete ideas, expanded sentences, and language that supports comprehension. |
|------|--|

Evidence:

- | | |
|------|--|
| 1.49 | Instruction helps children notice differences between everyday conversational language and the language often used in books, explanations, and informational talk. |
|------|--|

Evidence:

- | | |
|------|---|
| 1.50 | Instruction intentionally supports children's use and understanding of increasingly complex sentence structures, including coordinating conjunctions (e.g., and, or, but, so) and causal and temporal connectors (e.g., because, so, when, after), through teacher modeling, recasting, and guided language practice. |
|------|---|

Evidence:

- | | |
|------|---|
| 1.51 | For multilingual learners and speakers of English language variations, instruction uses an asset-based approach that values home language patterns while supporting understanding and use of school-based language through modeling and meaningful interaction. |
|------|---|

Evidence:

Discourse (Narrative and Information)

To what extent is this red flag statement true?

1 – Red Flag statement is false.

2 – Red Flag statement is minimally true, evidence is minimal or briefly mentioned.

3 – Red Flag statement is mostly true. If applicable, evidence is in multiple places throughout the curriculum.

4 – Red Flag statement is always true, pervasive, and/or integral to the curriculum.

Recording Evidence From Curricular Materials

1. Note the specific location (if applicable). Is this from the teacher's manual? Student materials? Ancillary materials (e.g., student texts, workbooks, specific additional materials)? Please note the specific section, lesson, and/or page number.
2. Justify your response by describing the practices that signal the presence of the red flag.

[Click here to jump to the glossary.](#) Please refer to the glossary as needed as you review.

Red Flags: Practices Not Aligned With the Research Evidence		Red Flag (Rate: 1-4)
1.52	Instruction does not intentionally support children's ability to understand and produce extended narratives or explanations, relying instead on brief responses or isolated language activities.	Rating ▾
Evidence:		
1.53	Instruction does not teach the organizational structures of narratives (e.g., characters, setting, problems, events, outcomes) through shared stories, retell, discussion, and play.	Rating ▾
Evidence:		
1.54	Narrative and informational language are not differentiated in instruction, limiting children's understanding that language is organized differently for different purposes (e.g., to describe, to explain, to sequence).	Rating ▾
Evidence:		

1.55	Children have limited opportunities to tell and retell stories, explain ideas, or use language to connect events and information over time.	Rating ▾
Evidence:		
Practices Aligned With the Research Evidence		
1.56	Instruction intentionally supports children’s ability to understand and produce extended narratives or explanations, as opposed to brief responses or isolated language activities.	
Evidence:		
1.57	Instruction explicitly teaches the organizational structures of narratives (e.g., characters, setting, problems, events, outcomes) through shared stories, retell, discussion, and play.	
Evidence:		
1.58	Narrative and informational language are differentiated in instruction, supporting children’s understanding that language is organized differently for different purposes (e.g., to describe, to explain, to sequence).	
Evidence:		
1.59	Children are provided frequent opportunities to produce extended discourse, such as telling and retelling stories, explaining ideas, describing how to do something, and participating in structured discussions, with teacher modeling and scaffolding.	
Evidence:		

Verbal Reasoning

To what extent is this red flag statement true?

- 1 – Red Flag statement is false.
- 2 – Red Flag statement is minimally true, evidence is minimal or briefly mentioned.
- 3 – Red Flag statement is mostly true. If applicable, evidence is in multiple places throughout the curriculum.
- 4 – Red Flag statement is always true, pervasive, and/or integral to the curriculum.

Recording Evidence From Curricular Materials

- 1. Note the specific location (if applicable). Is this from the teacher’s manual? Student materials? Ancillary materials (e.g., student texts, workbooks, specific additional materials)? Please note the specific section, lesson, and/or page number.
- 2. Justify your response by describing the practices that signal the presence of the red flag.

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Red Flags: Practices Not Aligned With the Research Evidence		Red Flag (Rate: 1-4)
1.60	Instruction does not model inferential reasoning during shared language experiences (e.g., read-alouds, storytelling, discussion, play), including how to reason about ideas that are not directly stated and how to connect what children already know to new information.	Rating ▾
Evidence:		
1.61	Instruction provides few intentional opportunities for children to practice inferential reasoning, and those opportunities are not distributed across activities and routines.	Rating ▾
Evidence:		
1.62	There is no evidence of supporting the development of relational language (e.g., cause-and-effect, problem-solution, motives, mental states, emotions, predictions)	Rating ▾

Evidence:

1.63

Questions and discussion stay at a low level of abstraction, with few opportunities for children to explain their thinking, give reasons for their answers, or talk about what they do and do not understand.

Rating ▾

Evidence:

Practices Aligned With the Research Evidence

1.64

Instruction explicitly models inferential reasoning during shared language experiences (e.g., read-alouds, storytelling, discussion, play), showing children how to reason about ideas that are not directly stated and how to connect what they already know to new information.

Evidence:

1.65

Instruction provides frequent, intentional opportunities for children to practice inferential reasoning, distributed across activities and routines.

Evidence:

1.66

Children are supported in interpreting relational language (e.g., cause-and-effect, problem-solution, motives, mental states, emotions, predictions) during conversations, stories, and explanations.

Evidence:

1.67

Instruction includes guided questions and discussion that move beyond the immediately observable, prompting children to explain their thinking, give reasons for their answers, and talk about what they do and do not understand.

Evidence:

*Asterisk indicates items that were added or revised in the 4th edition of the *Curriculum Evaluation Guidelines* compared to the previous edition.

Knowledge

To what extent is this red flag statement true?

- 1 – Red Flag statement is false.
- 2 – Red Flag statement is minimally true, evidence is minimal or briefly mentioned.
- 3 – Red Flag statement is mostly true. If applicable, evidence is in multiple places throughout the curriculum.
- 4 – Red Flag statement is always true, pervasive, and/or integral to the curriculum.

Recording Evidence From Curricular Materials

- 3. Note the specific location (if applicable). Is this from the teacher’s manual? Student materials? Ancillary materials (e.g., student texts, workbooks, specific additional materials)? Please note the specific section, lesson, and/or page number.
- 4. Justify your response by describing the practices that signal the presence of the red flag.

[Click here to jump to the glossary.](#) Please refer to the glossary as needed as you review.

Red Flags: Practices Not Aligned With the Research Evidence		Red Flag (Rate: 1-4)
1.68	Read-alouds and shared learning experiences emphasize narrowly focused or simplistic content, with limited exposure to conceptually rich topics or informational language that supports knowledge building (e.g., science, social studies, how the world works).	Rating ▾
Evidence:		
1.69	Instruction does not elicit what children already know about a topic or connect it to new vocabulary and concepts, and it does not account for the fact that children arrive with different background knowledge	Rating ▾

Evidence:

1.70

Language experiences are isolated or fragmented, with limited opportunities for children to revisit, extend, or deepen their understanding of topics over time.

Rating ▾

Evidence:

1.71

Opportunities to build and use knowledge are confined to a narrow set of activities, rather than recurring across conversation, storytelling, explanation, drawing and dictation, shared writing, and play.

Rating ▾

Evidence:

1.72

There is no evidence that oral language instruction explicitly teaches the concepts and vocabulary that carry content learning—categories and their members (plants, animals), comparative and quantity terms (same/different, more/less, none/some/many), and topic-specific words drawn from math, science, and social studies—or that children hear, use, and revisit these words across child-initiated discussion, play, and shared activities.

Rating ▾

Evidence:

1.73

There is no guidance or instruction is present to support multilingual learners in building upon their home language, culture, and personal experiences to develop new knowledge, along with using visuals, gestures, modeling, and clarification to support understanding.

Rating ▾

Evidence:

Practices Aligned With the Research Evidence

1.74	Instruction includes rich oral language experiences such as interactive read-alouds, storytelling, discussion, play, and multimedia, that give children repeated encounters with both narrative and informational content, building vocabulary and conceptual knowledge together rather than as separate strands.
Evidence:	
1.75	Rather than treating science as an occasional activity, instruction includes intentional, planned science learning, including observing, exploring, predicting, and linking cause and effect, and uses that content as a context for building language and knowledge.
Evidence:	
1.76	Instruction intentionally builds coherent and connected language experiences over time, providing children with multiple opportunities to revisit concepts, expand vocabulary and knowledge, and deepen their understanding of meaningful topics across activities and contexts.
Evidence:	
1.77	Instruction intentionally bridges existing knowledge to new knowledge through structured conversation, explanation, storytelling, drawing and dictation, shared writing, and play-based discourse.
Evidence:	
1.78	Oral language instruction explicitly teaches the concepts and vocabulary that carry content learning—categories and their members (plants, animals), comparative and quantity terms (same/different, more/less, none/some/many), and topic-specific words drawn from math, science, and social studies—and children hear, use, and revisit these words across child-initiated discussion, play, and shared activities.
Evidence:	

1.79	For multilingual learners, instruction builds on children’s home language, culture, and personal experiences to build new knowledge, along with using visuals, gestures, modeling, and clarification to support understanding.
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Evidence:

SECTION 2:

Early and Emergent Literacy

Alphabet Knowledge

NOTE: Print knowledge encompasses both alphabet knowledge and concepts of print. This section only addresses alphabet knowledge: letter names, letter shapes, and the sounds letters represent. In Pre–K, reasonable end-of-year targets are roughly 18 uppercase and 15 lowercase letter names, not mastery of all 26 in either case.

To what extent is this red flag statement true? 1 – Red Flag statement is false. 2 – Red Flag statement is minimally true, evidence is minimal or briefly mentioned. 3 – Red Flag statement is mostly true. If applicable, evidence is in multiple places throughout the curriculum. 4 – Red Flag statement is always true, pervasive, and/or integral to the curriculum.	Recording Evidence From Curricular Materials 1. Note the specific location (if applicable). Is this from the teacher’s manual? Student materials? Ancillary materials (e.g., student texts, workbooks, specific additional materials)? Please note the specific section, lesson, and/or page number. 2. Justify your response by describing the practices that signal the presence of the red flag.
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[Click here to jump to the glossary.](#) Please refer to the glossary as needed as you review.

Red Flags: Practices Not Aligned With the Research Evidence		Red Flag (Rate: 1-4)
2.1	Letter–sound relationships are only addressed incidentally (e.g., during shared reading or in environmental print) without intentional instructional attention on how print represents spoken language.	Rating ▾
Evidence:		
2.2	There is no evidence of instructional materials having a planned progression (i.e., scope and sequence) for developing foundational alphabetic knowledge skills, including letter names and sounds.	Rating ▾
Evidence:		

2.3	Instruction introduces letters or sounds without a thoughtful progression (e.g., introducing many elements at once or without regard to perceptual salience or instructional coherence).	Rating ▾
Evidence:		
2.4	Letters and sounds are introduced too slowly to cover the alphabet with time for review, with only one or two new letters presented per week.	Rating ▾
Evidence:		
2.5	Previously taught letters and sounds are not revisited once introduced, with no cumulative review built into later lessons, routines, or activities.	Rating ▾
Evidence:		
2.6	There is evidence that instruction in the letter names does not include connection to the letter sounds.	Rating ▾
Evidence:		
2.7	There is evidence that instruction in letter names is not connected with instruction for how to write the letters/graphemes.	Rating ▾
Evidence:		
2.8	Pictures, context, or first-letter guessing are presented as ways to figure out what a written word says, rather than focusing on the letters and sounds in the word.	Rating ▾

Evidence:		
2.9	Anchor words and pictures used to illustrate letter–sound relationships do not begin with the target sound in its clearest form (e.g., “ant” for short a, “eye” for short e, “umbrella” for short u, “dress” for d).	Rating ▾
Evidence:		
2.10	Attention to letters and sounds is limited to brief, optional, or peripheral activities rather than being intentionally connected to broader language and literacy instruction, routines, and contexts.	Rating ▾
Evidence:		
2.11	Instruction provides limited opportunities for children to attend to, compare, and talk about sounds and letters in meaningful ways, hindering consolidation of early letter-sound relationships.	Rating ▾
Evidence:		
2.12	Instruction assumes that children's home language sound system and letter knowledge map directly onto English, and does not identify which English sounds, and letter–sound patterns have no counterpart in the languages children speak.	Rating ▾
Evidence:		
2.13	Instruction does not give multilingual learners additional time and does not explicitly teach the sounds of English that are not part of the child’s home language.	Rating ▾
Evidence:		

Practices Aligned With the Research Evidence

2.14 Instruction intentionally and explicitly teaches how print represents spoken language.

Evidence:

2.15 Instruction reflects a coherent progression (i.e., scope and sequence) of emergent literacy and language foundations, building from broader language and sound awareness toward more specific awareness of speech sounds and print.

Evidence:

2.16 Instruction reflects a coherent scope and sequence for introducing letters, sounds, and print concepts, with attention to instructional salience and developmental appropriateness.

Evidence:

2.17 Instruction includes cumulative, spaced, and distributed practice, with intentional opportunities to revisit, reteach, and use previously introduced letters and sounds across activities, routines, and contexts.

Evidence:

2.18 Anchor words and pictures used to illustrate letter-sound relationships begin with the target sound in its clearest form. For example, "apple" rather than "ant" for short a, "edge" rather than "eye" for short e, "up" rather than "umbrella" for short u, and "dog" rather than "dress" for d.

Evidence:

2.19	Instruction includes explicit and cumulative opportunities to intentionally connect alphabet knowledge instruction within broader language and literacy instruction, routines, and contexts.
Evidence:	
2.20	Pictures serve as anchors linking a letter to its sound, not as a way for children to figure out what a written word says.
Evidence:	
2.21	Instruction provides repeated opportunities for children to attend to, compare, and talk about sounds and letters in meaningful ways, supporting consolidation of early sound–symbol understanding.
Evidence:	
2.22	Instructional materials address multiple characteristics of each letter, including the letter name, uppercase and lowercase shapes, the most salient letter sound, an appropriate anchor picture, articulatory gesture or mouth shape, and guidance on forming the letter. These characteristics are revisited across the year.
Evidence:	
2.23	Instruction identifies which English sounds and letter–sound patterns have no close counterpart in the languages children speak, and builds on home-language knowledge where it applies rather than assuming it transfers automatically.
Evidence:	
2.24	Instruction gives multilingual learners additional time and explicitly teaches the sounds of English that are not part of the child's home language.

Evidence:

Phonological and Phoneme Awareness

NOTE: In Pre–K, phonological awareness develops across levels (words, syllables, rhyme, onset–rime, and individual phonemes) with the levels overlapping rather than progressing in strict stages. Attention to phonemes belongs in Pre–K and is most effective when connected to letters, but mastery of full phoneme segmentation and blending is not an appropriate Pre–K expectation. Instruction should reach beyond syllables without demanding mastery at the phoneme level.

To what extent is this red flag statement true?

- 1– Red Flag statement is false.
- 2 – Red Flag statement is minimally true, evidence is minimal or briefly mentioned.
- 3 – Red Flag statement is mostly true. If applicable, evidence is in multiple places throughout the curriculum.
- 4 – Red Flag statement is always true, pervasive, and/or integral to the curriculum.

Recording Evidence From Curricular Materials

- 1. Note the specific location (if applicable). Is this from the teacher’s manual? Student materials? Ancillary materials (e.g., student texts, workbooks, specific additional materials)? Please note the specific section, lesson, and/or page number.
- 2. Justify your response by describing the practices that signal the presence of the red flag.

[Click here to jump to the glossary.](#) Please refer to the glossary as needed as you review.

Red Flags: Practices Not Aligned With the Research Evidence		Red Flag (Rate: 1-4)
2.25	Instruction focuses exclusively on letter identification or print activities without intentional support for children’s awareness of the sound structure of spoken language, such as words, syllables, rhyme, and phonemes.	Rating ▾
Evidence:		

2.26	Phonological awareness appears only incidentally, in songs, rhymes, or transitions, with no planned sequence, stated objectives, or scheduled instructional time across the year.	Rating ▾
Evidence:		
2.27	There is no evidence of instruction in individual phonemes that letters represent.	Rating ▾
Evidence:		
2.28	Instruction emphasizes letters without supporting children's understanding that spoken language is composed of sounds that can be noticed, compared, and discussed.	Rating ▾
Evidence:		
2.29	Instruction in phonological and phoneme awareness is not integrated with texts read aloud or embedded into daily oral language and routines.	Rating ▾
Evidence:		
2.30	Instruction does not match typical Pre-K expectations. Either it stops at word and syllable awareness with no attention to smaller units, or it expects children to master full phoneme segmentation and blending.	Rating ▾
Evidence:		
2.31	Instruction does not explicitly teach multilingual learners the phonological features of English that may not exist in their home language (e.g., consonant blends, English syllable structures), and does not provide sufficient opportunities for additional practice.	Rating ▾

Evidence:

Practices Aligned With the Research Evidence

- | | |
|------|--|
| 2.32 | Instruction intentionally supports phonological awareness, including awareness of words, syllables, rhyme, and onset–rime patterns, through developmentally appropriate and engaging activities. |
|------|--|

Evidence:

- | | |
|------|---|
| 2.33 | Instruction reflects a planned progression in sound awareness, recognizing that attention to smaller units of sound (including individual phonemes) emerges gradually and is not required for mastery in Pre–K. |
|------|---|

Evidence:

- | | |
|------|--|
| 2.34 | Instruction provides repeated opportunities for children to listen to, produce, and compare sounds in spoken language across contexts, laying the foundation for later phoneme awareness and decoding instruction. |
|------|--|

Evidence:

- | | |
|------|--|
| 2.35 | Instruction in phonological and phoneme awareness is purposefully integrated into interactive read-alouds, oral language experiences, and daily classroom routines, providing frequent, meaningful opportunities for children to develop these skills in authentic contexts. |
|------|--|

Evidence:

- | | |
|------|--|
| 2.36 | Instruction reflects a coherent progression of emergent literacy and language foundations, building from broader language and sound awareness toward more specific awareness of speech sounds and print. |
|------|--|

Evidence:

- | | |
|------|--|
| 2.37 | For multilingual learners, additional instruction explicitly teaches the phonological patterns of English that may not exist in their home language (e.g., consonant blends, English syllable structures). |
|------|--|

Evidence:

Concepts of Print

NOTE: In Pre–K, instruction supports the foundations of word recognition through intentional attention to print concepts, letter knowledge, letter-sound relationships, and phonological sensitivity. Expectations for independent decoding, fluent word reading, or mastery of phonics patterns are not appropriate in Pre–K. When a curriculum does include early decoding, this section evaluates whether it builds on letter–sound knowledge rather than whole-word memorization. Also, decoding and encoding develop reciprocally. This section overlaps with the word writing items, and reviewing the two together may take less time than reviewing them separately.

To what extent is this red flag statement true?

1 – Red Flag statement is false.

2 – Red Flag statement is minimally true, evidence is minimal or briefly mentioned.

3 – Red Flag statement is mostly true. If applicable, evidence is in multiple places throughout the curriculum.

4 – Red Flag statement is always true, pervasive, and/or integral to the curriculum.

Recording Evidence From Curricular Materials

1. Note the specific location (if applicable). Is this from the teacher’s manual? Student materials? Ancillary materials (e.g., student texts, workbooks, specific additional materials)? Please note the specific section, lesson, and/or page number.
2. Justify your response by describing the practices that signal the presence of the red flag.

[Click here to jump to the glossary.](#) Please refer to the glossary as needed as you review.

Red Flags: Practices Not Aligned With the Research Evidence

Red Flag
(Rate: 1–4)

2.38	Environmental print and familiar symbols are displayed without adult attention to the letters and words within them, leaving children to recognize logos rather than print.	Rating ▾
Evidence:		
2.39	Instruction does not include attention to print referencing opportunities such as print directionality and orientation, symbol awareness, and aspects of how books work (front, back, author, illustrator, distinction between print and illustrations).	Rating ▾
Evidence:		
2.40	Instruction does not mention print conventions such as upper and lowercase letter distinctions, the use and purpose of punctuation, and spaces between written words.	Rating ▾
Evidence:		
2.41	If early decoding instruction is present in the curriculum, children are encouraged to memorize whole words, including high-frequency words, as visual units without attention to the relationship between spoken sounds and print.	Rating ▾
Evidence:		
Practices Aligned With the Research Evidence		
2.42	Instruction intentionally incorporates environmental print and familiar symbols, drawing children's attention to the letters and words within them, to help children recognize the functional purposes of print and make meaningful connections between print and everyday experiences.	

Evidence:

- | | |
|------|--|
| 2.43 | Instruction includes print-referencing opportunities that develop children's understanding of print concepts, including print directionality, orientation, book handling (where to start reading the words on a page, left-to-right finger sweep leading to one-to-one correspondence), the distinction between print and illustrations, and the understanding that print carries meaning. |
|------|--|

Evidence:

- | | |
|------|--|
| 2.44 | Instruction explicitly draws attention to print conventions, including upper and lowercase letter distinctions, the use and purpose of punctuation, and spaces between written words, to build children's understanding of how print is organized. |
|------|--|

Evidence:

- | | |
|------|---|
| 2.45 | When early decoding instruction is included, instruction explicitly teaches the relationships between spoken sounds and printed letters, guiding children to decode words, including high-frequency words, by applying letter-sound knowledge rather than memorizing whole words as visual units. |
|------|---|

Evidence:

Handwriting

NOTE: In Pre–K, writing develops through children's attempts to represent meaning on paper, progressing from marks and scribbles through mock letters, letter strings, and invented spelling. Expectations for conventional spelling, correct letter formation, or independent sentence writing are not appropriate in Pre–K. Instruction supports the foundations of writing through handwriting, encoding, and composition; children's approximations are evidence of learning rather than errors to be corrected. Also, encoding and decoding develop reciprocally. These sections overlap with the alphabet knowledge and phonological awareness items, and reviewing them together may take less time than reviewing them separately.

To what extent is this red flag statement true?

1 – Red Flag statement is false.

2 – Red Flag statement is minimally true, evidence is minimal or briefly mentioned.

3 – Red Flag statement is mostly true. If applicable, evidence is in multiple places throughout the curriculum.

4 – Red Flag statement is always true, pervasive, and/or integral to the curriculum.

Recording Evidence From Curricular Materials

1. Note the specific location (if applicable). Is this from the teacher's manual? Student materials? Ancillary materials (e.g., student texts, workbooks, specific additional materials)? Please note the specific section, lesson, and/or page number.
2. Justify your response by describing the practices that signal the presence of the red flag.

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Red Flags: Practices Not Aligned With the Research Evidence		Red Flag (Rate: 1-4)
2.46	There is no intentional modeling or guided practice of emergent handwriting, including pencil grasp, writing posture, prewriting shapes, and letter formation, with no opportunities to revisit skills over time; instruction relies on unstructured exposure or free writing time.	Rating ▾
Evidence:		
2.47	There is no instruction in where to begin and how to move when forming letters (e.g., top to bottom, left to right), and no practice of prewriting motor concepts (up-down, straight-curved-diagonal, circle-line).	Rating ▾
Evidence:		
2.48	Handwriting instruction is not integrated with alphabet instruction, so children practice forming letters without connection to letter names, shapes, and sounds..	Rating ▾

Evidence:

2.49

Handwriting experiences are disconnected from oral language, drawing, shared writing, and other early literacy activities, and are not used to express ideas.

Rating ▾

Evidence:

2.50

Instruction does not recognize developmental variation in fine motor skills and emphasizes mastery of conventional letter formation rather than participation and progress.

Rating ▾

Evidence:

Practices Aligned With the Research Evidence

2.51

Instruction includes explicit modeling and scaffolded guided practice supporting emergent handwriting development, including appropriate pencil grasp, writing posture, formation of prewriting shapes and letters, and multiple opportunities to revisit and practice skills over time.

Evidence:

2.52

Instruction in letter formation explicitly teaches where to begin and how to move, with multimodal opportunities to practice prewriting motor concepts (left-right, top-bottom, up-down, straight-curved-diagonal, circle-line) and pencil grasp.

Evidence:

2.53

Handwriting instruction is intentionally integrated with alphabet instruction so that children learn letter formation while developing letter names, letter shapes, and letter-sound knowledge.

Evidence:

- | | |
|------|---|
| 2.54 | Handwriting experiences are integrated with oral language, drawing, shared writing, and other early literacy activities, supporting children in expressing ideas through marks, symbols, letters, and emergent writing. |
|------|---|

Evidence:

- | | |
|------|---|
| 2.55 | Instruction recognizes developmental variation in children's fine-motor skills and provides differentiated supports, emphasizing active participation, engagement, and developmental progress rather than mastery of conventional letter formation or writing conventions in Pre-K. |
|------|---|

Evidence:

Word Writing

To what extent is this red flag statement true?

1 – Red Flag statement is false.

2 – Red Flag statement is minimally true, evidence is minimal or briefly mentioned.

3 – Red Flag statement is mostly true. If applicable, evidence is in multiple places throughout the curriculum.

4 – Red Flag statement is always true, pervasive, and/or integral to the curriculum.

Recording Evidence From Curricular Materials

1. Note the specific location (if applicable). Is this from the teacher's manual? Student materials? Ancillary materials (e.g., student texts, workbooks, specific additional materials)? Please note the specific section, lesson, and/or page number.
2. Justify your response by describing the practices that signal the presence of the red flag.

[Click here to jump to the glossary.](#) Please refer to the glossary as needed as you review.

Red Flags: Practices Not Aligned With the Research Evidence		Red Flag (Rate: 1-4)
2.56	Children are expected to copy or memorize spellings (e.g., repeated writing, decorative writing activities) without opportunities to think about or represent the sounds in words.	Rating ▾
Evidence:		
2.57	Children have few opportunities to segment spoken words into sounds and represent those sounds with letters, letter-like forms, or invented spellings as part of meaningful communication.	Rating ▾
Evidence:		
2.58	Encoding activities are disconnected from oral language, phonological awareness, and meaning-making, reducing children's understanding that writing represents spoken language.	Rating ▾
Evidence:		
2.59	Instruction emphasizes correctness, adult spelling models, and mastery of spelling conventions over children's attempts to represent sounds and ideas in developmentally appropriate ways.	Rating ▾
Evidence:		
2.60	Writing opportunities are infrequent and clustered rather than distributed across the year, with little guided practice.	Rating ▾
Evidence:		

Practices Aligned With the Research Evidence

- 2.61 Children engage in meaningful writing experiences that encourage them to represent the sounds in words using their developing knowledge of letter–sound correspondences, with explicit teacher support for connecting spoken language to print rather than copying or memorizing spellings.

Evidence:

- 2.62 Instruction supports emergent encoding, including opportunities for children to segment words orally and to represent sounds using letters, letter-like forms, or invented spellings as part of meaningful communication.

Evidence:

- 2.63 Encoding experiences are integrated with oral language, drawing, shared writing, meaning making, and play, supporting children in expressing ideas through marks, symbols, and early letter use.

Evidence:

- 2.64 Instruction recognizes the developmental writing sequence — scribbles, mock letters, random letter strings, semi-phonetic spelling, then phonetic spelling — and draws children's attention to the relationship between spoken sounds and written symbols without requiring conventional spelling or mastery of spelling patterns.

Evidence:

- 2.65 Writing opportunities are distributed across the year and repeated, with intentional guided practice.

Evidence:

Written Composition

NOTE: Composition is what children have to say; transcription is how it gets onto the page. In Pre–K, transcription (i.e., handwriting together with alphabet knowledge and emergent spelling) is still developing and constrains what children can produce independently. Composition therefore develops first and most fully through oral language: children plan, organize, and rehearse ideas by talking, telling stories, and explaining, and adults capture those ideas through dictation and shared writing. Instruction should build composition through language rather than waiting for transcription skills to catch up, and should not treat a child's limited writing output as the limit of what that child can compose.

To what extent is this red flag statement true?

- 1– Red Flag statement is false.
- 2 – Red Flag statement is minimally true, evidence is minimal or briefly mentioned.
- 3 – Red Flag statement is mostly true. If applicable, evidence is in multiple places throughout the curriculum.
- 4 – Red Flag statement is always true, pervasive, and/or integral to the curriculum.

Recording Evidence From Curricular Materials

- 3. Note the specific location (if applicable). Is this from the teacher’s manual? Student materials? Ancillary materials (e.g., student texts, workbooks, specific additional materials)? Please note the specific section, lesson, and/or page number.
- 4. Justify your response by describing the practices that signal the presence of the red flag.

[Click here to jump to the glossary.](#) Please refer to the glossary as needed as you review.

Red Flags: Practices Not Aligned With the Research Evidence		Red Flag (Rate: 1-4)
2.66	Composition experiences are disconnected from language comprehension, discourse instruction, or reading-related activities.	Rating ▾
Evidence:		
2.67	Children are asked to complete writing tasks without intentional modeling, shared planning, or opportunities to orally rehearse ideas prior to drawing, dictation, or writing.	Rating ▾

Evidence:

2.68

Writing experiences are largely unstructured, with limited use of teacher modeling, shared writing, or examples that demonstrate how ideas can be organized and expressed.

Rating ▾

Evidence:

2.69

Instruction does not include modeling of print conventions such as spaces between words, punctuation, and capitalization.

Rating ▾

Evidence:

2.70

Instruction does not support children in producing sentence-level and extended language (e.g., multiple related sentences or ideas) during storytelling, explanation, and discussion.

Rating ▾

Evidence:

2.71

Composition opportunities are limited to unstructured narrative sharing, with few opportunities for children to describe, explain, or give reasons.

Rating ▾

Evidence:

2.72

Writing and composition are treated as isolated skills rather than as tools for expressing ideas, telling stories, explaining experiences, and communicating knowledge.

Rating ▾

Evidence:

2.73	Multilingual learners are not able to draw on their home language when expressing ideas.	Rating ▾
Evidence:		
Practices Aligned With the Research Evidence		
2.74	Composition experiences are integrated with language comprehension, discourse instruction, and reading-related activities, reinforcing the reciprocal relationship between language, writing, and meaning.	
Evidence:		
2.75	Instruction explicitly supports oral composition, including opportunities for children to plan, organize, and rehearse ideas through discussion, storytelling, and explanation before drawing, dictation, or writing.	
Evidence:		
2.76	Teachers model and guide composition through shared writing, interactive writing, and dictation, demonstrating how spoken language can be represented through print.	
Evidence:		
2.77	Instruction includes modeling of print conventions such as spaces between words, punctuation, and capitalization.	
Evidence:		
2.78	Instruction supports children in producing extended language (e.g., multiple related sentences or ideas) during storytelling, explanation, and discussion, with scaffolding as needed.	

Evidence:

2.79	Children are provided opportunities to compose across multiple purposes, including narrative (telling stories), informational (describing or explaining), and opinion-based language (sharing preferences or reasons).
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Evidence:

2.80	Multilingual learners may use their home language or move between languages, when composing and sharing ideas.
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Evidence:

SECTION 3:

Assessment

Essential Conditions

NOTE: These conditions describe a functioning assessment system and not just the tools included within the curriculum. Assessment in Pre–K exists to inform instruction by identifying which children need more support, and whether core instruction is working for most children. This is the logic of a multi-tiered system of supports (MTSS), and the items below describe its minimum requirements: something is measured, oral language is included, and results lead to action. Validated oral-language screening tools are still emerging, and many widely used early-literacy screeners assess print-related skills without measuring oral language.

To what extent is this red flag statement true? 1– Red Flag statement is false. 2 – Red Flag statement is minimally true, evidence is minimal or briefly mentioned. 3 – Red Flag statement is mostly true. If applicable, evidence is in multiple places throughout the curriculum. 4 – Red Flag statement is always true, pervasive, and/or integral to the curriculum.	Recording Evidence From Curricular Materials 1. Note the specific location (if applicable). Is this from the teacher’s manual? Student materials? Ancillary materials (e.g., student texts, workbooks, specific additional materials)? Please note the specific section, lesson, and/or page number. 2. Justify your response by describing the practices that signal the presence of the red flag.
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[Click here to jump to the glossary.](#) Please refer to the glossary as needed as you review.

Red Flags: Practices Not Aligned With the Research Evidence		Red Flag (Rate: 1-4)
3.1	Assessment processes rely solely on observation or checklists, without measuring children's language and early literacy skill development.	Rating ▾
Evidence:		
3.2	Universal screening does not include oral language.	Rating ▾

Evidence:

- | | | |
|-----|---|----------|
| 3.3 | Universal screening is not connected to tiered instruction or additional support within a multi-tiered system of supports (MTSS). | Rating ▾ |
|-----|---|----------|

Evidence:

Practices Aligned With the Research Evidence

- | | |
|-----|--|
| 3.4 | The assessment system provides multiple, complementary sources of information that, together, describe children's development in oral language, listening comprehension, vocabulary, discourse, phonological sensitivity, print awareness, and emergent writing. |
|-----|--|

Evidence:

- | | |
|-----|--|
| 3.5 | Assessment data are used to inform instruction and guide support within a multi-tiered system of supports (MTSS), recognizing typical variability in early language development. |
|-----|--|

Evidence:

- | | |
|-----|---|
| 3.6 | Assessments are developmentally appropriate, reliable, valid, and efficient for their intended purpose; they are used to guide instruction and identify children who may need earlier or additional support, not to assign proficiency labels or track children based on predicted performance. |
|-----|---|

Evidence:

- | | |
|-----|--|
| 3.7 | Assessments are aligned with educational standards and the scope of sequence of instruction. |
|-----|--|

Evidence:

Design, Interpretation, and Use

To what extent is this red flag statement true?

- 1 – Red Flag statement is false.
- 2 – Red Flag statement is minimally true, evidence is minimal or briefly mentioned.
- 3 – Red Flag statement is mostly true. If applicable, evidence is in multiple places throughout the curriculum.
- 4 – Red Flag statement is always true, pervasive, and/or integral to the curriculum.

Recording Evidence From Curricular Materials

- 5. Note the specific location (if applicable). Is this from the teacher’s manual? Student materials? Ancillary materials (e.g., student texts, workbooks, specific additional materials)? Please note the specific section, lesson, and/or page number.
- 6. Justify your response by describing the practices that signal the presence of the red flag.

[Click here to jump to the glossary.](#) Please refer to the glossary as needed as you review.

Red Flags: Practices Not Aligned With the Research Evidence		Red Flag (Rate: 1-4)
3.8	Assessments set benchmarks beyond typical Pre–K expectations, such as requiring children to name and sound all upper- and lowercase letters or to segment all sounds in single-syllable words before kindergarten entry.	Rating ▾
Evidence:		
3.9	Assessment systems focus narrowly on print-related skills while failing to assess core aspects of language, such as vocabulary, listening comprehension, discourse, or sentence understanding.	Rating ▾

Evidence:

3.10

Phonological awareness (e.g., awareness of words, syllables, rhyme, or emerging phoneme awareness) is not assessed, limiting the ability to understand children's preparedness for later decoding instruction.

Rating ▾

Evidence:

3.11

Assessment practices emphasize correctness or performance outcomes rather than using assessment to understand children's language development and to inform instruction.

Rating ▾

Evidence:

3.12

Assessment systems do not account for linguistic diversity, and children's home language, dialect, and prior language experiences are not considered when interpreting performance.

Rating ▾

Evidence:

Practices Aligned With the Research Evidence

3.13

Assessment systems include multiple, complementary sources of information that describe children's development in oral language, listening comprehension, vocabulary, discourse, phonological awareness, print concepts, alphabet knowledge, and emergent writing.

Evidence:

3.14

Assessments are used for screening, instructional planning, and progress monitoring, with the primary purpose of informing instruction.

Evidence:

- | | |
|------|--|
| 3.15 | Assessment practices are developmentally appropriate and efficient, occurring within authentic activities (e.g., conversation, retelling, explanation, shared writing), minimizing time taken away from instruction. |
|------|--|

Evidence:

- | | |
|------|---|
| 3.16 | Assessments are developmentally appropriate, reliable, and valid for their intended purpose, and are used to guide instruction rather than to assign proficiency labels or determine placement. |
|------|---|

Evidence:

- | | |
|------|--|
| 3.17 | Assessments are aligned with educational standards and with the scope and sequence of instruction. |
|------|--|

Evidence:

- | | |
|------|--|
| 3.18 | Learning outcomes are developmentally appropriate for Pre–K and reflect a coherent progression of foundational language and literacy skills. |
|------|--|

Evidence:

- | | |
|------|--|
| 3.19 | Assessment systems explicitly attend to language comprehension, including vocabulary knowledge, sentence understanding, narrative and expository discourse, and listening comprehension. |
|------|--|

Evidence:

3.20	Assessment data are used within a Multi-Tiered System of Supports (MTSS) to guide differentiated instruction and additional language support, recognizing typical variability in early childhood development.
Evidence:	
3.21	For multilingual learners, assessment practices consider home-language abilities, language exposure, and the fact that transfer across languages varies by skill; home-language measures or interpretive support are used when feasible, and children are assessed in their home language when possible.
Evidence:	
3.22	Assessments have a clearly defined purpose aligned with their use (e.g., distinguishing between brief screeners and more in-depth diagnostics) and are interpreted cautiously in light of developmental expectations and children's reliable participation.
Evidence:	
3.23	Patterns in group-level assessment data are used to evaluate the effectiveness of Tier 1 instruction, with lack of progress prompting instructional review rather than child deficit assumptions.
Evidence:	

NOTE: This tool is to be considered a “living document,” meaning that it will be periodically updated based on user feedback, suggestions for optimizing use, etc. Email questions, feedback, and additional suggested citations to info@thereadingleague.org. We thank everyone who contributed to the content of this resource.

Glossary

DESIGN AND DELIVERY

Active student responding. Observable responses children make during instruction — answering, gesturing, pointing, or using response cards. More opportunities to respond mean more chances to learn and more information for the teacher.

Adult-guided instruction. Learning that follows the adult plans and leads toward a specific goal. Complements child-guided instruction rather than replacing it.

Child-guided instruction. Learning that follows children's interests and choices, with the adult supporting and extending rather than directing.

Cumulative practice. Adding a newly learned skill to previously learned related skills so they are practiced together.

Deliberate practice. Practice aimed at a specific purpose — accuracy, fluent retrieval, or generalization — rather than repetition alone.

Educative curriculum materials. Materials that build teachers' knowledge, explaining the reasoning behind practices rather than only directing what to do.

Explicit instruction. Instruction in which the teacher clearly models a skill or concept, guides children's practice with support, and scaffolds toward independence.

Fidelity of implementation. The degree to which a curriculum is delivered as designed. Includes how often it is used, how closely lessons are followed, and the quality of delivery, which can vary independently of one another.

Incidental learning. Learning that occurs through exposure without planned instructional attention.

Interleaving. Mixing the order of skills or items to be practiced so the learner must discriminate among them. Distinct from cumulative practice, which adds new skills to previously learned ones.

Intentional teaching. Teaching in which the adult knows what children are meant to learn and chooses strategies purposefully, in both adult-guided and child-guided contexts.

Retrieval practice. Tasks requiring learners to bring skills or knowledge to mind without prompts or cues.

Spaced (distributed) practice. Practice distributed across multiple sessions over time rather than concentrated in a single session.

Systematic instruction. Instruction following a planned, logical sequence that builds from simpler concepts to more complex ones.

LANGUAGE COMPREHENSION AND LANGUAGE PRODUCTION

Conversational turn. A single exchange in which one speaker responds to the other. Sustained back-and-forth exchanges, rather than only adult talk, support language development.

Expressive language. The words, sentences, and ideas a child produces.

Language comprehension. Understanding spoken language, including vocabulary, sentences, narratives, explanations, and informational talk.

Language production. Using spoken language to express ideas, tell stories, explain, and participate in conversation.

Listening comprehension. Understanding language that is heard, including stories and explanations read or told aloud.

Modeling. Demonstrating language or a way of thinking aloud so children can hear what is expected before doing it themselves.

Multilingual learner. A child developing two or more languages, including children whose home language differs from the language of instruction.

Oral language. Spoken language across all of its components, including vocabulary, morphosyntax, discourse, and the sound system.

Receptive language. The words, sentences, and ideas a child understands.

Responsive interaction. Adult talk that follows the child's focus and builds on what the child says, rather than directing or correcting.

Scaffolding. Temporary support that lets a child do something not yet possible independently and is withdrawn as the child builds proficiency.

Shared reading. Reading aloud with children in ways that invite their participation through talk before, during, and after the reading.

Turn taking. The alternation between speakers in conversation. In classrooms, scaffolds for turn taking ensure all children participate rather than a few dominating.

Vocabulary breadth and depth. *Breadth* is how many words a child knows; *depth* is how much a child knows about each word, including its meaning, its relationships to other words, and when it is used.

KINDS OF WORDS

Abstract nouns. Ideas, states, and events with no visible referent (*idea, promise, courage*). Need more support than concrete words but are taught in the same way.

Adjectives. Qualities and properties (*rough, enormous, transparent*). Often relative — (e.g., *big* depends on the comparison).

Concrete nouns. Objects, people, and animals a child can see or handle (*ladder, robin, shovel*). Easiest to learn, and over-represented in most preschool curricula.

Connectives. Words that joining ideas and signaling how they relate (*and, but, so, because, when*). Foundational for causal reasoning and extended discourse.

Mental state and emotion words. Internal experience (*think, remember, wonder, frustrated, proud*). Central to reasoning and narrative, and rarely learned incidentally.

Verbs. Actions and processes (*gallop, stir, crumble*). More difficult to learn than concrete nouns because learners need to hear them in many situations before they know how to use them.

HOW WORDS RELATE TO EACH OTHER

Relational and concept words. Relationships rather than things. Commonly assessed at kindergarten entry, but often absent from instruction.

- Spatial: *under, behind, beside*
- Temporal: *before, after, first, next*
- Quantity: *all, none, some, many, few*
- Comparative: *biggest, heavier, same, different*

Category (taxonomic) relationships. Words organized hierarchically by kind: *animal* → *bird* → *robin*. Teaching words in conceptually coherent sets supports learning of words that are never directly taught.

Attributes. The parts, properties, and features of something (*a robin has feathers, a beak, wings*).

Functions. What something is for or what it does (*a shovel is for digging*).

Associations. Words that co-occur in experience without belonging to the same category (*doctor–hospital, rain–umbrella*).

Synonyms and antonyms. Words with similar or opposite meanings. Emerging in later preschool as semantic knowledge deepens; not expected to be mastered.

Multiple-meaning words. Words with more than one sense (*trunk, bat, ring*). Emerging in preschool; useful to notice rather than to teach systematically.

SENTENCE COMPLEXITY

Coordinating conjunction. A word joining two grammatically equal parts of a sentence (*and, but, or, so*).

CROWD. A set of prompt types used during dialogic reading: Completion, Recall, Open-ended, Wh- questions, and Distancing (connecting the book to the child's own experience).

Dialogic reading. A shared reading approach in which the adult prompts the child to talk about the book and gradually shifts from reader to listener as the child takes on more of the telling.

Expansion. Repeating a child's utterance in a fuller, more grammatically complete form (*"Doggy run"* → *"Yes, the doggy is running"*).

Extension. Adding new information to a child's utterance, taking the idea further, rather than only completing it.

Morphosyntax. The way words are formed and combined to convey meaning, including word endings, grammatical markers, and sentence structure working together.

PEER. A dialogic reading sequence: Prompt the child, Evaluate the response, Expand on it, and Repeat the prompt to check understanding.

Recast. Repeating a child's utterance in a more complete or complex form while preserving the meaning within the natural flow of conversation.

Sentence complexity. The grammatical elaboration of a sentence, including expanded noun phrases, multiple clauses, and connectives joining ideas.

Syntax. The rules governing how words combine into phrases and sentences.

Temporal and causal connectors. Words linking ideas in time or by cause (*before, after, when, because, so*), allowing children to express relationships across events.

Utterance. A single spoken contribution (i.e., what a child says in one turn, whether a word, phrase, or full sentence).

DISCOURSE

Causal relationships. Connections between events in which one brings about another, often signaled by words such as *because* and *so*.

Decontextualized language. Language about people, objects, and events not present in the immediate situation (i.e., the language of stories, explanations, and books, distinct from talk about the here and now).

Discourse. Language extending beyond a single sentence, in which utterances connect to form a coherent whole.

Elaborative reminiscing. An adult conversational style that draws children into recounting past events by adding detail, asking open-ended questions, and building on what the child contributes.

Explanation. Discourse that accounts for how or why something happens or how something is done.

Extended discourse. Language spanning multiple connected utterances (e.g., telling a story, explaining an idea, or describing a process) rather than brief responses.

Informational language. Language used to describe, explain, or convey information about the world. Organized by topic and category rather than by sequence of events.

Narrative. Discourse that recounts a sequence of connected events, real or imagined.

Narrative structure. The organizational elements of a story: characters, setting, problem, events, and outcome.

Retell. A child's account of a story after hearing it. Used both to build and to observe narrative skill.

Story grammar. The predictable pattern of elements that organizes a narrative, providing a framework that children use to understand and produce stories.

Temporal relationships. Connections between events in time, often signaled by words such as *before*, *after*, *first*, and *next*.

VERBAL REASONING

Abstraction, levels of. The distance between a question or comment and what is immediately visible. Lower levels ask children to name or recall what is present; higher levels ask them to explain, predict, or reason about what is not present.

Cause and effect. The relationship between an event and what brings it about or follows from it.

Emotion words. Words naming feelings and emotional states (*frustrated*, *proud*, *disappointed*). Rarely learned incidentally and central to understanding characters and events.

Inference. A conclusion drawn from information that is not directly stated, using what is said together with what the child already knows.

Inferential question. A question requiring children to reason beyond the stated information (i.e., predicting, explaining, or interpreting) rather than recalling it.

Literal question. A question answered directly from information stated or shown, such as naming, labeling, or recalling.

Mental state words. Words naming internal experience and thinking (*think*, *remember*, *wonder*, *know*, *guess*). Central to reasoning about why characters act as they do.

Prediction. An expectation about what will happen next, based on what has occurred and what the child knows.

Relational language. Language expressing relationships among ideas (cause and effect, problem and solution, motives, mental states, emotions, and predictions).

KNOWLEDGE

Associations. Words and ideas that co-occur in experience without belonging to the same category (*doctor–hospital, rain–umbrella*).

Attributes. The parts, properties, and features of something (*a robin has feathers, a beak, wings*).

Background knowledge. What a child already knows about a topic. Shapes what children take from a text or activity, and differs across children in ways that affect what they learn from the same materials.

Category (taxonomic) relationships. Words organized hierarchically by kind: *animal* → *bird* → *robin*. Teaching words in conceptually coherent sets supports learning of words that are never directly taught.

Concept. An organized understanding of a class of things, events, or ideas, to which words attach.

Conceptual knowledge. Understanding of how ideas relate to one another, as distinct from knowing isolated facts or labels.

Content vocabulary. Words tied to a particular topic or domain, learned alongside the knowledge they belong to (*habitat, hibernate, migrate*).

Functions. What something is for or what it does (*a shovel is for digging*).

Informational text. Text written to convey information about the world, organized by topic rather than by sequence of events.

Science processes. Ways of investigating the world (observing, exploring, predicting, and linking cause and effect).

Text set. A group of texts on a related topic, read across days so that concepts and vocabulary recur and accumulate.

World knowledge. What children understand about how the world works (the natural world, communities, and everyday events) built through organized, repeated encounters with content.

ALPHABET KNOWLEDGE

Alphabet knowledge. Knowledge of letter names, letter shapes in upper and lowercase, and the sounds letters represent.

Anchor word/anchor picture. The example word and image that are paired with a letter to illustrate its sound. Anchor words should begin with the target sound in its clearest form (*apple* rather than *ant* for short a).

Articulatory gesture. The mouth position and movement that produce a speech sound. Often paired with letter instruction to connect what children feel when saying a sound with the letter that represents it.

Consonant blend. Two or more consonants sounded together, each retaining its own sound (*dr, st, bl*). Words beginning with blends make poor anchor words because the target sound is coarticulated with the adjacent sound.

Cumulative review. Bringing previously taught letters and sounds back into later lessons and activities so they are practiced alongside new ones.

Distributed practice. Practice spread across multiple sessions and days rather than concentrated within a single lesson or week.

Grapheme. A letter or letter combination that represents a phoneme.

Letter formation. How a letter is written, including where to begin and the direction of movement (top to bottom, left to right).

Letter name. The name of a letter of the alphabet. Many letter names contain the sound the letter represents, which supports letter–sound learning.

Letter–sound correspondence. The relationship between a grapheme (printed letter or letters) and its corresponding phoneme (individual speech sound); for example, *c* can correspond to /k/ or /s/.

Most salient letter sound. The sound that is most commonly and consistently represented by a letter and should be taught before less frequent alternatives.

Perceptual salience. How visually or auditorily distinct a letter or sound is from others, which affects how easily children learn to discriminate it.

Phoneme. The smallest unit of sound in a spoken word; an individual speech sound.

Prewriting motor concepts. The directional and shape concepts underlying letter formation: left–right, top–bottom, up–down, straight–curved–diagonal, and circle–line.

Scope and sequence. The planned order and pacing for introducing letters, sounds, and related skills across the year.

PHONOLOGICAL AND PHONEME AWARENESS

Blending. Combining spoken sounds to form a word. In Pre-K, blending typically begins at the syllable and onset-rime level, with phoneme blending emerging without expectation of being mastered.

Onset-rime. The two parts of a spoken syllable: the onset is the consonant sound or sounds before the vowel, and the rime is the vowel and everything after it (in *cat*, /k/ is the onset and /at/ is the rime).

Phoneme. The smallest unit of sound in a spoken word; an individual speech sound.

Phonological awareness. Awareness of the sound structure of spoken language, spanning words, syllables, rhyme, onset-rime, and individual phonemes.

Phoneme awareness. Awareness of individual phonemes in spoken words. The smallest-grain level of phonological awareness emerging in Pre-K without expectation of being mastered. This is also referred to as phonemic awareness.

Rhyme. Words that share the same rime (*cat*, *hat*, *sat*).

Segmenting. Breaking a spoken word into smaller units. In Pre-K, segmenting typically involves words, syllables, and onset-rime, with phoneme segmenting emerging.

Syllable. A unit of spoken language containing one vowel sound.

CONCEPTS OF PRINT

Alphabet knowledge. Knowledge of letter names, letter shapes in upper and lowercase, and the sounds letters represent.

Anchor word/anchor picture. The example word and image that are paired with a letter to illustrate its sound.

Articulatory gesture. The mouth position and movement that produce a speech sound.

Concepts of print. Understanding how print works, including directionality, where to begin reading on a page, the distinction between print and illustrations, and the understanding that print carries meaning.

Encoding. Representing the sounds in spoken words with letters. In Pre-K, this takes the form of emergent writing and invented spelling rather than conventional spelling. Encoding and decoding develop reciprocally.

Environmental print. Print encountered in everyday surroundings, such as signs and logos. Supports understanding of print's purposes when adults draw attention to the letters and words within it.

Grapheme. A letter or letter combination that represents a phoneme.

High-frequency words. Words that appear most often in printed text. In Pre–K, these are encountered rather than mastered and are connected to their letters and sounds rather than memorized as visual shapes.

Letter–sound correspondences. The relationship between a grapheme (printed letter or letters) and its corresponding phoneme (individual speech sound); for example, *c* can correspond to /k/ or /s/.

Phonics. Instruction in how printed letters represent the sounds of spoken language. In Pre–K, this means letter–sound correspondences and emerging sound–symbol understanding, not systematic decoding instruction.

Predictable texts. Texts with repetitive sentences, words, and phrases. Useful for participation and language patterns in shared reading; not a route to word reading, since children rely on memory and picture cues rather than print.

Print conventions. Features of how print is organized, including upper- and lowercase letter distinctions, punctuation, and spaces between written words.

Print referencing. Explicitly drawing children's attention to print during shared reading through comments, questions, and pointing.

HANDWRITING

Emergent handwriting. Children's early attempts to produce marks, shapes, and letters, before conventional letter formation is expected.

Fine motor skills. The small-muscle control of the hands and fingers used in holding a writing tool and forming shapes and letters. Develops at widely varying rates in Pre–K.

Guided practice. Children practicing a skill with adult support available, between the teacher's demonstration and independent work.

Letter formation. How a letter is written, including where to begin, the direction of movement, and the order of strokes.

Modeling. Demonstrating how a letter or shape is formed while children watch, often with the adult describing the movement aloud.

Multimodal practice. Practicing formation through more than one channel (tracing in sand, forming letters in the air, using large arm movements, writing with different tools rather than pencil and paper alone).

Participation and progress. Children's engagement in writing activities and their movement along the developmental sequence, distinct from producing conventionally formed letters. In Pre–K, the former is the appropriate expectation.

Pencil grasp. How a child holds a writing tool. A tripod grasp, using the thumb and first two fingers, is the mature pattern; different, earlier grasps are typical in Pre–K.

Prewriting motor concepts. The directional and shape concepts underlying letter formation: left–right, top–bottom, up–down, straight–curved–diagonal, and circle–line.

Prewriting shapes. The basic strokes and forms that make up letters (vertical and horizontal lines, circles, crosses, and diagonals) practiced before or alongside letters themselves.

Shared writing. The teacher writes in front of children while thinking aloud, often composing text while children contribute, so they see how spoken language becomes print.

Writing posture. How a child sits and positions the paper and body while writing.

WORD WRITING

Developmental writing sequence. The typical progression in children's written representations. The stages overlap rather than replacing one another, and a child may produce more than one on the same day.

- **Scribble.** Writing represented by a continuous wavy or looping line.
- **Mock letters.** Strokes or marks that resemble letters, not yet conventional without being conventional ones.
- **Random letter strings.** Real letters used without correspondence to the sounds in the word (*XXOT* for *love*).
- **Semi-phonetic spelling.** Partial spellings representing some of the sounds, usually the most salient (*LV* for *love*).
- **Phonetic spelling.** Fuller sound-by-sound spellings, not yet conventional (*LUV* for *love*).

Distributed practice. Writing opportunities are spread out and recur throughout the year and recurring, rather than being concentrated in a unit or a season.

Encoding. Representing the sounds in spoken words with letters. In Pre–K, this takes the form of emergent writing and invented spelling rather than conventional spelling. Encoding and decoding develop reciprocally.

Emergent encoding. Early attempts to represent spoken language through marks, symbols, letters, or letter-like forms, reflecting a developing understanding of letter-sound relationships.

Invented spelling. Developmentally appropriate representations of the sounds in words that reflect children's emerging phonological and alphabetic knowledge. Children create a spelling from what they know rather than reproducing one they have been given.

Letter–sound correspondence. The relationship between a printed letter or letters and the speech sound they represent.

Meaningful communication. Writing used to convey something the child intends — (a name, a label, a message, an idea about a drawing) — rather than practicing letters or copying for its own sake.

Segmenting. Breaking a spoken word into smaller units. In word writing, children segment a word in order to represent the sounds they hear with letters.

Shared writing. The teacher writes in front of children while thinking aloud, often composing text while children contribute, so they see how spoken language becomes print.

WRITTEN COMPOSITION

Composition. Generating and organizing ideas for others to receive; what a child has to say, independent of how it reaches the page. In Pre–K, composition happens through talk, drawing, dictation, and emergent writing.

Dictation. An adult writing down the language a child generates orally, connecting spoken language to print, and letting children compose beyond what they can transcribe.

Interactive writing. A variation on shared writing in which children take the pen for parts of the text — (a letter, a word, a space) — while the teacher writes the rest.

Oral composition. Planning, organizing, and rehearsing ideas by talking before drawing or writing.

Print conventions. Features of how print is organized — (spaces between words, punctuation, capitalization) — modeled during shared writing rather than required in children's own writing.

Purposes for composing. The different reasons children use language to communicate: narrative (telling what happened), informational (describing or explaining), and opinion (sharing a preference and a reason).

Rehearsal. Saying an idea aloud before recording it, which lets children work out what they want to say before managing how to write it.

Shared writing. The teacher and children compose text together with the teacher as scribe, thinking aloud so children see how spoken language becomes print.

Transcription. Getting language onto the page: handwriting together with alphabet knowledge and emergent spelling. Still developing in Pre–K, so it constrains how much a child can write independently, but not how much a child can compose.

ESSENTIAL CONDITIONS

Additional support. Instruction beyond core provision, matched to what assessment shows a child needs. Screening that identifies children but leads to no change in what they receive does not function as screening.

Assessment system. The full set of tools and processes a program uses to gather information about children's learning, including screening, ongoing observation, and progress monitoring. A system requires that the pieces connect, and information gathered leads somewhere.

Multi-Tiered System of Supports (MTSS). A framework in which assessment data guide instruction and support across tiers, with screening, progress monitoring, a research-based core curriculum, validated interventions for children needing more, and a collaborative problem-solving process.

Observation and checklists. Recording what children do during classroom activities. Valuable for describing participation and engagement, but they document what was seen rather than measuring skill development, so they cannot, on their own, tell which children need more support.

Oral language. Spoken language across its components — (vocabulary, morphosyntax, discourse, and comprehension). Screening that covers only print-related skills misses the strongest Pre–K predictor of later reading comprehension.

Screeners. A short assessment measure designed to flag children for closer attention; A screener indicates the need for a closer/further look; it does not diagnose, determine proficiency, or set placement. Screening that identifies children who need extra support but leads to no change in their instruction is futile.

Skill measurement. Assessment that yields information about a child's level of development in a specific area (vocabulary, phonological awareness, alphabet knowledge).

Tiered instruction. Instruction organized in levels of increasing intensity, beginning with core instruction for all children and adding support for those who need more.

Tier 1. Core instruction provided to all children. When a large proportion of children are not making expected progress, Tier 1 is examined before individual children are considered for additional support.

Universal screening. Brief assessment given to *all* children, not only those about whom someone already has concerns. Universal administration is what makes it possible to identify children whose difficulties are not obvious in the classroom.

DESIGN, INTERPRETATION, AND USE

Authentic assessment. Gathering information during ordinary classroom activities (conversation, retelling, explanation, shared writing) rather than in separate testing sessions.

Benchmark. A performance level identified as a reasonable expectation at a point in time. Pre–K benchmarks should reflect what is typical for three- and four-year-olds, not readiness targets carried down from kindergarten.

Diagnostic assessment. In-depth assessment of specific skills used to plan targeted instruction and additional language support. Distinguished from a brief screener by its depth and by the decisions it informs.

Dialect. A rule-governed variety of a language with its own consistent grammatical, phonological, and morphosyntactic patterns. Differences from Mainstream American English are differences, not errors, and may lower scores on measures that do not account for them.

Formative assessment. Information gathered during instruction and used to adjust it, distinct from information gathered to summarize what a child has achieved.

Language exposure. How much and how long a child has heard and used each of their languages. Necessary context for interpreting a multilingual child's performance in either language.

Mainstream American English. The variety of English used in most school materials and assessments. Children who speak other varieties may score below expectations for linguistic reasons rather than because of a language difficulty.

Norm-referenced assessment. A measure comparing a child's performance to a sample of other children. Interpretation depends on whether that sample resembles the child being assessed.

Progress monitoring. Repeated assessment of children receiving additional support used to track development toward specific skills and to adjust instruction.

Purpose alignment. Using an assessment only for the decisions it was designed to support. A screener cannot do a diagnostic's work, and neither should determine placement.

Reliable. The extent to which an assessment produces consistent results across time, settings, and examiners.

Standardized. Administered and scored in a consistent manner. Interpretation requires attention to whether the norming sample and scoring procedures are appropriate for the children being assessed, including those who speak a home language or dialect other than Mainstream American English.

Transfer across languages. The extent to which a skill developed in one language supports the same skill in another. Transfer varies by skill and depends on how well developed the home language is, so it should not be assumed.

Valid. The extent to which an assessment accurately and appropriately measures what it is intended to measure, for the purpose and population for which it is used.

References

The references below are organized by section and item, so that each criterion can be traced to the research supporting it. Where a body of evidence exists, meta-analyses and systematic reviews are cited alongside individual studies. Where the preschool evidence base is thin, the references reflect that, including studies with older learners or with children receiving intervention services, cited for the principle rather than as direct preschool evidence.

FRONT MATTER

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SECTION 0: DESIGN AND DELIVERY

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0.10 Cohesion across program components

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0.11 Clear, usable guidance for teachers

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SECTION 1: ORAL LANGUAGE

Language Comprehension and Language Production

1.1 Reliance on unstructured or incidental learning experiences

Division for Early Childhood. (2014). *DEC recommended practices in early intervention/early childhood special education 2014*. <https://www.dec-sped.org/dec-recommended-practices>

Hadley, E. B., Dedrick, R. F., Dickinson, D. K., Kim, E. S., Hirsh-Pasek, K., & Golinkoff, R. M. (2021). Exploring the relations between child and word characteristics and preschoolers' word-learning. *Journal of Applied Developmental Psychology*, 77, Article 101332. <https://doi.org/10.1016/j.appdev.2021.101332>

Marulis, L. M., & Neuman, S. B. (2010). The effects of vocabulary intervention on young children's word learning: A meta-analysis. *Review of Educational Research*, 80(3), 300–335. <https://doi.org/10.3102/0034654310377087>

1.2 No instructional language framework

Justice, L. M., & Kaderavek, J. N. (2004). Embedded–explicit emergent literacy intervention I: Background and description of approach. *Language, Speech, and Hearing Services in Schools*, 35(3), 201–211. [https://doi.org/10.1044/0161-1461\(2004/020\)](https://doi.org/10.1044/0161-1461(2004/020))

Justice, L. M., Mashburn, A., Hamre, B. K., & Pianta, R. C. (2008). Quality of language and literacy instruction in preschool classrooms serving at-risk pupils. *Early Childhood Research Quarterly*, 23(1), 51–68. <https://doi.org/10.1016/j.ecresq.2007.09.004>

Wasik, B. A., & Hindman, A. H. (2020). Increasing preschoolers' vocabulary development through a streamlined teacher professional development intervention. *Early Childhood Research Quarterly*, 50, 101–113. <https://doi.org/10.1016/j.ecresq.2018.11.001>

1.3 Limited exposure to rich vocabulary, complex sentences, and extended language

Dickinson, D. K., & Tabors, P. O. (Eds.). (2001). *Beginning literacy with language: Young children learning at home and school*. Paul H. Brookes.

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1.4 Listening comprehension addressed only through post-reading questions

Cabell, S. Q., Justice, L. M., McGinty, A. S., DeCoster, J., & Forston, L. D. (2015). Teacher–child conversations in preschool classrooms: Contributions to children's vocabulary development. *Early Childhood Research Quarterly*, 30, 80–92. <https://doi.org/10.1016/j.ecresq.2014.09.004>

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Zucker, T. A., Justice, L. M., Piasta, S. B., & Kaderavek, J. N. (2010). Preschool teachers' literal and inferential questions and children's responses during whole-class shared reading. *Early Childhood Research Quarterly*, 25(1), 65–83. <https://doi.org/10.1016/j.ecresq.2009.07.001>

1.5 Oral language not connected to emergent writing

- Gerde, H. K., Bingham, G. E., & Wasik, B. A. (2012). Writing in early childhood classrooms: Guidance for best practices. *Early Childhood Education Journal*, 40(6), 351–359. <https://doi.org/10.1007/s10643-012-0531-z>
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1.6 Questioning limited to literal recall or labeling

- Cabell, S. Q., Justice, L. M., McGinty, A. S., DeCoster, J., & Forston, L. D. (2015). Teacher–child conversations in preschool classrooms: Contributions to children's vocabulary development. *Early Childhood Research Quarterly*, 30, 80–92. <https://doi.org/10.1016/j.ecresq.2014.09.004>
- McGee, L. M., & Schickedanz, J. A. (2007). Repeated interactive read-alouds in preschool and kindergarten. *The Reading Teacher*, 60(8), 742–751. <https://doi.org/10.1598/RT.60.8.4>
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1.7 Limited opportunities to produce extended oral language

- Dickinson, D. K., & Tabors, P. O. (Eds.). (2001). *Beginning literacy with language: Young children learning at home and school*. Paul H. Brookes.
- Fivush, R., Haden, C. A., & Reese, E. (2006). Elaborating on elaborations: Role of maternal reminiscing style in cognitive and socioemotional development. *Child Development*, 77(6), 1568–1588. <https://doi.org/10.1111/j.1467-8624.2006.00960.x>
- Griffin, T. M., Hemphill, L., Camp, L., & Wolf, D. P. (2004). Oral discourse in the preschool years and later literacy skills. *First Language*, 24(2), 123–147. <https://doi.org/10.1177/0142723704042369>

Reese, E., Leyva, D., Sparks, A., & Grolnick, W. (2010). Maternal elaborative reminiscing increases low-income children's narrative skills relative to dialogic reading. *Early Education and Development*, 21(3), 318–342. <https://doi.org/10.1080/10409289.2010.481552>

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Spencer, T. D., Kajian, M., Petersen, D. B., & Bilyk, N. (2014). Effects of an individualized narrative intervention on children's storytelling and comprehension skills. *Journal of Early Intervention*, 35(3), 243–269. <https://doi.org/10.1177/1053815114540002>

1.8 Home-language strengths not built upon for multilingual learners

Buysse, V., Peisner-Feinberg, E., Páez, M., Hammer, C. S., & Knowles, M. (2014). Effects of early education programs and practices on the development and learning of dual language learners: A review of the literature. *Early Childhood Research Quarterly*, 29(4), 765–785. <https://doi.org/10.1016/j.ecresq.2014.05.008>

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Larson, A. L., Cycyk, L. M., Carta, J. J., Hammer, C. S., Baralt, M., Uchikoshi, Y., An, Z. G., & Wood, C. (2020). A systematic review of language-focused interventions for young children from culturally and linguistically diverse backgrounds. *Early Childhood Research Quarterly*, 50, 157–178. <https://doi.org/10.1016/j.ecresq.2019.06.001>

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1.9 No scaffolds for conversational turn taking

Cabell, S. Q., Justice, L. M., McGinty, A. S., DeCoster, J., & Forston, L. D. (2015). Teacher–child conversations in preschool classrooms: Contributions to children's vocabulary development. *Early Childhood Research Quarterly*, 30, 80–92. <https://doi.org/10.1016/j.ecresq.2014.09.004>

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Godfrey, S. A., Grisham-Brown, J., Schuster, J. W., & Hemmeter, M. L. (2003). The effects of three techniques on student participation with preschool children with attending problems. *Education and Treatment of Children*, 26(3), 255–272.

Romeo, R. R., Leonard, J. A., Robinson, S. T., West, M. R., Mackey, A. P., Rowe, M. L., & Gabrieli, J. D. E. (2018). Beyond the 30-million-word gap: Children's conversational exposure is associated with language-related brain function. *Psychological Science*, 29(5), 700–710. <https://doi.org/10.1177/0956797617742725>

Whorral, J., & Cabell, S. Q. (2016). Supporting children's oral language development in the preschool classroom. *Early Childhood Education Journal*, 44(4), 335–341. <https://doi.org/10.1007/s10643-015-0719-0>

1.10 Instruction delivered through intentionally sequenced learning experiences

Division for Early Childhood. (2014). *DEC recommended practices in early intervention/early childhood special education 2014*. <https://www.dec-sped.org/dec-recommended-practices>

Hadley, E. B., Dedrick, R. F., Dickinson, D. K., Kim, E. S., Hirsh-Pasek, K., & Golinkoff, R. M. (2021). Exploring the relations between child and word characteristics and preschoolers' word-learning. *Journal of Applied Developmental Psychology*, 77, Article 101332. <https://doi.org/10.1016/j.appdev.2021.101332>

Marulis, L. M., & Neuman, S. B. (2010). The effects of vocabulary intervention on young children's word learning: A meta-analysis. *Review of Educational Research*, 80(3), 300–335. <https://doi.org/10.3102/0034654310377087>

1.11 Instruction reflects a clear language framework

- Justice, L. M., & Kaderavek, J. N. (2004). Embedded–explicit emergent literacy intervention I: Background and description of approach. *Language, Speech, and Hearing Services in Schools*, 35(3), 201–211.
[https://doi.org/10.1044/0161-1461\(2004/020\)](https://doi.org/10.1044/0161-1461(2004/020))
- Justice, L. M., Mashburn, A., Hamre, B. K., & Pianta, R. C. (2008). Quality of language and literacy instruction in preschool classrooms serving at-risk pupils. *Early Childhood Research Quarterly*, 23(1), 51–68.
<https://doi.org/10.1016/j.ecresq.2007.09.004>
- Wasik, B. A., & Hindman, A. H. (2020). Increasing preschoolers' vocabulary development through a streamlined teacher professional development intervention. *Early Childhood Research Quarterly*, 50, 101–113.
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1.12 Instruction explicitly supports language comprehension

- Dickinson, D. K., & Tabors, P. O. (Eds.). (2001). *Beginning literacy with language: Young children learning at home and school*. Paul H. Brookes.
- Hogan, T. P., Adlof, S. M., & Alonzo, C. N. (2014). On the importance of listening comprehension. *International Journal of Speech-Language Pathology*, 16(3), 199–207. <https://doi.org/10.3109/17549507.2014.904441>
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<https://doi.org/10.1002/pits.20314>
- Wasik, B. A., & Bond, M. A. (2001). Beyond the pages of a book: Interactive book reading and language development in preschool classrooms. *Journal of Educational Psychology*, 93(2), 243–250. <https://doi.org/10.1037/0022-0663.93.2.243>
- Weizman, Z. O., & Snow, C. E. (2001). Lexical output as related to children's vocabulary acquisition: Effects of sophisticated exposure and support for meaning. *Developmental Psychology*, 37(2), 265–279.
<https://doi.org/10.1037/0012-1649.37.2.265>

1.13 Instruction explicitly supports language production

Cabell, S. Q., Justice, L. M., McGinty, A. S., DeCoster, J., & Forston, L. D. (2015). Teacher–child conversations in preschool classrooms: Contributions to children’s vocabulary development. *Early Childhood Research Quarterly, 30*, 80–92. <https://doi.org/10.1016/j.ecresq.2014.09.004>

McGee, L. M., & Schickedanz, J. A. (2007). Repeated interactive read-alouds in preschool and kindergarten. *The Reading Teacher, 60*(8), 742–751. <https://doi.org/10.1598/RT.60.8.4>

Whorral, J., & Cabell, S. Q. (2016). Supporting children’s oral language development in the preschool classroom. *Early Childhood Education Journal, 44*(4), 335–341. <https://doi.org/10.1007/s10643-015-0719-0>

Zucker, T. A., Justice, L. M., Piasta, S. B., & Kaderavek, J. N. (2010). Preschool teachers’ literal and inferential questions and children’s responses during whole-class shared reading. *Early Childhood Research Quarterly, 25*(1), 65–83. <https://doi.org/10.1016/j.ecresq.2009.07.001>

1.14 Emergent writing integrated with language production

Gerde, H. K., Bingham, G. E., & Wasik, B. A. (2012). Writing in early childhood classrooms: Guidance for best practices. *Early Childhood Education Journal, 40*(6), 351–359. <https://doi.org/10.1007/s10643-012-0531-z>

Puranik, C. S., & Lonigan, C. J. (2011). From scribbles to scrabble: Preschool children’s developing knowledge of written language. *Reading and Writing, 24*(5), 567–589. <https://doi.org/10.1007/s11145-009-9220-8>

1.15 Frequent, structured opportunities to produce extended discourse

Dickinson, D. K., & Tabors, P. O. (Eds.). (2001). *Beginning literacy with language: Young children learning at home and school*. Paul H. Brookes.

Fivush, R., Haden, C. A., & Reese, E. (2006). Elaborating on elaborations: Role of maternal reminiscing style in cognitive and socioemotional development. *Child Development, 77*(6), 1568–1588. <https://doi.org/10.1111/j.1467-8624.2006.00960.x>

Griffin, T. M., Hemphill, L., Camp, L., & Wolf, D. P. (2004). Oral discourse in the preschool years and later literacy skills. *First Language, 24*(2), 123–147. <https://doi.org/10.1177/0142723704042369>

Reese, E., Leyva, D., Sparks, A., & Grolnick, W. (2010). Maternal elaborative reminiscing increases low-income children's narrative skills relative to dialogic reading. *Early Education and Development*, 21(3), 318–342. <https://doi.org/10.1080/10409289.2010.481552>

Snow, C. E. (1991). The theoretical basis for relationships between language and literacy in development. *Journal of Research in Childhood Education*, 6(1), 5–10.

Spencer, T. D., Kajian, M., Petersen, D. B., & Bilyk, N. (2014). Effects of an individualized narrative intervention on children's storytelling and comprehension skills. *Journal of Early Intervention*, 35(3), 243–269. <https://doi.org/10.1177/1053815114540002>

1.16 Instruction builds on home language for multilingual learners

Buysse, V., Peisner-Feinberg, E., Páez, M., Hammer, C. S., & Knowles, M. (2014). Effects of early education programs and practices on the development and learning of dual language learners: A review of the literature. *Early Childhood Research Quarterly*, 29(4), 765–785. <https://doi.org/10.1016/j.ecresq.2014.05.008>

Castro, D. C., Páez, M. M., Dickinson, D. K., & Frede, E. (2011). Promoting language and literacy in young dual language learners: Research, practice, and policy. *Child Development Perspectives*, 5(1), 15–21. <https://doi.org/10.1111/j.1750-8606.2010.00142.x>

Hammer, C. S., Hoff, E., Uchikoshi, Y., Gillanders, C., Castro, D. C., & Sandilos, L. E. (2014). The language and literacy development of young dual language learners: A critical review. *Early Childhood Research Quarterly*, 29(4), 715–733. <https://doi.org/10.1016/j.ecresq.2014.05.008>

Larson, A. L., Cycyk, L. M., Carta, J. J., Hammer, C. S., Baralt, M., Uchikoshi, Y., An, Z. G., & Wood, C. (2020). A systematic review of language-focused interventions for young children from culturally and linguistically diverse backgrounds. *Early Childhood Research Quarterly*, 50, 157–178. <https://doi.org/10.1016/j.ecresq.2019.06.001>

National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the educational success of children and youth learning English: Promising futures*. The National Academies Press. <https://doi.org/10.17226/24677>

Pham, G., & Kohnert, K. (2010). Sentence interpretation by typically developing Vietnamese–English bilingual children. *Applied Psycholinguistics*, 31(3), 507–529. <https://doi.org/10.1017/S0142716410000093>

Spencer, T. D., Moran, M. K., Thompson, M. S., Petersen, D. B., & Restrepo, M. A. (2020). Early efficacy of multi-tiered dual language instruction: Promoting preschoolers' Spanish and English oral language. *AERA Open*, 6(1), 1–16.
<https://doi.org/10.1177/2332858419897886>

1.17 Multiple opportunities and scaffolds for conversational turn taking

Cabell, S. Q., Justice, L. M., McGinty, A. S., DeCoster, J., & Forston, L. D. (2015). Teacher–child conversations in preschool classrooms: Contributions to children's vocabulary development. *Early Childhood Research Quarterly*, 30, 80–92.
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Girolametto, L., & Weitzman, E. (2002). Responsiveness of child care providers in interaction with toddlers and preschoolers. *Language, Speech, and Hearing Services in Schools*, 33(4), 268–281. [https://doi.org/10.1044/0161-1461\(2002/022\)](https://doi.org/10.1044/0161-1461(2002/022))

Godfrey, S. A., Grisham-Brown, J., Schuster, J. W., & Hemmeter, M. L. (2003). The effects of three techniques on student participation with preschool children with attending problems. *Education and Treatment of Children*, 26(3), 255–272.

Romeo, R. R., Leonard, J. A., Robinson, S. T., West, M. R., Mackey, A. P., Rowe, M. L., & Gabrieli, J. D. E. (2018). Beyond the 30-million-word gap: Children's conversational exposure is associated with language-related brain function. *Psychological Science*, 29(5), 700–710. <https://doi.org/10.1177/0956797617742725>

Whorral, J., & Cabell, S. Q. (2016). Supporting children's oral language development in the preschool classroom. *Early Childhood Education Journal*, 44(4), 335–341. <https://doi.org/10.1007/s10643-015-0719-0>

Vocabulary

1.18 Surface-level vocabulary exposure with limited depth

Dickinson, D. K., Nesbitt, K. T., Collins, M. F., Hadley, E. B., Newman, K., Rivera, B. L., Ilgez, H., Nicolopoulou, A., Golinkoff, R. M., & Hirsh-Pasek, K. (2019). Teaching for breadth and depth of vocabulary knowledge: Learning from explicit and implicit instruction and the storybook texts. *Early Childhood Research Quarterly*, 47, 341–356.
<https://doi.org/10.1016/j.ecresq.2018.07.012>

Hadley, E. B., Dickinson, D. K., Hirsh-Pasek, K., & Golinkoff, R. M. (2019). Building semantic networks: The impact of a vocabulary intervention on preschoolers' depth of word knowledge. *Reading Research Quarterly*, 54(1), 41–61.
<https://doi.org/10.1002/rrq.225>

Marulis, L. M., & Neuman, S. B. (2010). The effects of vocabulary intervention on young children's word learning: A meta-analysis. *Review of Educational Research*, 80(3), 300–335. <https://doi.org/10.3102/0034654310377087>

1.19 Memorizing isolated words or definitions without meaningful context

Dickinson, D. K., Nesbitt, K. T., Collins, M. F., Hadley, E. B., Newman, K., Rivera, B. L., Ilgez, H., Nicolopoulou, A., Golinkoff, R. M., & Hirsh-Pasek, K. (2019). Teaching for breadth and depth of vocabulary knowledge: Learning from explicit and implicit instruction and the storybook texts. *Early Childhood Research Quarterly*, 47, 341–356. <https://doi.org/10.1016/j.ecresq.2018.07.012>

Justice, L. M., & Kaderavek, J. N. (2004). Embedded–explicit emergent literacy intervention I: Background and description of approach. *Language, Speech, and Hearing Services in Schools*, 35(3), 201–211. [https://doi.org/10.1044/0161-1461\(2004/020\)](https://doi.org/10.1044/0161-1461(2004/020))

Marulis, L. M., & Neuman, S. B. (2010). The effects of vocabulary intervention on young children's word learning: A meta-analysis. *Review of Educational Research*, 80(3), 300–335. <https://doi.org/10.3102/0034654310377087>

1.20 No instruction building the underlying semantic system

Hadley, E. B., Dickinson, D. K., Hirsh-Pasek, K., & Golinkoff, R. M. (2019). Building semantic networks: The impact of a vocabulary intervention on preschoolers' depth of word knowledge. *Reading Research Quarterly*, 54(1), 41–61. <https://doi.org/10.1002/rrq.225>

Neuman, S. B., & Dwyer, J. (2011). Developing vocabulary and conceptual knowledge for low-income preschoolers: A design experiment. *Journal of Literacy Research*, 43(2), 103–129. <https://doi.org/10.1177/1086296X11403089>

Neuman, S. B., Newman, E. H., & Dwyer, J. (2011). Educational effects of a vocabulary intervention on preschoolers' word knowledge and conceptual development: A cluster-randomized trial. *Reading Research Quarterly*, 46(3), 249–272. <https://doi.org/10.1598/RRQ.46.3.3>

1.21 No instruction in semantic relationships or concept words

Eising, M., & Karasinski, C. (2022). Developmental kindergarten classroom intervention for spatial relational terms. *CoDAS*, 34(4), Article e20210176. <https://doi.org/10.1590/2317-1782/20212021176>

Hadley, E. B., & Mendez, K. Z. (2021). A systematic review of word selection in early childhood vocabulary instruction. *Early Childhood Research Quarterly*, 54, 44–59. <https://doi.org/10.1016/j.ecresq.2020.07.010>

Hadley, E. B., Dedrick, R. F., Dickinson, D. K., Kim, E. S., Hirsh-Pasek, K., & Golinkoff, R. M. (2021). Exploring the relations between child and word characteristics and preschoolers' word-learning. *Journal of Applied Developmental Psychology*, 77, Article 101332. <https://doi.org/10.1016/j.appdev.2021.101332>

1.22 Recurring words not intentionally selected, taught, or revisited

Hadley, E. B. (2021). Learning words that matter: Selecting vocabulary words for young children. *The Reading Teacher*, 74(6), 761–770. <https://doi.org/10.1002/trtr.1978>

Hadley, E. B., & Mendez, K. Z. (2021). A systematic review of word selection in early childhood vocabulary instruction. *Early Childhood Research Quarterly*, 54, 44–59. <https://doi.org/10.1016/j.ecresq.2020.07.010>

Neuman, S. B., & Wright, T. S. (2013). *All about words: Increasing vocabulary in the Common Core classroom, Pre–K–2*. Teachers College Press.

Vlach, H. A., Sandhofer, C. M., & Kornell, N. (2008). The spacing effect in children's memory and category induction. *Cognition*, 109(1), 163–167. <https://doi.org/10.1016/j.cognition.2008.07.013>

Wasik, B. A., & Hindman, A. H. (2020). Increasing preschoolers' vocabulary development through a streamlined teacher professional development intervention. *Early Childhood Research Quarterly*, 50, 101–113. <https://doi.org/10.1016/j.ecresq.2018.11.001>

1.23 Vocabulary disconnected from topics and content areas

Greenfield, D. B., Jirout, J., Dominguez, X., Greenberg, A., Maier, M., & Fuccillo, J. (2009). Science in the preschool classroom: A programmatic research agenda to improve science readiness. *Early Education and Development*, 20(2), 238–264. <https://doi.org/10.1080/10409280802595441>

Neuman, S. B., & Danielson, K. (2021). Enacting content-rich curriculum in early childhood: The role of teacher knowledge and pedagogy. *Early Education and Development*, 32(3), 443–458. <https://doi.org/10.1080/10409289.2020.1753463>

Neuman, S. B., Kaefer, T., & Pinkham, A. M. (2016). Improving low-income preschoolers' word and world knowledge: The effects of content-rich instruction. *The Elementary School Journal*, 116(4), 652–674. <https://doi.org/10.1086/686463>

1.24 No support for multilingual learners' vocabulary development

- Buysse, V., Peisner-Feinberg, E., Páez, M., Hammer, C. S., & Knowles, M. (2014). Effects of early education programs and practices on the development and learning of dual language learners: A review of the literature. *Early Childhood Research Quarterly*, 29(4), 765–785. <https://doi.org/10.1016/j.ecresq.2014.05.008>
- Castro, D. C., Páez, M. M., Dickinson, D. K., & Frede, E. (2011). Promoting language and literacy in young dual language learners: Research, practice, and policy. *Child Development Perspectives*, 5(1), 15–21. <https://doi.org/10.1111/j.1750-8606.2010.00142.x>
- Larson, A. L., Cycyk, L. M., Carta, J. J., Hammer, C. S., Baralt, M., Uchikoshi, Y., An, Z. G., & Wood, C. (2020). A systematic review of language-focused interventions for young children from culturally and linguistically diverse backgrounds. *Early Childhood Research Quarterly*, 50, 157–178. <https://doi.org/10.1016/j.ecresq.2019.06.001>
- National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the educational success of children and youth learning English: Promising futures*. The National Academies Press. <https://doi.org/10.17226/24677>

1.25 A range of word types taught, not mainly concrete nouns

- Hadley, E. B. (2021). Learning words that matter: Selecting vocabulary words for young children. *The Reading Teacher*, 74(6), 761–770. <https://doi.org/10.1002/trtr.1978>
- Hadley, E. B., & Mendez, K. Z. (2021). A systematic review of word selection in early childhood vocabulary instruction. *Early Childhood Research Quarterly*, 54, 44–59. <https://doi.org/10.1016/j.ecresq.2020.07.010>
- Eising, M., & Karasinski, C. (2022). Developmental kindergarten classroom intervention for spatial relational terms. *CoDAS*, 34(4), Article e20210176. <https://doi.org/10.1590/2317-1782/20212021176>
- Neuman, S. B., & Wright, T. S. (2013). *All about words: Increasing vocabulary in the Common Core classroom, PreK–2*. Teachers College Press.
- Wasik, B. A., & Bond, M. A. (2001). Beyond the pages of a book: Interactive book reading and language development in preschool classrooms. *Journal of Educational Psychology*, 93(2), 243–250. <https://doi.org/10.1037/0022-0663.93.2.243>

1.26 Robust conversations exploring word meanings

Cabell, S. Q., Justice, L. M., McGinty, A. S., DeCoster, J., & Forston, L. D. (2015). Teacher–child conversations in preschool classrooms: Contributions to children’s vocabulary development. *Early Childhood Research Quarterly, 30*, 80–92. <https://doi.org/10.1016/j.ecresq.2014.09.004>

Dickinson, D. K., Nesbitt, K. T., Collins, M. F., Hadley, E. B., Newman, K., Rivera, B. L., Ilgez, H., Nicolopoulou, A., Golinkoff, R. M., & Hirsh-Pasek, K. (2019). Teaching for breadth and depth of vocabulary knowledge: Learning from explicit and implicit instruction and the storybook texts. *Early Childhood Research Quarterly, 47*, 341–356. <https://doi.org/10.1016/j.ecresq.2018.07.012>

Whorral, J., & Cabell, S. Q. (2016). Supporting children’s oral language development in the preschool classroom. *Early Childhood Education Journal, 44*(4), 335–341. <https://doi.org/10.1007/s10643-015-0719-0>

1.27 Vocabulary taught deeply using multiple supports

Hadley, E. B., Dickinson, D. K., Hirsh-Pasek, K., & Golinkoff, R. M. (2019). Building semantic networks: The impact of a vocabulary intervention on preschoolers’ depth of word knowledge. *Reading Research Quarterly, 54*(1), 41–61. <https://doi.org/10.1002/rrq.225>

Marulis, L. M., & Neuman, S. B. (2010). The effects of vocabulary intervention on young children’s word learning: A meta-analysis. *Review of Educational Research, 80*(3), 300–335. <https://doi.org/10.3102/0034654310377087>

Wasik, B. A., & Bond, M. A. (2001). Beyond the pages of a book: Interactive book reading and language development in preschool classrooms. *Journal of Educational Psychology, 93*(2), 243–250. <https://doi.org/10.1037/0022-0663.93.2.243>

1.28 Frequent opportunities for expressive use and emergent literacy links

Gerde, H. K., Bingham, G. E., & Wasik, B. A. (2012). Writing in early childhood classrooms: Guidance for best practices. *Early Childhood Education Journal, 40*(6), 351–359. <https://doi.org/10.1007/s10643-012-0531-z>

Puranik, C. S., & Lonigan, C. J. (2011). From scribbles to scrabble: Preschool children’s developing knowledge of written language. *Reading and Writing, 24*(5), 567–589. <https://doi.org/10.1007/s11145-009-9220-8>

Wasik, B. A., & Hindman, A. H. (2020). Increasing preschoolers' vocabulary development through a streamlined teacher professional development intervention. *Early Childhood Research Quarterly*, 50, 101–113. <https://doi.org/10.1016/j.ecresq.2018.11.001>

1.29 Concept words and semantic relationships explicitly taught

Eising, M., & Karasinski, C. (2022). Developmental kindergarten classroom intervention for spatial relational terms. *CoDAS*, 34(4), Article e20210176. <https://doi.org/10.1590/2317-1782/20212021176>

Hadley, E. B., Dedrick, R. F., Dickinson, D. K., Kim, E. S., Hirsh-Pasek, K., & Golinkoff, R. M. (2021). Exploring the relations between child and word characteristics and preschoolers' word-learning. *Journal of Applied Developmental Psychology*, 77, Article 101332. <https://doi.org/10.1016/j.appdev.2021.101332>

Hadley, E. B., & Mendez, K. Z. (2021). A systematic review of word selection in early childhood vocabulary instruction. *Early Childhood Research Quarterly*, 54, 44–59. <https://doi.org/10.1016/j.ecresq.2020.07.010>

1.30 Vocabulary introduced within broader topics and content areas

Greenfield, D. B., Jirout, J., Dominguez, X., Greenberg, A., Maier, M., & Fuccillo, J. (2009). Science in the preschool classroom: A programmatic research agenda to improve science readiness. *Early Education and Development*, 20(2), 238–264. <https://doi.org/10.1080/10409280802595441>

Neuman, S. B., & Danielson, K. (2021). Enacting content-rich curriculum in early childhood: The role of teacher knowledge and pedagogy. *Early Education and Development*, 32(3), 443–458. <https://doi.org/10.1080/10409289.2020.1753463>

Neuman, S. B., Kaefer, T., & Pinkham, A. M. (2016). Improving low-income preschoolers' word and world knowledge: The effects of content-rich instruction. *The Elementary School Journal*, 116(4), 652–674. <https://doi.org/10.1086/686463>

1.31 Instruction builds on home language for multilingual learners

Buysse, V., Peisner-Feinberg, E., Páez, M., Hammer, C. S., & Knowles, M. (2014). Effects of early education programs and practices on the development and learning of dual language learners: A review of the literature. *Early Childhood Research Quarterly*, 29(4), 765–785. <https://doi.org/10.1016/j.ecresq.2014.05.008>

Castro, D. C., Páez, M. M., Dickinson, D. K., & Frede, E. (2011). Promoting language and literacy in young dual language learners: Research, practice, and policy. *Child Development Perspectives*, 5(1), 15–21.

<https://doi.org/10.1111/j.1750-8606.2010.00142.x>

Larson, A. L., Cych, L. M., Carta, J. J., Hammer, C. S., Baralt, M., Uchikoshi, Y., An, Z. G., & Wood, C. (2020). A systematic review of language-focused interventions for young children from culturally and linguistically diverse backgrounds. *Early Childhood Research Quarterly*, 50, 157–178. <https://doi.org/10.1016/j.ecresq.2019.06.001>

National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the educational success of children and youth learning English: Promising futures*. The National Academies Press. <https://doi.org/10.17226/24677>

Sentence Complexity

1.32 Incidental exposure only, with little intentional support for sentence structures

Ambridge, B., Theakston, A. L., Lieven, E. V. M., & Tomasello, M. (2006). The distributed learning effect for children's acquisition of an abstract syntactic construction. *Cognitive Development*, 21(2), 174–193.

<https://doi.org/10.1016/j.cogdev.2005.09.003>

Huttenlocher, J., Waterfall, H., Vasilyeva, M., Vevea, J., & Hedges, L. V. (2010). Sources of variability in children's language growth. *Cognitive Psychology*, 61(4), 343–365. <https://doi.org/10.1016/j.cogpsych.2010.08.002>

Justice, L. M., & Kaderavek, J. N. (2004). Embedded–explicit emergent literacy intervention I: Background and description of approach. *Language, Speech, and Hearing Services in Schools*, 35(3), 201–211.

[https://doi.org/10.1044/0161-1461\(2004/020\)](https://doi.org/10.1044/0161-1461(2004/020))

Justice, L. M., Kaderavek, J. N., Fan, X., Sofka, A., & Hunt, A. (2009). Accelerating preschoolers' early literacy development through classroom-based teacher–child storybook reading and explicit print referencing. *Language, Speech, and Hearing Services in Schools*, 40(1), 67–85. [https://doi.org/10.1044/0161-1461\(2008/07-0098\)](https://doi.org/10.1044/0161-1461(2008/07-0098))

1.33 No explicit templates or guidance for children's sentence production

Whitehurst, G. J., Falco, F. L., Lonigan, C. J., Fischel, J. E., DeBaryshe, B. D., Valdez-Menchaca, M. C., & Caulfield, M. (1988). Accelerating language development through picture book reading. *Developmental Psychology*, 24(4), 552–559.

<https://doi.org/10.1037/0012-1649.24.4.552>

Zevenbergen, A. A., & Whitehurst, G. J. (2003). Dialogic reading: A shared picture book reading intervention for preschoolers. In A. van Kleeck, S. A. Stahl, & E. B. Bauer (Eds.), *On reading books to children: Parents and teachers* (pp. 177–200). Lawrence Erlbaum.

1.34 Limited teacher modeling of complex language

Cabell, S. Q., Justice, L. M., McGinty, A. S., DeCoster, J., & Forston, L. D. (2015). Teacher–child conversations in preschool classrooms: Contributions to children’s vocabulary development. *Early Childhood Research Quarterly*, 30, 80–92. <https://doi.org/10.1016/j.ecresq.2014.09.004>

Huttenlocher, J., Vasilyeva, M., Cymerman, E., & Levine, S. (2002). Language input and child syntax. *Cognitive Psychology*, 45(3), 337–374. [https://doi.org/10.1016/S0010-0285\(02\)00500-5](https://doi.org/10.1016/S0010-0285(02)00500-5)

Wasik, B. A., & Bond, M. A. (2001). Beyond the pages of a book: Interactive book reading and language development in preschool classrooms. *Journal of Educational Psychology*, 93(2), 243–250. <https://doi.org/10.1037/0022-0663.93.2.243>

1.35 Instruction largely directive, corrective, or reactive

Cabell, S. Q., Justice, L. M., McGinty, A. S., DeCoster, J., & Forston, L. D. (2015). Teacher–child conversations in preschool classrooms: Contributions to children’s vocabulary development. *Early Childhood Research Quarterly*, 30, 80–92. <https://doi.org/10.1016/j.ecresq.2014.09.004>

Cleave, P. L., Becker, S. D., Curran, M. K., Owen Van Horne, A. J., & Fey, M. E. (2015). The efficacy of recasts in language intervention: A systematic review and meta-analysis. *American Journal of Speech-Language Pathology*, 24(2), 237–255. https://doi.org/10.1044/2015_AJSLP-14-0105

Girolametto, L., & Weitzman, E. (2002). Responsiveness of child care providers in interaction with toddlers and preschoolers. *Language, Speech, and Hearing Services in Schools*, 33(4), 268–281. [https://doi.org/10.1044/0161-1461\(2002/022\)](https://doi.org/10.1044/0161-1461(2002/022))

1.36 Little attention to how words work together in sentences

Ambridge, B., Theakston, A. L., Lieven, E. V. M., & Tomasello, M. (2006). The distributed learning effect for children’s acquisition of an abstract syntactic construction. *Cognitive Development*, 21(2), 174–193. <https://doi.org/10.1016/j.cogdev.2005.09.003>

Huttenlocher, J., Vasilyeva, M., Cymerman, E., & Levine, S. (2002). Language input and child syntax. *Cognitive Psychology*, 45(3), 337–374. [https://doi.org/10.1016/S0010-0285\(02\)00500-5](https://doi.org/10.1016/S0010-0285(02)00500-5)

Justice, L. M., & Kaderavek, J. N. (2004). Embedded–explicit emergent literacy intervention I: Background and description of approach. *Language, Speech, and Hearing Services in Schools*, 35(3), 201–211. [https://doi.org/10.1044/0161-1461\(2004/020\)](https://doi.org/10.1044/0161-1461(2004/020))

1.37 Limited exposure to a variety of sentence structures

Ambridge, B., Theakston, A. L., Lieven, E. V. M., & Tomasello, M. (2006). The distributed learning effect for children’s acquisition of an abstract syntactic construction. *Cognitive Development*, 21(2), 174–193. <https://doi.org/10.1016/j.cogdev.2005.09.003>

Dickinson, D. K., & Tabors, P. O. (Eds.). (2001). *Beginning literacy with language: Young children learning at home and school*. Paul H. Brookes.

Huttenlocher, J., Waterfall, H., Vasilyeva, M., Vevea, J., & Hedges, L. V. (2010). Sources of variability in children’s language growth. *Cognitive Psychology*, 61(4), 343–365. <https://doi.org/10.1016/j.cogpsych.2010.08.002>

1.38 Limited time for guided discussion and modeling of complete ideas

Cabell, S. Q., Justice, L. M., McGinty, A. S., DeCoster, J., & Forston, L. D. (2015). Teacher–child conversations in preschool classrooms: Contributions to children’s vocabulary development. *Early Childhood Research Quarterly*, 30, 80–92. <https://doi.org/10.1016/j.ecresq.2014.09.004>

Whorral, J., & Cabell, S. Q. (2016). Supporting children’s oral language development in the preschool classroom. *Early Childhood Education Journal*, 44(4), 335–341. <https://doi.org/10.1007/s10643-015-0719-0>

Zucker, T. A., Justice, L. M., Piasta, S. B., & Kaderavek, J. N. (2010). Preschool teachers’ literal and inferential questions and children’s responses during whole-class shared reading. *Early Childhood Research Quarterly*, 25(1), 65–83. <https://doi.org/10.1016/j.ecresq.2009.07.001>

1.39 No distinction between conversational language and book language

Curenton, S. M., & Justice, L. M. (2004). African American and Caucasian preschoolers' use of decontextualized language: Literate language features in oral narratives. *Language, Speech, and Hearing Services in Schools, 35*(3), 240–253. [https://doi.org/10.1044/0161-1461\(2004/023\)](https://doi.org/10.1044/0161-1461(2004/023))

Dickinson, D. K., & Tabors, P. O. (Eds.). (2001). *Beginning literacy with language: Young children learning at home and school*. Paul H. Brookes.

Snow, C. E. (1983). Literacy and language: Relationships during the preschool years. *Harvard Educational Review, 53*(2), 165–189.

1.40 No intentional support for complex sentence structures and connectors

Cleave, P. L., Becker, S. D., Curran, M. K., Owen Van Horne, A. J., & Fey, M. E. (2015). The efficacy of recasts in language intervention: A systematic review and meta-analysis. *American Journal of Speech-Language Pathology, 24*(2), 237–255. https://doi.org/10.1044/2015_AJSLP-14-0105

Curenton, S. M., & Justice, L. M. (2004). African American and Caucasian preschoolers' use of decontextualized language: Literate language features in oral narratives. *Language, Speech, and Hearing Services in Schools, 35*(3), 240–253. [https://doi.org/10.1044/0161-1461\(2004/023\)](https://doi.org/10.1044/0161-1461(2004/023))

Curran, M., & Owen Van Horne, A. (2019). Use of recast intervention to teach causal adverbials to young children with developmental language disorder within a science curriculum: A single case design study. *American Journal of Speech-Language Pathology, 28*(2), 430–447. https://doi.org/10.1044/2018_AJSLP-17-0164

1.41 No asset-based approach for multilingual learners and speakers of English language variations

Charity Hudley, A. H., & Mallinson, C. (2011). *Understanding English language variation in U.S. schools*. Teachers College Press.

Larson, A. L., Cycyk, L. M., Carta, J. J., Hammer, C. S., Baralt, M., Uchikoshi, Y., An, Z. G., & Wood, C. (2020). A systematic review of language-focused interventions for young children from culturally and linguistically diverse backgrounds. *Early Childhood Research Quarterly, 50*, 157–178. <https://doi.org/10.1016/j.ecresq.2019.06.001>

National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the educational success of children and youth learning English: Promising futures*. The National Academies Press. <https://doi.org/10.17226/24677>

Washington, J. A., & Craig, H. K. (1999). Performances of at-risk, African American preschoolers on the Peabody Picture Vocabulary Test–III. *Language, Speech, and Hearing Services in Schools*, 30(1), 75–82. <https://doi.org/10.1044/0161-1461.3001.75>

Wolfram, W., & Schilling, N. (2016). *American English: Dialects and variation* (3rd ed.). Wiley-Blackwell.

1.42 Clear, intentional progression for language structures and print conventions

Ambridge, B., Theakston, A. L., Lieven, E. V. M., & Tomasello, M. (2006). The distributed learning effect for children's acquisition of an abstract syntactic construction. *Cognitive Development*, 21(2), 174–193. <https://doi.org/10.1016/j.cogdev.2005.09.003>

Huttenlocher, J., Waterfall, H., Vasilyeva, M., Vevea, J., & Hedges, L. V. (2010). Sources of variability in children's language growth. *Cognitive Psychology*, 61(4), 343–365. <https://doi.org/10.1016/j.cogpsych.2010.08.002>

Justice, L. M., & Kaderavek, J. N. (2004). Embedded–explicit emergent literacy intervention I: Background and description of approach. *Language, Speech, and Hearing Services in Schools*, 35(3), 201–211. [https://doi.org/10.1044/0161-1461\(2004/020\)](https://doi.org/10.1044/0161-1461(2004/020))

Justice, L. M., Kaderavek, J. N., Fan, X., Sofka, A., & Hunt, A. (2009). Accelerating preschoolers' early literacy development through classroom-based teacher–child storybook reading and explicit print referencing. *Language, Speech, and Hearing Services in Schools*, 40(1), 67–85. [https://doi.org/10.1044/0161-1461\(2008/07-0098\)](https://doi.org/10.1044/0161-1461(2008/07-0098))

1.43 Explicit templates and instructional guidance for sentence production

Whitehurst, G. J., Falco, F. L., Lonigan, C. J., Fischel, J. E., DeBaryshe, B. D., Valdez-Menchaca, M. C., & Caulfield, M. (1988). Accelerating language development through picture book reading. *Developmental Psychology*, 24(4), 552–559. <https://doi.org/10.1037/0012-1649.24.4.552>

Zevenbergen, A. A., & Whitehurst, G. J. (2003). Dialogic reading: A shared picture book reading intervention for preschoolers. In A. van Kleeck, S. A. Stahl, & E. B. Bauer (Eds.), *On reading books to children: Parents and teachers* (pp. 177–200). Lawrence Erlbaum.

1.44 Consistent teacher modeling of complex language in meaningful contexts

Cabell, S. Q., Justice, L. M., McGinty, A. S., DeCoster, J., & Forston, L. D. (2015). Teacher–child conversations in preschool classrooms: Contributions to children’s vocabulary development. *Early Childhood Research Quarterly, 30*, 80–92. <https://doi.org/10.1016/j.ecresq.2014.09.004>

Huttenlocher, J., Vasilyeva, M., Cymerman, E., & Levine, S. (2002). Language input and child syntax. *Cognitive Psychology, 45*(3), 337–374. [https://doi.org/10.1016/S0010-0285\(02\)00500-5](https://doi.org/10.1016/S0010-0285(02)00500-5)

Wasik, B. A., & Bond, M. A. (2001). Beyond the pages of a book: Interactive book reading and language development in preschool classrooms. *Journal of Educational Psychology, 93*(2), 243–250. <https://doi.org/10.1037/0022-0663.93.2.243>

1.45 Intentional, responsive interactions that extend thinking and language

Cabell, S. Q., Justice, L. M., McGinty, A. S., DeCoster, J., & Forston, L. D. (2015). Teacher–child conversations in preschool classrooms: Contributions to children’s vocabulary development. *Early Childhood Research Quarterly, 30*, 80–92. <https://doi.org/10.1016/j.ecresq.2014.09.004>

Cleave, P. L., Becker, S. D., Curran, M. K., Owen Van Horne, A. J., & Fey, M. E. (2015). The efficacy of recasts in language intervention: A systematic review and meta-analysis. *American Journal of Speech-Language Pathology, 24*(2), 237–255. https://doi.org/10.1044/2015_AJSLP-14-0105

Girolametto, L., & Weitzman, E. (2002). Responsiveness of child care providers in interaction with toddlers and preschoolers. *Language, Speech, and Hearing Services in Schools, 33*(4), 268–281. [https://doi.org/10.1044/0161-1461\(2002/022\)](https://doi.org/10.1044/0161-1461(2002/022))

1.46 Attention to how words work together in sentences, without formal terminology

Ambridge, B., Theakston, A. L., Lieven, E. V. M., & Tomasello, M. (2006). The distributed learning effect for children’s acquisition of an abstract syntactic construction. *Cognitive Development, 21*(2), 174–193. <https://doi.org/10.1016/j.cogdev.2005.09.003>

Huttenlocher, J., Vasilyeva, M., Cymerman, E., & Levine, S. (2002). Language input and child syntax. *Cognitive Psychology, 45*(3), 337–374. [https://doi.org/10.1016/S0010-0285\(02\)00500-5](https://doi.org/10.1016/S0010-0285(02)00500-5)

Justice, L. M., & Kaderavek, J. N. (2004). Embedded–explicit emergent literacy intervention I: Background and description of approach. *Language, Speech, and Hearing Services in Schools*, 35(3), 201–211.
[https://doi.org/10.1044/0161-1461\(2004/020\)](https://doi.org/10.1044/0161-1461(2004/020))

1.47 Exposure to a range of sentence structures through oral language experiences

Ambridge, B., Theakston, A. L., Lieven, E. V. M., & Tomasello, M. (2006). The distributed learning effect for children’s acquisition of an abstract syntactic construction. *Cognitive Development*, 21(2), 174–193.
<https://doi.org/10.1016/j.cogdev.2005.09.003>

Dickinson, D. K., & Tabors, P. O. (Eds.). (2001). *Beginning literacy with language: Young children learning at home and school*. Paul H. Brookes.

Huttenlocher, J., Waterfall, H., Vasilyeva, M., Vevea, J., & Hedges, L. V. (2010). Sources of variability in children’s language growth. *Cognitive Psychology*, 61(4), 343–365. <https://doi.org/10.1016/j.cogpsych.2010.08.002>

1.48 Sufficient time for guided discussion with modeling of complete ideas

Cabell, S. Q., Justice, L. M., McGinty, A. S., DeCoster, J., & Forston, L. D. (2015). Teacher–child conversations in preschool classrooms: Contributions to children’s vocabulary development. *Early Childhood Research Quarterly*, 30, 80–92.
<https://doi.org/10.1016/j.ecresq.2014.09.004>

Whorral, J., & Cabell, S. Q. (2016). Supporting children’s oral language development in the preschool classroom. *Early Childhood Education Journal*, 44(4), 335–341. <https://doi.org/10.1007/s10643-015-0719-0>

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<https://doi.org/10.1016/j.ecresq.2009.07.001>

1.49 Children notice differences between conversational and book language

Curenton, S. M., & Justice, L. M. (2004). African American and Caucasian preschoolers’ use of decontextualized language: Literate language features in oral narratives. *Language, Speech, and Hearing Services in Schools*, 35(3), 240–253.
[https://doi.org/10.1044/0161-1461\(2004/023\)](https://doi.org/10.1044/0161-1461(2004/023))

Dickinson, D. K., & Tabors, P. O. (Eds.). (2001). *Beginning literacy with language: Young children learning at home and school*. Paul H. Brookes.

Snow, C. E. (1983). Literacy and language: Relationships during the preschool years. *Harvard Educational Review*, 53(2), 165–189.

1.50 Intentional support for complex sentence structures, conjunctions, and connectors

Cleave, P. L., Becker, S. D., Curran, M. K., Owen Van Horne, A. J., & Fey, M. E. (2015). The efficacy of recasts in language intervention: A systematic review and meta-analysis. *American Journal of Speech-Language Pathology*, 24(2), 237–255. https://doi.org/10.1044/2015_AJSLP-14-0105

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Curran, M., & Owen Van Horne, A. (2019). Use of recast intervention to teach causal adverbials to young children with developmental language disorder within a science curriculum: A single case design study. *American Journal of Speech-Language Pathology*, 28(2), 430–447. https://doi.org/10.1044/2018_AJSLP-17-0164

1.51 Asset-based approach for multilingual learners and speakers of English language variations

Buysse, V., Peisner-Feinberg, E., Páez, M., Hammer, C. S., & Knowles, M. (2014). Effects of early education programs and practices on the development and learning of dual language learners: A review of the literature. *Early Childhood Research Quarterly*, 29(4), 765–785. <https://doi.org/10.1016/j.ecresq.2014.05.008>

Charity Hudley, A. H., & Mallinson, C. (2011). *Understanding English language variation in U.S. schools*. Teachers College Press.

Larson, A. L., Cycyk, L. M., Carta, J. J., Hammer, C. S., Baralt, M., Uchikoshi, Y., An, Z. G., & Wood, C. (2020). A systematic review of language-focused interventions for young children from culturally and linguistically diverse backgrounds. *Early Childhood Research Quarterly*, 50, 157–178. <https://doi.org/10.1016/j.ecresq.2019.06.001>

National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the educational success of children and youth learning English: Promising futures*. The National Academies Press. <https://doi.org/10.17226/24677>

Wolfram, W., & Schilling, N. (2016). *American English: Dialects and variation* (3rd ed.). Wiley-Blackwell.

Discourse (Narrative and Informational)

1.52 No intentional support for extended narratives or explanations

Griffin, T. M., Hemphill, L., Camp, L., & Wolf, D. P. (2004). Oral discourse in the preschool years and later literacy skills. *First Language*, 24(2), 123–147. <https://doi.org/10.1177/0142723704042369>

Pesco, D., & Gagné, A. (2017). Scaffolding narrative skills: A meta-analysis of instruction in early childhood settings. *Early Education and Development*, 28(7), 773–793. <https://doi.org/10.1080/10409289.2015.1060800>

Spencer, T. D., & Petersen, D. B. (2020). Narrative intervention: Principles to practice. *Language, Speech, and Hearing Services in Schools*, 51(4), 1081–1096. https://doi.org/10.1044/2020_LSHSS-20-00015

Weddle, S. A., Spencer, T. D., Kajian, M., & Petersen, D. B. (2016). An examination of a multi-tiered system of language support for culturally and linguistically diverse preschoolers: Implications for early and accurate identification. *School Psychology Review*, 45(1), 109–131. <https://doi.org/10.17105/SPR45-1.109-132>

1.53 Organizational structures of narratives not taught

Pesco, D., & Gagné, A. (2017). Scaffolding narrative skills: A meta-analysis of instruction in early childhood settings. *Early Education and Development*, 28(7), 773–793. <https://doi.org/10.1080/10409289.2015.1060800>

Spencer, T. D., & Petersen, D. B. (2020). Narrative intervention: Principles to practice. *Language, Speech, and Hearing Services in Schools*, 51(4), 1081–1096. https://doi.org/10.1044/2020_LSHSS-20-00015

Spencer, T. D., Petersen, D. B., & Adams, J. L. (2015). Tier 2 language intervention for diverse preschoolers: An early-stage randomized control group study following an analysis of response to intervention. *American Journal of Speech-Language Pathology*, 24(4), 619–636. https://doi.org/10.1044/2015_AJSLP-14-0101

Spencer, T. D., Petersen, D. B., Slocum, T. A., & Allen, M. M. (2015). Large group narrative intervention in Head Start preschools: Implications for response to intervention. *Journal of Early Childhood Research*, 13(2), 196–217. <https://doi.org/10.1177/1476718X13515419>

Weddle, S. A., Spencer, T. D., Kajian, M., & Petersen, D. B. (2016). An examination of a multi-tiered system of language support for culturally and linguistically diverse preschoolers: Implications for early and accurate identification. *School Psychology Review*, 45(1), 109–131. <https://doi.org/10.17105/SPR45-1.109-132>

1.54 Narrative and informational language not differentiated

Pentimonti, J. M., Zucker, T. A., & Justice, L. M. (2011). What are preschool teachers reading in their classrooms? *Reading Psychology*, 32(3), 197–236. <https://doi.org/10.1080/02702711003604484>

Pentimonti, J. M., Zucker, T. A., Justice, L. M., & Kaderavek, J. N. (2010). Informational text use in preschool classroom read-alouds. *The Reading Teacher*, 63(8), 656–665. <https://doi.org/10.1598/RT.63.8.4>

Price, L. H., Bradley, B. A., & Smith, J. M. (2012). A comparison of preschool teachers' talk during storybook and information book read-alouds. *Early Childhood Research Quarterly*, 27(3), 426–440. <https://doi.org/10.1016/j.ecresq.2012.02.003>

1.55 Limited opportunities to tell, retell, and explain

Curenton, S. M., & Justice, L. M. (2004). African American and Caucasian preschoolers' use of decontextualized language: Literate language features in oral narratives. *Language, Speech, and Hearing Services in Schools*, 35(3), 240–253. [https://doi.org/10.1044/0161-1461\(2004/023\)](https://doi.org/10.1044/0161-1461(2004/023))

Fivush, R., Haden, C. A., & Reese, E. (2006). Elaborating on elaborations: Role of maternal reminiscing style in cognitive and socioemotional development. *Child Development*, 77(6), 1568–1588. <https://doi.org/10.1111/j.1467-8624.2006.00960.x>

Reese, E., Leyva, D., Sparks, A., & Grolnick, W. (2010). Maternal elaborative reminiscing increases low-income children's narrative skills relative to dialogic reading. *Early Education and Development*, 21(3), 318–342. <https://doi.org/10.1080/10409289.2010.481552>

Spencer, T. D., & Petersen, D. B. (2020). Narrative intervention: Principles to practice. *Language, Speech, and Hearing Services in Schools*, 51(4), 1081–1096. https://doi.org/10.1044/2020_LSHSS-20-00015

Spencer, T. D., Weddle, S. A., Petersen, D. B., & Adams, J. A. (2017). Multi-tiered narrative intervention for preschoolers: A Head Start implementation study. *NHSA Dialog*, 20(1), 1–28. <https://doi.org/10.55370/hsdialog.v20i1.543>

Weddle, S. A., Spencer, T. D., Kajian, M., & Petersen, D. B. (2016). An examination of a multi-tiered system of language support for culturally and linguistically diverse preschoolers: Implications for early and accurate identification. *School Psychology Review*, 45(1), 109–131. <https://doi.org/10.17105/SPR45-1.109-132>

1.56 Intentional support for extended narratives and explanations

Griffin, T. M., Hemphill, L., Camp, L., & Wolf, D. P. (2004). Oral discourse in the preschool years and later literacy skills. *First Language*, 24(2), 123–147. <https://doi.org/10.1177/0142723704042369>

Pesco, D., & Gagné, A. (2017). Scaffolding narrative skills: A meta-analysis of instruction in early childhood settings. *Early Education and Development*, 28(7), 773–793. <https://doi.org/10.1080/10409289.2015.1060800>

Spencer, T. D., & Petersen, D. B. (2020). Narrative intervention: Principles to practice. *Language, Speech, and Hearing Services in Schools*, 51(4), 1081–1096. https://doi.org/10.1044/2020_LSHSS-20-00015

Spencer, T. D., Weddle, S. A., Petersen, D. B., & Adams, J. A. (2017). Multi-tiered narrative intervention for preschoolers: A Head Start implementation study. *NHSA Dialog*, 20(1), 1–28. <https://doi.org/10.55370/hsdialog.v20i1.543>

Weddle, S. A., Spencer, T. D., Kajian, M., & Petersen, D. B. (2016). An examination of a multi-tiered system of language support for culturally and linguistically diverse preschoolers: Implications for early and accurate identification. *School Psychology Review*, 45(1), 109–131. <https://doi.org/10.17105/SPR45-1.109-132>

1.57 Narrative organizational structures explicitly taught

Pesco, D., & Gagné, A. (2017). Scaffolding narrative skills: A meta-analysis of instruction in early childhood settings. *Early Education and Development*, 28(7), 773–793. <https://doi.org/10.1080/10409289.2015.1060800>

Spencer, T. D., & Petersen, D. B. (2020). Narrative intervention: Principles to practice. *Language, Speech, and Hearing Services in Schools*, 51(4), 1081–1096. https://doi.org/10.1044/2020_LSHSS-20-00015

Spencer, T. D., Petersen, D. B., & Adams, J. L. (2015). Tier 2 language intervention for diverse preschoolers: An early-stage randomized control group study following an analysis of response to intervention. *American Journal of Speech-Language Pathology*, 24(4), 619–636. https://doi.org/10.1044/2015_AJSLP-14-0101

Spencer, T. D., Petersen, D. B., Slocum, T. A., & Allen, M. M. (2015). Large group narrative intervention in Head Start preschools: Implications for response to intervention. *Journal of Early Childhood Research*, 13(2), 196–217. <https://doi.org/10.1177/1476718X13515419>

Weddle, S. A., Spencer, T. D., Kajian, M., & Petersen, D. B. (2016). An examination of a multi-tiered system of language support for culturally and linguistically diverse preschoolers: Implications for early and accurate identification. *School Psychology Review*, 45(1), 109–131. <https://doi.org/10.17105/SPR45-1.109-132>

1.58 Children learn that information is organized by purpose

Neuman, S. B., Kaefer, T., & Pinkham, A. M. (2016). Improving low-income preschoolers' word and world knowledge: The effects of content-rich instruction. *The Elementary School Journal*, 116(4), 652–674. <https://doi.org/10.1086/686463>

Pentimonti, J. M., Zucker, T. A., & Justice, L. M. (2011). What are preschool teachers reading in their classrooms? *Reading Psychology*, 32(3), 197–236. <https://doi.org/10.1080/02702711003604484>

Pentimonti, J. M., Zucker, T. A., Justice, L. M., & Kaderavek, J. N. (2010). Informational text use in preschool classroom read-alouds. *The Reading Teacher*, 63(8), 656–665. <https://doi.org/10.1598/RT.63.8.4>

Price, L. H., Bradley, B. A., & Smith, J. M. (2012). A comparison of preschool teachers' talk during storybook and information book read-alouds. *Early Childhood Research Quarterly*, 27(3), 426–440. <https://doi.org/10.1016/j.ecresq.2012.02.003>

1.59 Frequent opportunities to produce extended discourse

Curenton, S. M., & Justice, L. M. (2004). African American and Caucasian preschoolers' use of decontextualized language: Literate language features in oral narratives. *Language, Speech, and Hearing Services in Schools*, 35(3), 240–253. [https://doi.org/10.1044/0161-1461\(2004/023\)](https://doi.org/10.1044/0161-1461(2004/023))

Fivush, R., Haden, C. A., & Reese, E. (2006). Elaborating on elaborations: Role of maternal reminiscing style in cognitive and socioemotional development. *Child Development*, 77(6), 1568–1588. <https://doi.org/10.1111/j.1467-8624.2006.00960.x>

Reese, E., Leyva, D., Sparks, A., & Grolnick, W. (2010). Maternal elaborative reminiscing increases low-income children's narrative skills relative to dialogic reading. *Early Education and Development*, 21(3), 318–342. <https://doi.org/10.1080/10409289.2010.481552>

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Spencer, T. D., Petersen, D. B., Slocum, T. A., & Allen, M. M. (2015). Large group narrative intervention in Head Start preschools: Implications for response to intervention. *Journal of Early Childhood Research*, 13(2), 196–217. <https://doi.org/10.1177/1476718X13515419>

Verbal Reasoning

1.60 No modeling of inferential reasoning

van Kleeck, A. (2008). Providing preschool foundations for later reading comprehension: The importance of and ideas for targeting inferencing in storybook-sharing interventions. *Psychology in the Schools*, 45(7), 627–643. <https://doi.org/10.1002/pits.20314>

Zucker, T. A., Cabell, S. Q., Justice, L. M., Pentimonti, J. M., & Kaderavek, J. N. (2013). The role of frequent, interactive prekindergarten shared reading in the longitudinal development of language and literacy skills. *Developmental Psychology*, 49(8), 1425–1439. <https://doi.org/10.1037/a0030347>

Zucker, T. A., Justice, L. M., Piasta, S. B., & Kaderavek, J. N. (2010). Preschool teachers' literal and inferential questions and children's responses during whole-class shared reading. *Early Childhood Research Quarterly*, 25(1), 65–83. <https://doi.org/10.1016/j.ecresq.2009.07.001>

1.61 Few opportunities to practice inferential reasoning

van Kleeck, A. (2008). Providing preschool foundations for later reading comprehension: The importance of and ideas for targeting inferencing in storybook-sharing interventions. *Psychology in the Schools*, 45(7), 627–643. <https://doi.org/10.1002/pits.20314>

Vlach, H. A., Sandhofer, C. M., & Kornell, N. (2008). The spacing effect in children's memory and category induction. *Cognition*, 109(1), 163–167. <https://doi.org/10.1016/j.cognition.2008.07.013>

Zucker, T. A., Cabell, S. Q., Justice, L. M., Pentimonti, J. M., & Kaderavek, J. N. (2013). The role of frequent, interactive prekindergarten shared reading in the longitudinal development of language and literacy skills. *Developmental Psychology*, 49(8), 1425–1439. <https://doi.org/10.1037/a0030347>

1.62 No support for relational language

Curenton, S. M., & Justice, L. M. (2004). African American and Caucasian preschoolers' use of decontextualized language: Literate language features in oral narratives. *Language, Speech, and Hearing Services in Schools, 35*(3), 240–253.

[https://doi.org/10.1044/0161-1461\(2004/023\)](https://doi.org/10.1044/0161-1461(2004/023))

Curran, M., & Owen Van Horne, A. (2019). Use of recast intervention to teach causal adverbials to young children with developmental language disorder within a science curriculum: A single case design study. *American Journal of Speech-Language Pathology, 28*(2), 430–447. https://doi.org/10.1044/2018_AJSLP-17-0164

Grazzani Gavazzi, I., & Ornaghi, V. (2011). Emotional state talk and emotion understanding: A training study with preschool children. *Journal of Child Language, 38*(5), 1124–1139. <https://doi.org/10.1017/S0305000910000772>

Ornaghi, V., Grazzani, I., Cherubin, E., Conte, E., & Piralli, F. (2015). "Let's talk about emotions!" The effect of conversational training on preschoolers' emotion comprehension and prosocial orientation. *Social Development, 24*(1), 166–183.

<https://doi.org/10.1111/sode.12091>

1.63 Questions stay at a low level of abstraction

van Kleeck, A. (2008). Providing preschool foundations for later reading comprehension: The importance of and ideas for targeting inferencing in storybook-sharing interventions. *Psychology in the Schools, 45*(7), 627–643.

<https://doi.org/10.1002/pits.20314>

Zucker, T. A., Cabell, S. Q., Justice, L. M., Pentimonti, J. M., & Kaderavek, J. N. (2013). The role of frequent, interactive prekindergarten shared reading in the longitudinal development of language and literacy skills. *Developmental Psychology, 49*(8), 1425–1439. <https://doi.org/10.1037/a0030347>

Zucker, T. A., Justice, L. M., Piasta, S. B., & Kaderavek, J. N. (2010). Preschool teachers' literal and inferential questions and children's responses during whole-class shared reading. *Early Childhood Research Quarterly, 25*(1), 65–83.

<https://doi.org/10.1016/j.ecresq.2009.07.001>

1.64 Inferential reasoning explicitly modeled

van Kleeck, A. (2008). Providing preschool foundations for later reading comprehension: The importance of and ideas for targeting inferencing in storybook-sharing interventions. *Psychology in the Schools, 45*(7), 627–643.

<https://doi.org/10.1002/pits.20314>

Zucker, T. A., Cabell, S. Q., Justice, L. M., Pentimonti, J. M., & Kaderavek, J. N. (2013). The role of frequent, interactive prekindergarten shared reading in the longitudinal development of language and literacy skills. *Developmental Psychology*, 49(8), 1425–1439. <https://doi.org/10.1037/a0030347>

Zucker, T. A., Justice, L. M., Piasta, S. B., & Kaderavek, J. N. (2010). Preschool teachers' literal and inferential questions and children's responses during whole-class shared reading. *Early Childhood Research Quarterly*, 25(1), 65–83. <https://doi.org/10.1016/j.ecresq.2009.07.001>

1.65 Frequent, distributed opportunities to practice inferential reasoning

van_Kleeck, A. (2008). Providing preschool foundations for later reading comprehension: The importance of and ideas for targeting inferencing in storybook-sharing interventions. *Psychology in the Schools*, 45(7), 627–643. <https://doi.org/10.1002/pits.20314>

Vlach, H. A., Sandhofer, C. M., & Kornell, N. (2008). The spacing effect in children's memory and category induction. *Cognition*, 109(1), 163–167. <https://doi.org/10.1016/j.cognition.2008.07.013>

Zucker, T. A., Cabell, S. Q., Justice, L. M., Pentimonti, J. M., & Kaderavek, J. N. (2013). The role of frequent, interactive prekindergarten shared reading in the longitudinal development of language and literacy skills. *Developmental Psychology*, 49(8), 1425–1439. <https://doi.org/10.1037/a0030347>

1.66 Children interpret relational language during conversation and stories

Curenton, S. M., & Justice, L. M. (2004). African American and Caucasian preschoolers' use of decontextualized language: Literate language features in oral narratives. *Language, Speech, and Hearing Services in Schools*, 35(3), 240–253. [https://doi.org/10.1044/0161-1461\(2004/023\)](https://doi.org/10.1044/0161-1461(2004/023))

Curran, M., & Owen Van Horne, A. (2019). Use of recast intervention to teach causal adverbials to young children with developmental language disorder within a science curriculum: A single case design study. *American Journal of Speech-Language Pathology*, 28(2), 430–447. https://doi.org/10.1044/2018_AJSLP-17-0164

Grazzani Gavazzi, I., & Ornaghi, V. (2011). Emotional state talk and emotion understanding: A training study with preschool children. *Journal of Child Language*, 38(5), 1124–1139. <https://doi.org/10.1017/S0305000910000772>

Ornaghi, V., Grazzani, I., Cherubin, E., Conte, E., & Piralli, F. (2015). "Let's talk about emotions!" The effect of conversational training on preschoolers' emotion comprehension and prosocial orientation. *Social Development*, 24(1), 166–183. <https://doi.org/10.1111/sode.12091>

1.67 Guided questions and discussion beyond the immediately observable

van Kleeck, A. (2008). Providing preschool foundations for later reading comprehension: The importance of and ideas for targeting inferencing in storybook-sharing interventions. *Psychology in the Schools*, 45(7), 627–643. <https://doi.org/10.1002/pits.20314>

Zucker, T. A., Cabell, S. Q., Justice, L. M., Pentimonti, J. M., & Kaderavek, J. N. (2013). The role of frequent, interactive prekindergarten shared reading in the longitudinal development of language and literacy skills. *Developmental Psychology*, 49(8), 1425–1439. <https://doi.org/10.1037/a0030347>

Zucker, T. A., Justice, L. M., Piasta, S. B., & Kaderavek, J. N. (2010). Preschool teachers' literal and inferential questions and children's responses during whole-class shared reading. *Early Childhood Research Quarterly*, 25(1), 65–83. <https://doi.org/10.1016/j.ecresq.2009.07.001>

Knowledge

1.68 Narrowly focused or simplistic content

Neuman, S. B., & Kaefer, T. (2025). Knowledge-building through categorization: Boosting children's vocabulary and content knowledge in a shared book reading program. *Early Education and Development*. Advance online publication. <https://doi.org/10.1080/10409289.2025.2493016>

Neuman, S. B., Kaefer, T., & Pinkham, A. M. (2016). Improving low-income preschoolers' word and world knowledge: The effects of content-rich instruction. *The Elementary School Journal*, 116(4), 652–674. <https://doi.org/10.1086/686463>

Pentimonti, J. M., Zucker, T. A., & Justice, L. M. (2011). What are preschool teachers reading in their classrooms? *Reading Psychology*, 32(3), 197–236. <https://doi.org/10.1080/02702711003604484>

Pentimonti, J. M., Zucker, T. A., Justice, L. M., & Kaderavek, J. N. (2010). Informational text use in preschool classroom read-alouds. *The Reading Teacher*, 63(8), 656–665. <https://doi.org/10.1598/RT.63.8.4>

Price, L. H., Bradley, B. A., & Smith, J. M. (2012). A comparison of preschool teachers' talk during storybook and information book read-alouds. *Early Childhood Research Quarterly*, 27(3), 426–440. <https://doi.org/10.1016/j.ecresq.2012.02.003>

1.69 Children's existing knowledge is not elicited or built upon

Kaefer, T. (2018). The role of topic-related background knowledge in visual attention to illustration and children's word learning during shared book reading. *Journal of Research in Reading*, 41(3), 582–596. <https://doi.org/10.1111/1467-9817.12127>

Kaefer, T., Neuman, S. B., & Pinkham, A. M. (2015). Pre-existing background knowledge influences socioeconomic differences in preschoolers' word learning and comprehension. *Reading Psychology*, 36(3), 203–231. <https://doi.org/10.1080/02702711.2013.843064>

Neuman, S. B., & Danielson, K. (2021). Enacting content-rich curriculum in early childhood: The role of teacher knowledge and pedagogy. *Early Education and Development*, 32(3), 443–458. <https://doi.org/10.1080/10409289.2020.1753463>

1.70 Language experiences isolated or fragmented, with limited revisiting

Bierman, K. L., Domitrovich, C. E., Nix, R. L., Gest, S. D., Welsh, J. A., Greenberg, M. T., Blair, C., Nelson, K. E., & Gill, S. (2008). Promoting academic and social-emotional school readiness: The Head Start REDI program. *Child Development*, 79(6), 1802–1817. <https://doi.org/10.1111/j.1467-8624.2008.01227.x>

Neuman, S. B., & Kaefer, T. (2025). Knowledge-building through categorization: Boosting children's vocabulary and content knowledge in a shared book reading program. *Early Education and Development*. Advance online publication. <https://doi.org/10.1080/10409289.2025.2493016>

Vlach, H. A., Sandhofer, C. M., & Kornell, N. (2008). The spacing effect in children's memory and category induction. *Cognition*, 109(1), 163–167. <https://doi.org/10.1016/j.cognition.2008.07.013>

1.71 Knowledge building confined to a narrow set of activities

Cabell, S. Q., Justice, L. M., McGinty, A. S., DeCoster, J., & Forston, L. D. (2015). Teacher–child conversations in preschool classrooms: Contributions to children's vocabulary development. *Early Childhood Research Quarterly*, 30, 80–92. <https://doi.org/10.1016/j.ecresq.2014.09.004>

Gerde, H. K., Bingham, G. E., & Wasik, B. A. (2012). Writing in early childhood classrooms: Guidance for best practices. *Early Childhood Education Journal*, 40(6), 351–359. <https://doi.org/10.1007/s10643-012-0531-z>

Puranik, C. S., & Lonigan, C. J. (2011). From scribbles to scrabble: Preschool children's developing knowledge of written language. *Reading and Writing*, 24(5), 567–589. <https://doi.org/10.1007/s11145-009-9220-8>

1.72 No oral language instruction in content concepts and vocabulary

Eising, M., & Karasinski, C. (2022). Developmental kindergarten classroom intervention for spatial relational terms. *CoDAS*, 34(4), Article e20210176. <https://doi.org/10.1590/2317-1782/20212021176>

Greenfield, D. B., Jirout, J., Dominguez, X., Greenberg, A., Maier, M., & Fuccillo, J. (2009). Science in the preschool classroom: A programmatic research agenda to improve science readiness. *Early Education and Development*, 20(2), 238–264. <https://doi.org/10.1080/10409280802595441>

Neuman, S. B., Newman, E. H., & Dwyer, J. (2011). Educational effects of a vocabulary intervention on preschoolers' word knowledge and conceptual development: A cluster-randomized trial. *Reading Research Quarterly*, 46(3), 249–272. <https://doi.org/10.1598/RRQ.46.3.3>

1.73 No support for multilingual learners in building knowledge

Buysse, V., Peisner-Feinberg, E., Páez, M., Hammer, C. S., & Knowles, M. (2014). Effects of early education programs and practices on the development and learning of dual language learners: A review of the literature. *Early Childhood Research Quarterly*, 29(4), 765–785. <https://doi.org/10.1016/j.ecresq.2014.05.008>

Castro, D. C., Páez, M. M., Dickinson, D. K., & Frede, E. (2011). Promoting language and literacy in young dual language learners: Research, practice, and policy. *Child Development Perspectives*, 5(1), 15–21. <https://doi.org/10.1111/j.1750-8606.2010.00142.x>

Larson, A. L., Cycyk, L. M., Carta, J. J., Hammer, C. S., Baralt, M., Uchikoshi, Y., An, Z. G., & Wood, C. (2020). A systematic review of language-focused interventions for young children from culturally and linguistically diverse backgrounds. *Early Childhood Research Quarterly*, 50, 157–178. <https://doi.org/10.1016/j.ecresq.2019.06.001>

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1.74 Rich oral language experiences across narrative and informational content

- Cabell, S. Q., Kim, J. S., White, T. G., Gale, C. J., Edwards, A. A., Hwang, H., Petscher, Y., & Raines, R. M. (2025). Impact of a content-rich literacy curriculum on kindergarteners' vocabulary, listening comprehension, and content knowledge. *Journal of Educational Psychology*, 117(2), 153–175. <https://doi.org/10.1037/edu0000916>
- Neuman, S. B., & Kaefer, T. (2025). Knowledge-building through categorization: Boosting children's vocabulary and content knowledge in a shared book reading program. *Early Education and Development*. Advance online publication. <https://doi.org/10.1080/10409289.2025.2493016>
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- Price, L. H., Bradley, B. A., & Smith, J. M. (2012). A comparison of preschool teachers' talk during storybook and information book read-alouds. *Early Childhood Research Quarterly*, 27(3), 426–440. <https://doi.org/10.1016/j.ecresq.2012.02.003>

1.75 Intentional, planned science learning as a context for language and knowledge

- Greenfield, D. B., Jirout, J., Dominguez, X., Greenberg, A., Maier, M., & Fuccillo, J. (2009). Science in the preschool classroom: A programmatic research agenda to improve science readiness. *Early Education and Development*, 20(2), 238–264. <https://doi.org/10.1080/10409280802595441>
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- Neuman, S. B., Kaefer, T., & Pinkham, A. M. (2016). Improving low-income preschoolers' word and world knowledge: The effects of content-rich instruction. *The Elementary School Journal*, 116(4), 652–674. <https://doi.org/10.1086/686463>

1.76 Coherent, connected language experiences that revisit concepts over time

- Bierman, K. L., Domitrovich, C. E., Nix, R. L., Gest, S. D., Welsh, J. A., Greenberg, M. T., Blair, C., Nelson, K. E., & Gill, S. (2008). Promoting academic and social-emotional school readiness: The Head Start REDI program. *Child Development*, 79(6), 1802–1817. <https://doi.org/10.1111/j.1467-8624.2008.01227.x>
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1.77 Existing knowledge intentionally bridged to new knowledge

- Cabell, S. Q., Justice, L. M., McGinty, A. S., DeCoster, J., & Forston, L. D. (2015). Teacher–child conversations in preschool classrooms: Contributions to children’s vocabulary development. *Early Childhood Research Quarterly*, 30, 80–92. <https://doi.org/10.1016/j.ecresq.2014.09.004>
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1.78 Content concepts and vocabulary explicitly taught

- Eising, M., & Karasinski, C. (2022). Developmental kindergarten classroom intervention for spatial relational terms. *CoDAS*, 34(4), Article e20210176. <https://doi.org/10.1590/2317-1782/20212021176>

Greenfield, D. B., Jirout, J., Dominguez, X., Greenberg, A., Maier, M., & Fuccillo, J. (2009). Science in the preschool classroom: A programmatic research agenda to improve science readiness. *Early Education and Development, 20*(2), 238–264. <https://doi.org/10.1080/10409280802595441>

Neuman, S. B., Newman, E. H., & Dwyer, J. (2011). Educational effects of a vocabulary intervention on preschoolers' word knowledge and conceptual development: A cluster-randomized trial. *Reading Research Quarterly, 46*(3), 249–272. <https://doi.org/10.1598/RRQ.46.3.3>

1.79 Instruction builds on home language and experience for multilingual learners

Buysse, V., Peisner-Feinberg, E., Páez, M., Hammer, C. S., & Knowles, M. (2014). Effects of early education programs and practices on the development and learning of dual language learners: A review of the literature. *Early Childhood Research Quarterly, 29*(4), 765–785. <https://doi.org/10.1016/j.ecresq.2014.05.008>

Castro, D. C., Páez, M. M., Dickinson, D. K., & Frede, E. (2011). Promoting language and literacy in young dual language learners: Research, practice, and policy. *Child Development Perspectives, 5*(1), 15–21. <https://doi.org/10.1111/j.1750-8606.2010.00142.x>

Larson, A. L., Cycyk, L. M., Carta, J. J., Hammer, C. S., Baralt, M., Uchikoshi, Y., An, Z. G., & Wood, C. (2020). A systematic review of language-focused interventions for young children from culturally and linguistically diverse backgrounds. *Early Childhood Research Quarterly, 50*, 157–178. <https://doi.org/10.1016/j.ecresq.2019.06.001>

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SECTION 2: EARLY AND EMERGENT LITERACY

Alphabet Knowledge

2.1 Letter–sound relationships addressed only incidentally

Justice, L. M., Kaderavek, J. N., Fan, X., Sofka, A., & Hunt, A. (2009). Accelerating preschoolers' early literacy development through classroom-based teacher–child storybook reading and explicit print referencing. *Language, Speech, and Hearing Services in Schools, 40*(1), 67–85. [https://doi.org/10.1044/0161-1461\(2008/07-0098\)](https://doi.org/10.1044/0161-1461(2008/07-0098))

Piasta, S. B., & Wagner, R. K. (2010). Developing early literacy skills: A meta-analysis of alphabet learning and instruction. *Reading Research Quarterly*, 45(1), 8–38. <https://doi.org/10.1598/RRQ.45.1.2>

Roberts, T. A., Vadasy, P. F., & Sanders, E. A. (2020). Preschool instruction in letter names and sounds: Does contextualized or decontextualized instruction matter? *Reading Research Quarterly*, 55(4), 573–600. <https://doi.org/10.1002/rrq.284>

2.2 No planned progression for alphabetic knowledge

Justice, L. M., Pence, K., Bowles, R. B., & Wiggins, A. (2006). An investigation of four hypotheses concerning the order by which 4-year-old children learn the alphabet letters. *Early Childhood Research Quarterly*, 21(3), 374–389. <https://doi.org/10.1016/j.ecresq.2006.07.010>

National Early Literacy Panel. (2008). *Developing early literacy: Report of the National Early Literacy Panel*. National Institute for Literacy.

Piasta, S. B., & Wagner, R. K. (2010). Developing early literacy skills: A meta-analysis of alphabet learning and instruction. *Reading Research Quarterly*, 45(1), 8–38. <https://doi.org/10.1598/RRQ.45.1.2>

2.3 Letters or sounds introduced without a thoughtful progression

Justice, L. M., Pence, K., Bowles, R. B., & Wiggins, A. (2006). An investigation of four hypotheses concerning the order by which 4-year-old children learn the alphabet letters. *Early Childhood Research Quarterly*, 21(3), 374–389. <https://doi.org/10.1016/j.ecresq.2006.07.010>

Piasta, S. B., Petscher, Y., & Justice, L. M. (2012). How many letters should preschoolers in public programs know? The diagnostic efficiency of various preschool letter-naming benchmarks for predicting first-grade literacy achievement. *Journal of Educational Psychology*, 104(4), 945–958. <https://doi.org/10.1037/a0027757>

Twyman, J. S., & Hockman, A. (2021). You have the big idea, concept, and some examples . . . now what? *Behavior Analysis in Practice*, 14(3), 802–815. <https://doi.org/10.1007/s40617-021-00638-9>

2.4 Rate of introduction too slow to cover the alphabet with time for review

Jones, C. D., & Reutzel, D. R. (2012). Enhanced alphabet knowledge instruction: Exploring a change of frequency, focus, and distributed cycles of review. *Reading Psychology*, 33(5), 448–464. <https://doi.org/10.1080/02702711.2010.545260>

Piasta, S. B., Petscher, Y., & Justice, L. M. (2012). How many letters should preschoolers in public programs know? The diagnostic efficiency of various preschool letter-naming benchmarks for predicting first-grade literacy achievement. *Journal of Educational Psychology*, 104(4), 945–958. <https://doi.org/10.1037/a0027757>

2.5 Previously taught letters and sounds not revisited

Burns, M. K., Zaslofsky, A. F., Kanive, R., & Parker, D. C. (2012). Meta-analysis of incremental rehearsal using phi coefficients to compare single-case and group designs. *Journal of Behavioral Education*, 21(3), 185–202. <https://doi.org/10.1007/s10864-012-9160-2>

Cepeda, N. J., Pashler, H., Vul, E., Wixted, J. T., & Rohrer, D. (2006). Distributed practice in verbal recall tasks: A review and quantitative synthesis. *Psychological Bulletin*, 132(3), 354–380. <https://doi.org/10.1037/0033-2909.132.3.354>

Jones, C. D., & Reutzel, D. R. (2012). Enhanced alphabet knowledge instruction: Exploring a change of frequency, focus, and distributed cycles of review. *Reading Psychology*, 33(5), 448–464. <https://doi.org/10.1080/02702711.2010.545260>

Vlach, H. A., Sandhofer, C. M., & Kornell, N. (2008). The spacing effect in children's memory and category induction. *Cognition*, 109(1), 163–167. <https://doi.org/10.1016/j.cognition.2008.07.013>

2.6 Letter names taught without connection to letter sounds

Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading Research Quarterly*, 36(3), 250–287. <https://doi.org/10.1598/RRQ.36.3.2>

Piasta, S. B., Purpura, D. J., & Wagner, R. K. (2010). Fostering alphabet knowledge development: A comparison of two instructional approaches. *Reading and Writing*, 23(6), 607–626. <https://doi.org/10.1007/s11145-009-9174-x>

Piasta, S. B., & Wagner, R. K. (2010). Developing early literacy skills: A meta-analysis of alphabet learning and instruction. *Reading Research Quarterly*, 45(1), 8–38. <https://doi.org/10.1598/RRQ.45.1.2>

2.7 Letter names not connected to letter formation

James, K. H., & Engelhardt, L. (2012). The effects of handwriting experience on functional brain development in pre-literate children. *Trends in Neuroscience and Education*, 1(1), 32–42. <https://doi.org/10.1016/j.tine.2012.08.001>

Longcamp, M., Zerbato-Poudou, M.-T., & Velay, J.-L. (2005). The influence of writing practice on letter recognition in preschool children: A comparison between handwriting and typing. *Acta Psychologica*, 119(1), 67–79. <https://doi.org/10.1016/j.actpsy.2004.10.019>

Puranik, C. S., & Lonigan, C. J. (2011). From scribbles to scrabble: Preschool children's developing knowledge of written language. *Reading and Writing*, 24(5), 567–589. <https://doi.org/10.1007/s11145-009-9220-8>

2.8 Pictures used as a route to identifying written words

Ehri, L. C. (2014). Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning. *Scientific Studies of Reading*, 18(1), 5–21. <https://doi.org/10.1080/10888438.2013.819356>

Masonheimer, P. E., Drum, P. A., & Ehri, L. C. (1984). Does environmental print identification lead children into word reading? *Journal of Reading Behavior*, 16(4), 257–271. <https://doi.org/10.1080/10862968409547520>

2.9 Anchor words do not begin with the target sound in its clearest form

Twyman, J. S. (2021). The evidence is in the design. *Perspectives on Behavior Science*, 44(2–3), 195–223. <https://doi.org/10.1007/s40614-021-00309-8>

Twyman, J. S., & Hockman, A. (2021). You have the big idea, concept, and some examples . . . now what? *Behavior Analysis in Practice*, 14(3), 802–815. <https://doi.org/10.1007/s40617-021-00638-9>

2.10 Attention to letters and sounds limited to brief or peripheral activities

Justice, L. M., Kaderavek, J. N., Fan, X., Sofka, A., & Hunt, A. (2009). Accelerating preschoolers' early literacy development through classroom-based teacher–child storybook reading and explicit print referencing. *Language, Speech, and Hearing Services in Schools*, 40(1), 67–85. [https://doi.org/10.1044/0161-1461\(2008/07-0098\)](https://doi.org/10.1044/0161-1461(2008/07-0098))

Piasta, S. B., & Wagner, R. K. (2010). Developing early literacy skills: A meta-analysis of alphabet learning and instruction. *Reading Research Quarterly*, 45(1), 8–38. <https://doi.org/10.1598/RRQ.45.1.2>

Roberts, T. A., Vadasy, P. F., & Sanders, E. A. (2020). Preschool instruction in letter names and sounds: Does contextualized or decontextualized instruction matter? *Reading Research Quarterly*, 55(4), 573–600. <https://doi.org/10.1002/rrq.284>

2.11 Limited opportunities to attend to, compare, and talk about sounds and letters

Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading Research Quarterly*, 36(3), 250–287. <https://doi.org/10.1598/RRQ.36.3.2>

Piasta, S. B., & Wagner, R. K. (2010). Developing early literacy skills: A meta-analysis of alphabet learning and instruction. *Reading Research Quarterly*, 45(1), 8–38. <https://doi.org/10.1598/RRQ.45.1.2>

Twyman, J. S., & Hockman, A. (2021). You have the big idea, concept, and some examples . . . now what? *Behavior Analysis in Practice*, 14(3), 802–815. <https://doi.org/10.1007/s40617-021-00638-9>

2.12 Home-language sound systems assumed to map directly onto English

Goodrich, J. M., Lonigan, C. J., & Farver, J. M. (2013). Do early literacy skills in children's first language promote development of skills in their second language? An experimental evaluation of transfer. *Journal of Educational Psychology*, 105(2), 414–426. <https://doi.org/10.1037/a0031780>

Larson, A. L., Cycyk, L. M., Carta, J. J., Hammer, C. S., Baralt, M., Uchikoshi, Y., An, Z. G., & Wood, C. (2020). A systematic review of language-focused interventions for young children from culturally and linguistically diverse backgrounds. *Early Childhood Research Quarterly*, 50, 157–178. <https://doi.org/10.1016/j.ecresq.2019.06.001>

National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the educational success of children and youth learning English: Promising futures*. The National Academies Press. <https://doi.org/10.17226/24677>

2.13 No additional time and no explicit teaching of English sounds absent from the home language

Buysse, V., Peisner-Feinberg, E., Páez, M., Hammer, C. S., & Knowles, M. (2014). Effects of early education programs and practices on the development and learning of dual language learners: A review of the literature. *Early Childhood Research Quarterly*, 29(4), 765–785. <https://doi.org/10.1016/j.ecresq.2014.05.008>

Goodrich, J. M., Lonigan, C. J., & Farver, J. M. (2013). Do early literacy skills in children's first language promote development of skills in their second language? An experimental evaluation of transfer. *Journal of Educational Psychology*, 105(2), 414–426. <https://doi.org/10.1037/a0031780>

Larson, A. L., Ccyk, L. M., Carta, J. J., Hammer, C. S., Baralt, M., Uchikoshi, Y., An, Z. G., & Wood, C. (2020). A systematic review of language-focused interventions for young children from culturally and linguistically diverse backgrounds. *Early Childhood Research Quarterly*, 50, 157–178. <https://doi.org/10.1016/j.ecresq.2019.06.001>

National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the educational success of children and youth learning English: Promising futures*. The National Academies Press. <https://doi.org/10.17226/24677>

2.14 Instruction intentionally and explicitly teaches how print represents spoken language.

Justice, L. M., Kaderavek, J. N., Fan, X., Sofka, A., & Hunt, A. (2009). Accelerating preschoolers' early literacy development through classroom-based teacher–child storybook reading and explicit print referencing. *Language, Speech, and Hearing Services in Schools*, 40(1), 67–85. [https://doi.org/10.1044/0161-1461\(2008/07-0098\)](https://doi.org/10.1044/0161-1461(2008/07-0098))

Piasta, S. B., & Wagner, R. K. (2010). Developing early literacy skills: A meta-analysis of alphabet learning and instruction. *Reading Research Quarterly*, 45(1), 8–38. <https://doi.org/10.1598/RRQ.45.1.2>

Whitehurst, G. J., & Lonigan, C. J. (1998). Child development and emergent literacy. *Child Development*, 69(3), 848–872. <https://doi.org/10.1111/j.1467-8624.1998.tb06247.x>

2.15 Coherent progression of emergent literacy and language foundations

Anthony, J. L., Lonigan, C. J., Driscoll, K., Phillips, B. M., & Burgess, S. R. (2003). Phonological sensitivity: A quasi-parallel progression of word structure units and cognitive operations. *Reading Research Quarterly*, 38(4), 470–487. <https://doi.org/10.1598/RRQ.38.4.3>

National Early Literacy Panel. (2008). *Developing early literacy: Report of the National Early Literacy Panel*. National Institute for Literacy.

Piasta, S. B., & Wagner, R. K. (2010). Developing early literacy skills: A meta-analysis of alphabet learning and instruction. *Reading Research Quarterly*, 45(1), 8–38. <https://doi.org/10.1598/RRQ.45.1.2>

2.16 Coherent scope and sequence for letters, sounds, and print concepts

Justice, L. M., Pence, K., Bowles, R. B., & Wiggins, A. (2006). An investigation of four hypotheses concerning the order by which 4-year-old children learn the alphabet letters. *Early Childhood Research Quarterly*, 21(3), 374–389. <https://doi.org/10.1016/j.ecresq.2006.07.010>

Piasta, S. B., Petscher, Y., & Justice, L. M. (2012). How many letters should preschoolers in public programs know? The diagnostic efficiency of various preschool letter-naming benchmarks for predicting first-grade literacy achievement. *Journal of Educational Psychology*, 104(4), 945–958. <https://doi.org/10.1037/a0027757>

Piasta, S. B., & Wagner, R. K. (2010). Developing early literacy skills: A meta-analysis of alphabet learning and instruction. *Reading Research Quarterly*, 45(1), 8–38. <https://doi.org/10.1598/RRQ.45.1.2>

2.17 Cumulative, spaced, and distributed practice with letters and sounds

Burns, M. K., Zaslofsky, A. F., Kanive, R., & Parker, D. C. (2012). Meta-analysis of incremental rehearsal using phi coefficients to compare single-case and group designs. *Journal of Behavioral Education*, 21(3), 185–202. <https://doi.org/10.1007/s10864-012-9160-2>

Cepeda, N. J., Pashler, H., Vul, E., Wixted, J. T., & Rohrer, D. (2006). Distributed practice in verbal recall tasks: A review and quantitative synthesis. *Psychological Bulletin*, 132(3), 354–380. <https://doi.org/10.1037/0033-2909.132.3.354>

Jones, C. D., & Reutzel, D. R. (2012). Enhanced alphabet knowledge instruction: Exploring a change of frequency, focus, and distributed cycles of review. *Reading Psychology*, 33(5), 448–464. <https://doi.org/10.1080/02702711.2010.545260>

Vlach, H. A., Sandhofer, C. M., & Kornell, N. (2008). The spacing effect in children's memory and category induction. *Cognition*, 109(1), 163–167. <https://doi.org/10.1016/j.cognition.2008.07.013>

2.18 Anchor words begin with the target sound in its clearest form

Twyman, J. S. (2021). The evidence is in the design. *Perspectives on Behavior Science*, 44(2–3), 195–223. <https://doi.org/10.1007/s40614-021-00309-8>

Twyman, J. S., & Hockman, A. (2021). You have the big idea, concept, and some examples . . . now what? *Behavior Analysis in Practice*, 14(3), 802–815. <https://doi.org/10.1007/s40617-021-00638-9>

2.19 Alphabet knowledge connected to broader language and literacy instruction

Justice, L. M., Kaderavek, J. N., Fan, X., Sofka, A., & Hunt, A. (2009). Accelerating preschoolers' early literacy development through classroom-based teacher–child storybook reading and explicit print referencing. *Language, Speech, and Hearing Services in Schools*, 40(1), 67–85. [https://doi.org/10.1044/0161-1461\(2008/07-0098\)](https://doi.org/10.1044/0161-1461(2008/07-0098))

Roberts, T. A., Vadasy, P. F., & Sanders, E. A. (2020). Preschool instruction in letter names and sounds: Does contextualized or decontextualized instruction matter? *Reading Research Quarterly*, 55(4), 573–600. <https://doi.org/10.1002/rrq.284>

2.20 Pictures used as anchors linking letters to sounds, not to identify words

Ehri, L. C. (2014). Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning. *Scientific Studies of Reading*, 18(1), 5–21. <https://doi.org/10.1080/10888438.2013.819356>

Masonheimer, P. E., Drum, P. A., & Ehri, L. C. (1984). Does environmental print identification lead children into word reading? *Journal of Reading Behavior*, 16(4), 257–271. <https://doi.org/10.1080/10862968409547520>

2.21 Repeated opportunities to attend to, compare, and talk about sounds and letters

Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading Research Quarterly*, 36(3), 250–287. <https://doi.org/10.1598/RRQ.36.3.2>

Piasta, S. B., & Wagner, R. K. (2010). Developing early literacy skills: A meta-analysis of alphabet learning and instruction. *Reading Research Quarterly*, 45(1), 8–38. <https://doi.org/10.1598/RRQ.45.1.2>

Twyman, J. S., & Hockman, A. (2021). You have the big idea, concept, and some examples . . . now what? *Behavior Analysis in Practice*, 14(3), 802–815. <https://doi.org/10.1007/s40617-021-00638-9>

2.22 Materials address multiple characteristics of each letter

Boyer, N., & Ehri, L. C. (2011). Contribution of phonemic segmentation instruction with letters and articulation pictures to word reading and spelling in beginners. *Scientific Studies of Reading*, 15(5), 440–470. <https://doi.org/10.1080/10888438.2010.520778>

James, K. H., & Engelhardt, L. (2012). The effects of handwriting experience on functional brain development in pre-literate children. *Trends in Neuroscience and Education*, 1(1), 32–42. <https://doi.org/10.1016/j.tine.2012.08.001>

Longcamp, M., Zerbato-Poudou, M.-T., & Velay, J.-L. (2005). The influence of writing practice on letter recognition in preschool children: A comparison between handwriting and typing. *Acta Psychologica*, 119(1), 67–79. <https://doi.org/10.1016/j.actpsy.2004.10.019>

Piasta, S. B., Purpura, D. J., & Wagner, R. K. (2010). Fostering alphabet knowledge development: A comparison of two instructional approaches. *Reading and Writing*, 23(6), 607–626. <https://doi.org/10.1007/s11145-009-9174-x>

Twyman, J. S., & Hockman, A. (2021). You have the big idea, concept, and some examples . . . now what? *Behavior Analysis in Practice*, 14(3), 802–815. <https://doi.org/10.1007/s40617-021-00638-9>

2.23 Instruction accounts for differences between home-language and English sound systems

Goodrich, J. M., Lonigan, C. J., & Farver, J. M. (2013). Do early literacy skills in children's first language promote development of skills in their second language? An experimental evaluation of transfer. *Journal of Educational Psychology*, 105(2), 414–426. <https://doi.org/10.1037/a0031780>

Larson, A. L., Cysyk, L. M., Carta, J. J., Hammer, C. S., Baralt, M., Uchikoshi, Y., An, Z. G., & Wood, C. (2020). A systematic review of language-focused interventions for young children from culturally and linguistically diverse backgrounds. *Early Childhood Research Quarterly*, 50, 157–178. <https://doi.org/10.1016/j.ecresq.2019.06.001>

National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the educational success of children and youth learning English: Promising futures*. The National Academies Press. <https://doi.org/10.17226/24677>

2.24 Instruction gives multilingual learners additional time and explicitly teaches the sounds of English that are not part of the child's home language

Buysse, V., Peisner-Feinberg, E., Páez, M., Hammer, C. S., & Knowles, M. (2014). Effects of early education programs and practices on the development and learning of dual language learners: A review of the literature. *Early Childhood Research Quarterly*, 29(4), 765–785. <https://doi.org/10.1016/j.ecresq.2014.05.008>

Goodrich, J. M., Lonigan, C. J., & Farver, J. M. (2013). Do early literacy skills in children's first language promote development of skills in their second language? An experimental evaluation of transfer. *Journal of Educational Psychology*, 105(2), 414–426. <https://doi.org/10.1037/a0031780>

Larson, A. L., Cysyk, L. M., Carta, J. J., Hammer, C. S., Baralt, M., Uchikoshi, Y., An, Z. G., & Wood, C. (2020). A systematic review of language-focused interventions for young children from culturally and linguistically diverse backgrounds. *Early Childhood Research Quarterly*, 50, 157–178. <https://doi.org/10.1016/j.ecresq.2019.06.001>

National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the educational success of children and youth learning English: Promising futures*. The National Academies Press. <https://doi.org/10.17226/24677>

Phonological and Phoneme Awareness

2.25 Exclusive focus on letters or print with no attention to sound structure

Anthony, J. L., Lonigan, C. J., Driscoll, K., Phillips, B. M., & Burgess, S. R. (2003). Phonological sensitivity: A quasi-parallel progression of word structure units and cognitive operations. *Reading Research Quarterly*, 38(4), 470–487.
<https://doi.org/10.1598/RRQ.38.4.3>

National Early Literacy Panel. (2008). *Developing early literacy: Report of the National Early Literacy Panel*. National Institute for Literacy.

Phillips, B. M., Clancy-Menchetti, J., & Lonigan, C. J. (2008). Successful phonological awareness instruction with preschool children: Lessons from the classroom. *Topics in Early Childhood Special Education*, 28(1), 3–17.
<https://doi.org/10.1177/0271121407313813>

2.26 Phonological awareness appears only incidentally, with no planned sequence

Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading Research Quarterly*, 36(3), 250–287. <https://doi.org/10.1598/RRQ.36.3.2>

Phillips, B. M., Clancy-Menchetti, J., & Lonigan, C. J. (2008). Successful phonological awareness instruction with preschool children: Lessons from the classroom. *Topics in Early Childhood Special Education*, 28(1), 3–17.
<https://doi.org/10.1177/0271121407313813>

2.27 No instruction in the individual phonemes that letters represent

Boyer, N., & Ehri, L. C. (2011). Contribution of phonemic segmentation instruction with letters and articulation pictures to word reading and spelling in beginners. *Scientific Studies of Reading*, 15(5), 440–470.
<https://doi.org/10.1080/10888438.2010.520778>

Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading Research Quarterly*, 36(3), 250–287. <https://doi.org/10.1598/RRQ.36.3.2>

Piasta, S. B., & Wagner, R. K. (2010). Developing early literacy skills: A meta-analysis of alphabet learning and instruction. *Reading Research Quarterly*, 45(1), 8–38. <https://doi.org/10.1598/RRQ.45.1.2>

2.28 Letters emphasized without attention to the sounds of spoken language

Boyer, N., & Ehri, L. C. (2011). Contribution of phonemic segmentation instruction with letters and articulation pictures to word reading and spelling in beginners. *Scientific Studies of Reading*, 15(5), 440–470. <https://doi.org/10.1080/10888438.2010.520778>

Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading Research Quarterly*, 36(3), 250–287. <https://doi.org/10.1598/RRQ.36.3.2>

Roberts, T. A., Vadasy, P. F., & Sanders, E. A. (2020). Preschool instruction in letter names and sounds: Does contextualized or decontextualized instruction matter? *Reading Research Quarterly*, 55(4), 573–600. <https://doi.org/10.1002/rrq.284>

2.29 Phonological awareness not integrated with read-alouds or daily routines

Justice, L. M., Kaderavek, J. N., Fan, X., Sofka, A., & Hunt, A. (2009). Accelerating preschoolers' early literacy development through classroom-based teacher–child storybook reading and explicit print referencing. *Language, Speech, and Hearing Services in Schools*, 40(1), 67–85. [https://doi.org/10.1044/0161-1461\(2008/07-0098\)](https://doi.org/10.1044/0161-1461(2008/07-0098))

Phillips, B. M., Clancy-Menchetti, J., & Lonigan, C. J. (2008). Successful phonological awareness instruction with preschool children: Lessons from the classroom. *Topics in Early Childhood Special Education*, 28(1), 3–17. <https://doi.org/10.1177/0271121407313813>

Roberts, T. A., Vadasy, P. F., & Sanders, E. A. (2020). Preschool instruction in letter names and sounds: Does contextualized or decontextualized instruction matter? *Reading Research Quarterly*, 55(4), 573–600. <https://doi.org/10.1002/rrq.284>

2.30 Instruction does not match typical Pre–K expectations

Anthony, J. L., Lonigan, C. J., Driscoll, K., Phillips, B. M., & Burgess, S. R. (2003). Phonological sensitivity: A quasi-parallel progression of word structure units and cognitive operations. *Reading Research Quarterly*, 38(4), 470–487. <https://doi.org/10.1598/RRQ.38.4.3>

Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading Research Quarterly*, 36(3), 250–287. <https://doi.org/10.1598/RRQ.36.3.2>

National Early Literacy Panel. (2008). *Developing early literacy: Report of the National Early Literacy Panel*. National Institute for Literacy.

Roberts, T. A., Vadasy, P. F., & Sanders, E. A. (2020). Preschool instruction in letter names and sounds: Does contextualized or decontextualized instruction matter? *Reading Research Quarterly*, 55(4), 573–600. <https://doi.org/10.1002/rrq.284>

2.31 English phonological features not explicitly taught to multilingual learners

Goodrich, J. M., Lonigan, C. J., & Farver, J. M. (2013). Do early literacy skills in children's first language promote development of skills in their second language? An experimental evaluation of transfer. *Journal of Educational Psychology*, 105(2), 414–426. <https://doi.org/10.1037/a0031780>

Larson, A. L., Cysyk, L. M., Carta, J. J., Hammer, C. S., Baralt, M., Uchikoshi, Y., An, Z. G., & Wood, C. (2020). A systematic review of language-focused interventions for young children from culturally and linguistically diverse backgrounds. *Early Childhood Research Quarterly*, 50, 157–178. <https://doi.org/10.1016/j.ecresq.2019.06.001>

National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the educational success of children and youth learning English: Promising futures*. The National Academies Press. <https://doi.org/10.17226/24677>

2.32 Intentional support for word, syllable, rhyme, and onset–rime awareness

Anthony, J. L., Lonigan, C. J., Driscoll, K., Phillips, B. M., & Burgess, S. R. (2003). Phonological sensitivity: A quasi-parallel progression of word structure units and cognitive operations. *Reading Research Quarterly*, 38(4), 470–487. <https://doi.org/10.1598/RRQ.38.4.3>

National Early Literacy Panel. (2008). *Developing early literacy: Report of the National Early Literacy Panel*. National Institute for Literacy.

Phillips, B. M., Clancy-Menchetti, J., & Lonigan, C. J. (2008). Successful phonological awareness instruction with preschool children: Lessons from the classroom. *Topics in Early Childhood Special Education*, 28(1), 3–17. <https://doi.org/10.1177/0271121407313813>

2.33 Planned progression, with phonemes introduced alongside letters

Anthony, J. L., Lonigan, C. J., Driscoll, K., Phillips, B. M., & Burgess, S. R. (2003). Phonological sensitivity: A quasi-parallel progression of word structure units and cognitive operations. *Reading Research Quarterly*, 38(4), 470–487.

<https://doi.org/10.1598/RRQ.38.4.3>

Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading Research Quarterly*, 36(3), 250–287. <https://doi.org/10.1598/RRQ.36.3.2>

Phillips, B. M., Clancy-Menchetti, J., & Lonigan, C. J. (2008). Successful phonological awareness instruction with preschool children: Lessons from the classroom. *Topics in Early Childhood Special Education*, 28(1), 3–17.

<https://doi.org/10.1177/0271121407313813>

Roberts, T. A., Vadasy, P. F., & Sanders, E. A. (2020). Preschool instruction in letter names and sounds: Does contextualized or decontextualized instruction matter? *Reading Research Quarterly*, 55(4), 573–600. <https://doi.org/10.1002/rrq.284>

2.34 Repeated opportunities to listen to, produce, and compare sounds

Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading Research Quarterly*, 36(3), 250–287. <https://doi.org/10.1598/RRQ.36.3.2>

<https://doi.org/10.1598/RRQ.36.3.2>

Phillips, B. M., Clancy-Menchetti, J., & Lonigan, C. J. (2008). Successful phonological awareness instruction with preschool children: Lessons from the classroom. *Topics in Early Childhood Special Education*, 28(1), 3–17.

<https://doi.org/10.1177/0271121407313813>

Vlach, H. A., Sandhofer, C. M., & Kornell, N. (2008). The spacing effect in children's memory and category induction. *Cognition*, 109(1), 163–167. <https://doi.org/10.1016/j.cognition.2008.07.013>

2.35 Phonological awareness integrated into read-alouds and daily routines

Justice, L. M., Kaderavek, J. N., Fan, X., Sofka, A., & Hunt, A. (2009). Accelerating preschoolers' early literacy development through classroom-based teacher–child storybook reading and explicit print referencing. *Language, Speech, and Hearing Services in Schools*, 40(1), 67–85. [https://doi.org/10.1044/0161-1461\(2008/07-0098\)](https://doi.org/10.1044/0161-1461(2008/07-0098))

[https://doi.org/10.1044/0161-1461\(2008/07-0098\)](https://doi.org/10.1044/0161-1461(2008/07-0098))

Phillips, B. M., Clancy-Menchetti, J., & Lonigan, C. J. (2008). Successful phonological awareness instruction with preschool children: Lessons from the classroom. *Topics in Early Childhood Special Education*, 28(1), 3–17. <https://doi.org/10.1177/0271121407313813>

Roberts, T. A., Vadasy, P. F., & Sanders, E. A. (2020). Preschool instruction in letter names and sounds: Does contextualized or decontextualized instruction matter? *Reading Research Quarterly*, 55(4), 573–600. <https://doi.org/10.1002/rrq.284>

2.36 Coherent progression from broader sound awareness toward speech sounds and print

Anthony, J. L., Lonigan, C. J., Driscoll, K., Phillips, B. M., & Burgess, S. R. (2003). Phonological sensitivity: A quasi-parallel progression of word structure units and cognitive operations. *Reading Research Quarterly*, 38(4), 470–487. <https://doi.org/10.1598/RRQ.38.4.3>

Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel’s meta-analysis. *Reading Research Quarterly*, 36(3), 250–287. <https://doi.org/10.1598/RRQ.36.3.2>

National Early Literacy Panel. (2008). *Developing early literacy: Report of the National Early Literacy Panel*. National Institute for Literacy.

Phillips, B. M., Clancy-Menchetti, J., & Lonigan, C. J. (2008). Successful phonological awareness instruction with preschool children: Lessons from the classroom. *Topics in Early Childhood Special Education*, 28(1), 3–17. <https://doi.org/10.1177/0271121407313813>

2.37 Instruction provides additional time and explicitly teaches English phonology

Buyse, V., Peisner-Feinberg, E., Páez, M., Hammer, C. S., & Knowles, M. (2014). Effects of early education programs and practices on the development and learning of dual language learners: A review of the literature. *Early Childhood Research Quarterly*, 29(4), 765–785. <https://doi.org/10.1016/j.ecresq.2014.05.008>

Goodrich, J. M., Lonigan, C. J., & Farver, J. M. (2013). Do early literacy skills in children’s first language promote development of skills in their second language? An experimental evaluation of transfer. *Journal of Educational Psychology*, 105(2), 414–426. <https://doi.org/10.1037/a0031780>

Larson, A. L., Ccyk, L. M., Carta, J. J., Hammer, C. S., Baralt, M., Uchikoshi, Y., An, Z. G., & Wood, C. (2020). A systematic review of language-focused interventions for young children from culturally and linguistically diverse backgrounds. *Early Childhood Research Quarterly*, 50, 157–178. <https://doi.org/10.1016/j.ecresq.2019.06.001>

National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the educational success of children and youth learning English: Promising futures*. The National Academies Press. <https://doi.org/10.17226/24677>

Concepts of Print

2.38 Environmental print displayed without adult attention to the print within it

Masonheimer, P. E., Drum, P. A., & Ehri, L. C. (1984). Does environmental print identification lead children into word reading? *Journal of Reading Behavior*, 16(4), 257–271. <https://doi.org/10.1080/10862968409547520>

Neumann, M. M., Hood, M., Ford, R. M., & Neumann, D. L. (2012). The role of environmental print in emergent literacy. *Journal of Early Childhood Literacy*, 12(3), 231–258. <https://doi.org/10.1177/1468798411417080>

2.39 No attention to print referencing opportunities

Justice, L. M., Kaderavek, J. N., Fan, X., Sofka, A., & Hunt, A. (2009). Accelerating preschoolers' early literacy development through classroom-based teacher–child storybook reading and explicit print referencing. *Language, Speech, and Hearing Services in Schools*, 40(1), 67–85. [https://doi.org/10.1044/0161-1461\(2008/07-0098\)](https://doi.org/10.1044/0161-1461(2008/07-0098))

Whitehurst, G. J., & Lonigan, C. J. (1998). Child development and emergent literacy. *Child Development*, 69(3), 848–872. <https://doi.org/10.1111/j.1467-8624.1998.tb06247.x>

Zucker, T. A., Justice, L. M., & Piasta, S. B. (2009). Prekindergarten teachers' verbal references to print during classroom-based, large-group shared reading. *Language, Speech, and Hearing Services in Schools*, 40(4), 376–392. [https://doi.org/10.1044/0161-1461\(2009/08-0059\)](https://doi.org/10.1044/0161-1461(2009/08-0059))

2.40 Print referencing not extended to print conventions

Justice, L. M., Kaderavek, J. N., Fan, X., Sofka, A., & Hunt, A. (2009). Accelerating preschoolers' early literacy development through classroom-based teacher–child storybook reading and explicit print referencing. *Language, Speech, and Hearing Services in Schools*, 40(1), 67–85. [https://doi.org/10.1044/0161-1461\(2008/07-0098\)](https://doi.org/10.1044/0161-1461(2008/07-0098))

Storch, S. A., & Whitehurst, G. J. (2002). Oral language and code-related precursors to reading: Evidence from a longitudinal structural model. *Developmental Psychology*, 38(6), 934–947. <https://doi.org/10.1037/0012-1649.38.6.934>

Zucker, T. A., Justice, L. M., & Piasta, S. B. (2009). Prekindergarten teachers' verbal references to print during classroom-based, large-group shared reading. *Language, Speech, and Hearing Services in Schools*, 40(4), 376–392. [https://doi.org/10.1044/0161-1461\(2009/08-0059\)](https://doi.org/10.1044/0161-1461(2009/08-0059))

2.41 Whole words memorized as visual units

Ehri, L. C. (2000). Learning to read and learning to spell: Two sides of a coin. *Topics in Language Disorders*, 20(3), 19–36.

Ehri, L. C. (2014). Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning. *Scientific Studies of Reading*, 18(1), 5–21. <https://doi.org/10.1080/10888438.2013.819356>

Piasta, S. B., & Wagner, R. K. (2010). Developing early literacy skills: A meta-analysis of alphabet learning and instruction. *Reading Research Quarterly*, 45(1), 8–38. <https://doi.org/10.1598/RRQ.45.1.2>

2.42 Environmental print used with adult attention to letters and words

Masonheimer, P. E., Drum, P. A., & Ehri, L. C. (1984). Does environmental print identification lead children into word reading? *Journal of Reading Behavior*, 16(4), 257–271. <https://doi.org/10.1080/10862968409547520>

Neumann, M. M., Hood, M., Ford, R. M., & Neumann, D. L. (2012). The role of environmental print in emergent literacy. *Journal of Early Childhood Literacy*, 12(3), 231–258. <https://doi.org/10.1177/1468798411417080>

2.43 Print referencing develops understanding of print concepts

Justice, L. M., Kaderavek, J. N., Fan, X., Sofka, A., & Hunt, A. (2009). Accelerating preschoolers' early literacy development through classroom-based teacher–child storybook reading and explicit print referencing. *Language, Speech, and Hearing Services in Schools*, 40(1), 67–85. [https://doi.org/10.1044/0161-1461\(2008/07-0098\)](https://doi.org/10.1044/0161-1461(2008/07-0098))

Whitehurst, G. J., & Lonigan, C. J. (1998). Child development and emergent literacy. *Child Development*, 69(3), 848–872. <https://doi.org/10.1111/j.1467-8624.1998.tb06247.x>

Zucker, T. A., Justice, L. M., & Piasta, S. B. (2009). Prekindergarten teachers' verbal references to print during classroom-based, large-group shared reading. *Language, Speech, and Hearing Services in Schools, 40*(4), 376–392. [https://doi.org/10.1044/0161-1461\(2009/08-0059\)](https://doi.org/10.1044/0161-1461(2009/08-0059))

2.44 Print conventions explicitly drawn to children's attention

Justice, L. M., Kaderavek, J. N., Fan, X., Sofka, A., & Hunt, A. (2009). Accelerating preschoolers' early literacy development through classroom-based teacher–child storybook reading and explicit print referencing. *Language, Speech, and Hearing Services in Schools, 40*(1), 67–85. [https://doi.org/10.1044/0161-1461\(2008/07-0098\)](https://doi.org/10.1044/0161-1461(2008/07-0098))

Storch, S. A., & Whitehurst, G. J. (2002). Oral language and code-related precursors to reading: Evidence from a longitudinal structural model. *Developmental Psychology, 38*(6), 934–947. <https://doi.org/10.1037/0012-1649.38.6.934>

Zucker, T. A., Justice, L. M., & Piasta, S. B. (2009). Prekindergarten teachers' verbal references to print during classroom-based, large-group shared reading. *Language, Speech, and Hearing Services in Schools, 40*(4), 376–392. [https://doi.org/10.1044/0161-1461\(2009/08-0059\)](https://doi.org/10.1044/0161-1461(2009/08-0059))

2.45 Early decoding teaches letter-sound relationships rather than whole-word memorization

Ehri, L. C. (2000). Learning to read and learning to spell: Two sides of a coin. *Topics in Language Disorders, 20*(3), 19–36.

Ehri, L. C. (2014). Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning. *Scientific Studies of Reading, 18*(1), 5–21. <https://doi.org/10.1080/10888438.2013.819356>

Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading Research Quarterly, 36*(3), 250–287. <https://doi.org/10.1598/RRQ.36.3.2>

Handwriting

2.46 No intentional modeling or guided practice of emergent handwriting

Gerde, H. K., Bingham, G. E., & Wasik, B. A. (2012). Writing in early childhood classrooms: Guidance for best practices. *Early Childhood Education Journal, 40*(6), 351–359. <https://doi.org/10.1007/s10643-012-0531-z>

Hall, A. H., Simpson, A., Guo, Y., & Wang, S. (2015). Examining the effects of preschool writing instruction on emergent literacy skills: A systematic review of the literature. *Literacy Research and Instruction*, 54(2), 115–134. <https://doi.org/10.1080/19388071.2014.991883>

Longcamp, M., Zerbato-Poudou, M.-T., & Velay, J.-L. (2005). The influence of writing practice on letter recognition in preschool children: A comparison between handwriting and typing. *Acta Psychologica*, 119(1), 67–79. <https://doi.org/10.1016/j.actpsy.2004.10.019>

2.47 No instruction on where to begin and how to move when forming letters

James, K. H., & Engelhardt, L. (2012). The effects of handwriting experience on functional brain development in pre-literate children. *Trends in Neuroscience and Education*, 1(1), 32–42. <https://doi.org/10.1016/j.tine.2012.08.001>

Longcamp, M., Zerbato-Poudou, M.-T., & Velay, J.-L. (2005). The influence of writing practice on letter recognition in preschool children: A comparison between handwriting and typing. *Acta Psychologica*, 119(1), 67–79. <https://doi.org/10.1016/j.actpsy.2004.10.019>

2.48 Handwriting not integrated with alphabet instruction

James, K. H., & Engelhardt, L. (2012). The effects of handwriting experience on functional brain development in pre-literate children. *Trends in Neuroscience and Education*, 1(1), 32–42. <https://doi.org/10.1016/j.tine.2012.08.001>

Longcamp, M., Zerbato-Poudou, M.-T., & Velay, J.-L. (2005). The influence of writing practice on letter recognition in preschool children: A comparison between handwriting and typing. *Acta Psychologica*, 119(1), 67–79. <https://doi.org/10.1016/j.actpsy.2004.10.019>

Piasta, S. B., Purpura, D. J., & Wagner, R. K. (2010). Fostering alphabet knowledge development: A comparison of two instructional approaches. *Reading and Writing*, 23(6), 607–626. <https://doi.org/10.1007/s11145-009-9174-x>

2.49 Handwriting disconnected from oral language, drawing, and shared writing

Gerde, H. K., Bingham, G. E., & Wasik, B. A. (2012). Writing in early childhood classrooms: Guidance for best practices. *Early Childhood Education Journal*, 40(6), 351–359. <https://doi.org/10.1007/s10643-012-0531-z>

Puranik, C. S., & Lonigan, C. J. (2011). From scribbles to scrabble: Preschool children's developing knowledge of written language. *Reading and Writing*, 24(5), 567–589. <https://doi.org/10.1007/s11145-009-9220-8>

Puranik, C. S., & Lonigan, C. J. (2014). Emergent writing in preschoolers: Preliminary evidence for a theoretical framework. *Reading Research Quarterly*, 49(4), 453–467. <https://doi.org/10.1002/rrq.79>

2.50 Developmental variation not recognized; mastery emphasized over participation

James, K. H., & Engelhardt, L. (2012). The effects of handwriting experience on functional brain development in pre-literate children. *Trends in Neuroscience and Education*, 1(1), 32–42. <https://doi.org/10.1016/j.tine.2012.08.001>

Puranik, C. S., & Lonigan, C. J. (2014). Emergent writing in preschoolers: Preliminary evidence for a theoretical framework. *Reading Research Quarterly*, 49(4), 453–467. <https://doi.org/10.1002/rrq.79>

Puranik, C. S., Lonigan, C. J., & Kim, Y.-S. (2011). Contributions of emergent literacy skills to name writing, letter writing, and spelling in preschool children. *Early Childhood Research Quarterly*, 26(4), 465–474. <https://doi.org/10.1016/j.ecresq.2011.03.002>

2.51 Explicit modeling and scaffolded guided practice of emergent handwriting

Gerde, H. K., Bingham, G. E., & Wasik, B. A. (2012). Writing in early childhood classrooms: Guidance for best practices. *Early Childhood Education Journal*, 40(6), 351–359. <https://doi.org/10.1007/s10643-012-0531-z>

Hall, A. H., Simpson, A., Guo, Y., & Wang, S. (2015). Examining the effects of preschool writing instruction on emergent literacy skills: A systematic review of the literature. *Literacy Research and Instruction*, 54(2), 115–134. <https://doi.org/10.1080/19388071.2014.991883>

Longcamp, M., Zerbato-Poudou, M.-T., & Velay, J.-L. (2005). The influence of writing practice on letter recognition in preschool children: A comparison between handwriting and typing. *Acta Psychologica*, 119(1), 67–79. <https://doi.org/10.1016/j.actpsy.2004.10.019>

2.52 Letter formation explicitly taught, with prewriting motor concepts

James, K. H., & Engelhardt, L. (2012). The effects of handwriting experience on functional brain development in pre-literate children. *Trends in Neuroscience and Education*, 1(1), 32–42. <https://doi.org/10.1016/j.tine.2012.08.001>

Longcamp, M., Zerbato-Poudou, M.-T., & Velay, J.-L. (2005). The influence of writing practice on letter recognition in preschool children: A comparison between handwriting and typing. *Acta Psychologica*, 119(1), 67–79. <https://doi.org/10.1016/j.actpsy.2004.10.019>

2.53 Handwriting intentionally integrated with alphabet instruction

- James, K. H., & Engelhardt, L. (2012). The effects of handwriting experience on functional brain development in pre-literate children. *Trends in Neuroscience and Education*, 1(1), 32–42. <https://doi.org/10.1016/j.tine.2012.08.001>
- Longcamp, M., Zerbato-Poudou, M.-T., & Velay, J.-L. (2005). The influence of writing practice on letter recognition in preschool children: A comparison between handwriting and typing. *Acta Psychologica*, 119(1), 67–79. <https://doi.org/10.1016/j.actpsy.2004.10.019>
- Piasta, S. B., Purpura, D. J., & Wagner, R. K. (2010). Fostering alphabet knowledge development: A comparison of two instructional approaches. *Reading and Writing*, 23(6), 607–626. <https://doi.org/10.1007/s11145-009-9174-x>

2.54 Handwriting integrated with oral language, drawing, and shared writing

- Gerde, H. K., Bingham, G. E., & Wasik, B. A. (2012). Writing in early childhood classrooms: Guidance for best practices. *Early Childhood Education Journal*, 40(6), 351–359. <https://doi.org/10.1007/s10643-012-0531-z>
- Puranik, C. S., & Lonigan, C. J. (2011). From scribbles to scrabble: Preschool children's developing knowledge of written language. *Reading and Writing*, 24(5), 567–589. <https://doi.org/10.1007/s11145-009-9220-8>
- Puranik, C. S., & Lonigan, C. J. (2014). Emergent writing in preschoolers: Preliminary evidence for a theoretical framework. *Reading Research Quarterly*, 49(4), 453–467. <https://doi.org/10.1002/rrq.79>

2.55 Developmental variation recognized, with participation and progress emphasized

- James, K. H., & Engelhardt, L. (2012). The effects of handwriting experience on functional brain development in pre-literate children. *Trends in Neuroscience and Education*, 1(1), 32–42. <https://doi.org/10.1016/j.tine.2012.08.001>
- Puranik, C. S., & Lonigan, C. J. (2014). Emergent writing in preschoolers: Preliminary evidence for a theoretical framework. *Reading Research Quarterly*, 49(4), 453–467. <https://doi.org/10.1002/rrq.79>
- Puranik, C. S., Lonigan, C. J., & Kim, Y.-S. (2011). Contributions of emergent literacy skills to name writing, letter writing, and spelling in preschool children. *Early Childhood Research Quarterly*, 26(4), 465–474. <https://doi.org/10.1016/j.ecresq.2011.03.002>

Word Writing

2.56 Children expected to copy or memorize spellings

- Ehri, L. C. (2014). Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning. *Scientific Studies of Reading, 18*(1), 5–21. <https://doi.org/10.1080/10888438.2013.819356>
- Ouellette, G., & Sénéchal, M. (2008). Pathways to literacy: A study of invented spelling and its role in learning to read. *Child Development, 79*(4), 899–913. <https://doi.org/10.1111/j.1467-8624.2008.01166.x>
- Ouellette, G., & Sénéchal, M. (2017). Invented spelling in kindergarten as a predictor of reading and spelling in Grade 1: A new pathway to literacy, or just the same road, less known? *Developmental Psychology, 53*(1), 77–88. <https://doi.org/10.1037/dev0000179>

2.57 Few opportunities to segment words and represent sounds

- Gerde, H. K., Bingham, G. E., & Wasik, B. A. (2012). Writing in early childhood classrooms: Guidance for best practices. *Early Childhood Education Journal, 40*(6), 351–359. <https://doi.org/10.1007/s10643-012-0531-z>
- Puranik, C. S., & Lonigan, C. J. (2014). Emergent writing in preschoolers: Preliminary evidence for a theoretical framework. *Reading Research Quarterly, 49*(4), 453–467. <https://doi.org/10.1002/rrq.79>
- Sénéchal, M., Ouellette, G., Pagan, S., & Lever, R. (2012). The role of invented spelling on learning to read in low-phoneme-awareness kindergartners: A randomized-control-trial study. *Reading and Writing, 25*(4), 917–934. <https://doi.org/10.1007/s11145-011-9310-2>

2.58 Encoding disconnected from oral language and phonological awareness

- Boyer, N., & Ehri, L. C. (2011). Contribution of phonemic segmentation instruction with letters and articulation pictures to word reading and spelling in beginners. *Scientific Studies of Reading, 15*(5), 440–470. <https://doi.org/10.1080/10888438.2010.520778>
- Ehri, L. C. (2000). Learning to read and learning to spell: Two sides of a coin. *Topics in Language Disorders, 20*(3), 19–36.

Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading Research Quarterly*, 36(3), 250–287. <https://doi.org/10.1598/RRQ.36.3.2>

2.59 Correctness emphasized over developmentally appropriate attempts

Ouellette, G., & Sénéchal, M. (2017). Invented spelling in kindergarten as a predictor of reading and spelling in Grade 1: A new pathway to literacy, or just the same road, less known? *Developmental Psychology*, 53(1), 77–88. <https://doi.org/10.1037/dev0000179>

Puranik, C. S., & Lonigan, C. J. (2014). Emergent writing in preschoolers: Preliminary evidence for a theoretical framework. *Reading Research Quarterly*, 49(4), 453–467. <https://doi.org/10.1002/rrq.79>

2.60 Writing opportunities infrequent and clustered rather than distributed

Cepeda, N. J., Pashler, H., Vul, E., Wixted, J. T., & Rohrer, D. (2006). Distributed practice in verbal recall tasks: A review and quantitative synthesis. *Psychological Bulletin*, 132(3), 354–380. <https://doi.org/10.1037/0033-2909.132.3.354>

Hall, A. H., Simpson, A., Guo, Y., & Wang, S. (2015). Examining the effects of preschool writing instruction on emergent literacy skills: A systematic review of the literature. *Literacy Research and Instruction*, 54(2), 115–134. <https://doi.org/10.1080/19388071.2014.991883>

Vlach, H. A., Sandhofer, C. M., & Kornell, N. (2008). The spacing effect in children's memory and category induction. *Cognition*, 109(1), 163–167. <https://doi.org/10.1016/j.cognition.2008.07.013>

2.61 Meaningful writing that represents the sounds in words

Ehri, L. C. (2014). Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning. *Scientific Studies of Reading*, 18(1), 5–21. <https://doi.org/10.1080/10888438.2013.819356>

Ouellette, G., & Sénéchal, M. (2017). Invented spelling in kindergarten as a predictor of reading and spelling in Grade 1: A new pathway to literacy, or just the same road, less known? *Developmental Psychology*, 53(1), 77–88. <https://doi.org/10.1037/dev0000179>

Sénéchal, M., Ouellette, G., Pagan, S., & Lever, R. (2012). The role of invented spelling on learning to read in low-phoneme-awareness kindergartners: A randomized-control-trial study. *Reading and Writing*, 25(4), 917–934. <https://doi.org/10.1007/s11145-011-9310-2>

2.62 Emergent encoding supported through segmenting and invented spelling

Puranik, C. S., & Lonigan, C. J. (2014). Emergent writing in preschoolers: Preliminary evidence for a theoretical framework. *Reading Research Quarterly*, 49(4), 453–467. <https://doi.org/10.1002/rrq.79>

Sénéchal, M., Ouellette, G., Pagan, S., & Lever, R. (2012). The role of invented spelling on learning to read in low-phoneme-awareness kindergartners: A randomized-control-trial study. *Reading and Writing*, 25(4), 917–934. <https://doi.org/10.1007/s11145-011-9310-2>

2.63 Encoding integrated with oral language, drawing, shared writing, and play

Gerde, H. K., Bingham, G. E., & Wasik, B. A. (2012). Writing in early childhood classrooms: Guidance for best practices. *Early Childhood Education Journal*, 40(6), 351–359. <https://doi.org/10.1007/s10643-012-0531-z>

Puranik, C. S., & Lonigan, C. J. (2011). From scribbles to scrabble: Preschool children’s developing knowledge of written language. *Reading and Writing*, 24(5), 567–589. <https://doi.org/10.1007/s11145-009-9220-8>

2.64 Developmental writing sequence recognized and sound–symbol links drawn

Ehri, L. C. (2000). Learning to read and learning to spell: Two sides of a coin. *Topics in Language Disorders*, 20(3), 19–36.

Ouellette, G., & Sénéchal, M. (2008). Pathways to literacy: A study of invented spelling and its role in learning to read. *Child Development*, 79(4), 899–913. <https://doi.org/10.1111/j.1467-8624.2008.01166.x>

Puranik, C. S., & Lonigan, C. J. (2011). From scribbles to scrabble: Preschool children’s developing knowledge of written language. *Reading and Writing*, 24(5), 567–589. <https://doi.org/10.1007/s11145-009-9220-8>

Puranik, C. S., & Lonigan, C. J. (2014). Emergent writing in preschoolers: Preliminary evidence for a theoretical framework. *Reading Research Quarterly*, 49(4), 453–467. <https://doi.org/10.1002/rrq.79>

2.65 Writing opportunities distributed and repeated with guided practice

Cepeda, N. J., Pashler, H., Vul, E., Wixted, J. T., & Rohrer, D. (2006). Distributed practice in verbal recall tasks: A review and quantitative synthesis. *Psychological Bulletin*, 132(3), 354–380. <https://doi.org/10.1037/0033-2909.132.3.354>

Vlach, H. A., Sandhofer, C. M., & Kornell, N. (2008). The spacing effect in children's memory and category induction. *Cognition*, 109(1), 163–167. <https://doi.org/10.1016/j.cognition.2008.07.013>

Composition

2.66 Composition disconnected from language comprehension and discourse instruction

Ehri, L. C. (2000). Learning to read and learning to spell: Two sides of a coin. *Topics in Language Disorders*, 20(3), 19–36.

Kim, Y.-S. G., & Schatschneider, C. (2017). Expanding the developmental models of writing: A direct and indirect effects model of developmental writing (DIEW). *Journal of Educational Psychology*, 109(1), 35–50.

<https://doi.org/10.1037/edu0000129>

Puranik, C. S., & Lonigan, C. J. (2014). Emergent writing in preschoolers: Preliminary evidence for a theoretical framework.

Reading Research Quarterly, 49(4), 453–467. <https://doi.org/10.1002/rrq.79>

2.67 No modeling, shared planning, or oral rehearsal before writing

Kim, Y.-S. G., & Schatschneider, C. (2017). Expanding the developmental models of writing: A direct and indirect effects model of developmental writing (DIEW). *Journal of Educational Psychology*, 109(1), 35–50.

<https://doi.org/10.1037/edu0000129>

Spencer, T. D., & Petersen, D. B. (2020). Narrative intervention: Principles to practice. *Language, Speech, and Hearing Services in Schools*, 51(4), 1081–1096. https://doi.org/10.1044/2020_LSHSS-20-00015

2.68 Writing experiences unstructured, with limited modeling or shared writing

Gerde, H. K., Bingham, G. E., & Wasik, B. A. (2012). Writing in early childhood classrooms: Guidance for best practices. *Early Childhood Education Journal*, 40(6), 351–359. <https://doi.org/10.1007/s10643-012-0531-z>

Hall, A. H., Simpson, A., Guo, Y., & Wang, S. (2015). Examining the effects of preschool writing instruction on emergent literacy skills: A systematic review of the literature. *Literacy Research and Instruction*, 54(2), 115–134. <https://doi.org/10.1080/19388071.2014.991883>

2.69 No modeling of print conventions

Justice, L. M., Kaderavek, J. N., Fan, X., Sofka, A., & Hunt, A. (2009). Accelerating preschoolers' early literacy development through classroom-based teacher–child storybook reading and explicit print referencing. *Language, Speech, and Hearing Services in Schools*, 40(1), 67–85. [https://doi.org/10.1044/0161-1461\(2008/07-0098\)](https://doi.org/10.1044/0161-1461(2008/07-0098))

Zucker, T. A., Justice, L. M., & Piasta, S. B. (2009). Prekindergarten teachers' verbal references to print during classroom-based, large-group shared reading. *Language, Speech, and Hearing Services in Schools*, 40(4), 376–392. [https://doi.org/10.1044/0161-1461\(2009/08-0059\)](https://doi.org/10.1044/0161-1461(2009/08-0059))

2.70 No support for producing sentence-level and extended language

Curenton, S. M., & Justice, L. M. (2004). African American and Caucasian preschoolers' use of decontextualized language: Literate language features in oral narratives. *Language, Speech, and Hearing Services in Schools*, 35(3), 240–253. [https://doi.org/10.1044/0161-1461\(2004/023\)](https://doi.org/10.1044/0161-1461(2004/023))

Griffin, T. M., Hemphill, L., Camp, L., & Wolf, D. P. (2004). Oral discourse in the preschool years and later literacy skills. *First Language*, 24(2), 123–147. <https://doi.org/10.1177/0142723704042369>

Kim, Y.-S. G., & Schatschneider, C. (2017). Expanding the developmental models of writing: A direct and indirect effects model of developmental writing (DIEW). *Journal of Educational Psychology*, 109(1), 35–50. <https://doi.org/10.1037/edu0000129>

2.71 Composition limited to unstructured narrative sharing

Pesco, D., & Gagné, A. (2017). Scaffolding narrative skills: A meta-analysis of instruction in early childhood settings. *Early Education and Development*, 28(7), 773–793. <https://doi.org/10.1080/10409289.2015.1060800>

Price, L. H., Bradley, B. A., & Smith, J. M. (2012). A comparison of preschool teachers' talk during storybook and information book read-alouds. *Early Childhood Research Quarterly*, 27(3), 426–440. <https://doi.org/10.1016/j.ecresq.2012.02.003>

Spencer, T. D., & Petersen, D. B. (2020). Narrative intervention: Principles to practice. *Language, Speech, and Hearing Services in Schools*, 51(4), 1081–1096. https://doi.org/10.1044/2020_LSHSS-20-00015

2.72 Writing treated as an isolated skill rather than a tool for expressing ideas

Gerde, H. K., Bingham, G. E., & Wasik, B. A. (2012). Writing in early childhood classrooms: Guidance for best practices. *Early Childhood Education Journal*, 40(6), 351–359. <https://doi.org/10.1007/s10643-012-0531-z>

Kim, Y.-S. G., & Schatschneider, C. (2017). Expanding the developmental models of writing: A direct and indirect effects model of developmental writing (DIEW). *Journal of Educational Psychology*, 109(1), 35–50. <https://doi.org/10.1037/edu0000129>

2.73 Multilingual learners cannot draw on their home language

Bingham, G. E., Kim, Y.-S. G., & Cline, E. (2023). Supporting the writing development of emergent bilingual children: Universal and language-specific approaches. *The Reading Teacher*, 76(6), 390-399.

Larson, A. L., Cysyk, L. M., Carta, J. J., Hammer, C. S., Baralt, M., Uchikoshi, Y., An, Z. G., & Wood, C. (2020). A systematic review of language-focused interventions for young children from culturally and linguistically diverse backgrounds. *Early Childhood Research Quarterly*, 50, 157–178. <https://doi.org/10.1016/j.ecresq.2019.06.001>

National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the educational success of children and youth learning English: Promising futures*. The National Academies Press. <https://doi.org/10.17226/24677>

2.74 Composition integrated with language comprehension and discourse instruction

Ehri, L. C. (2000). Learning to read and learning to spell: Two sides of a coin. *Topics in Language Disorders*, 20(3), 19–36.

Kim, Y.-S. G., & Schatschneider, C. (2017). Expanding the developmental models of writing: A direct and indirect effects model of developmental writing (DIEW). *Journal of Educational Psychology*, 109(1), 35–50. <https://doi.org/10.1037/edu0000129>

Puranik, C. S., & Lonigan, C. J. (2014). Emergent writing in preschoolers: Preliminary evidence for a theoretical framework. *Reading Research Quarterly*, 49(4), 453–467. <https://doi.org/10.1002/rrq.79>

2.75 Oral composition explicitly supported through planning and rehearsal

Kim, Y.-S. G., & Schatschneider, C. (2017). Expanding the developmental models of writing: A direct and indirect effects model of developmental writing (DIEW). *Journal of Educational Psychology*, 109(1), 35–50.
<https://doi.org/10.1037/edu0000129>

Spencer, T. D., & Petersen, D. B. (2020). Narrative intervention: Principles to practice. *Language, Speech, and Hearing Services in Schools*, 51(4), 1081–1096. https://doi.org/10.1044/2020_LSHSS-20-00015

2.76 Composition modeled through shared writing, interactive writing, and dictation

Gerde, H. K., Bingham, G. E., & Wasik, B. A. (2012). Writing in early childhood classrooms: Guidance for best practices. *Early Childhood Education Journal*, 40(6), 351–359. <https://doi.org/10.1007/s10643-012-0531-z>

Hall, A. H., Simpson, A., Guo, Y., & Wang, S. (2015). Examining the effects of preschool writing instruction on emergent literacy skills: A systematic review of the literature. *Literacy Research and Instruction*, 54(2), 115–134.
<https://doi.org/10.1080/19388071.2014.991883>

2.77 Print conventions modeled

Justice, L. M., Kaderavek, J. N., Fan, X., Sofka, A., & Hunt, A. (2009). Accelerating preschoolers' early literacy development through classroom-based teacher–child storybook reading and explicit print referencing. *Language, Speech, and Hearing Services in Schools*, 40(1), 67–85. [https://doi.org/10.1044/0161-1461\(2008/07-0098\)](https://doi.org/10.1044/0161-1461(2008/07-0098))

Zucker, T. A., Justice, L. M., & Piasta, S. B. (2009). Prekindergarten teachers' verbal references to print during classroom-based, large-group shared reading. *Language, Speech, and Hearing Services in Schools*, 40(4), 376–392.
[https://doi.org/10.1044/0161-1461\(2009/08-0059\)](https://doi.org/10.1044/0161-1461(2009/08-0059))

2.78 Children supported in producing extended language

Curenton, S. M., & Justice, L. M. (2004). African American and Caucasian preschoolers' use of decontextualized language: Literate language features in oral narratives. *Language, Speech, and Hearing Services in Schools*, 35(3), 240–253.
[https://doi.org/10.1044/0161-1461\(2004/023\)](https://doi.org/10.1044/0161-1461(2004/023))

Griffin, T. M., Hemphill, L., Camp, L., & Wolf, D. P. (2004). Oral discourse in the preschool years and later literacy skills. *First Language*, 24(2), 123–147. <https://doi.org/10.1177/0142723704042369>

Kim, Y.-S. G., & Schatschneider, C. (2017). Expanding the developmental models of writing: A direct and indirect effects model of developmental writing (DIEW). *Journal of Educational Psychology*, 109(1), 35–50.
<https://doi.org/10.1037/edu0000129>

2.79 Opportunities to compose across multiple purposes

Pesco, D., & Gagné, A. (2017). Scaffolding narrative skills: A meta-analysis of instruction in early childhood settings. *Early Education and Development*, 28(7), 773–793. <https://doi.org/10.1080/10409289.2015.1060800>

Price, L. H., Bradley, B. A., & Smith, J. M. (2012). A comparison of preschool teachers' talk during storybook and information book read-alouds. *Early Childhood Research Quarterly*, 27(3), 426–440. <https://doi.org/10.1016/j.ecresq.2012.02.003>

Spencer, T. D., & Petersen, D. B. (2020). Narrative intervention: Principles to practice. *Language, Speech, and Hearing Services in Schools*, 51(4), 1081–1096. https://doi.org/10.1044/2020_LSHSS-20-00015

2.80 Multilingual learners draw on home language when composing

Bingham, G. E., Kim, Y.-S. G., & Cline, E. (2023). Supporting the writing development of emergent bilingual children: Universal and language-specific approaches. *The Reading Teacher*, 76(6), 733–743. <https://doi.org/10.1002/trtr.2166>

Larson, A. L., Cycyk, L. M., Carta, J. J., Hammer, C. S., Baralt, M., Uchikoshi, Y., An, Z. G., & Wood, C. (2020). A systematic review of language-focused interventions for young children from culturally and linguistically diverse backgrounds. *Early Childhood Research Quarterly*, 50, 157–178. <https://doi.org/10.1016/j.ecresq.2019.06.001>

National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the educational success of children and youth learning English: Promising futures*. The National Academies Press. <https://doi.org/10.17226/24677>

SECTION 3. ASSESSMENT

Non-Negotiables

3.1 Reliance on observation or checklists only

Greenwood, C. R., Carta, J. J., Atwater, J., Goldstein, H., Kaminski, R., & McConnell, S. (2013). Is a response to intervention (RTI) approach to preschool language and early literacy instruction needed? *Topics in Early Childhood Special Education*, 33(1), 48–64. <https://doi.org/10.1177/0271121412455438>

Lonigan, C. J., & Milburn, T. F. (2017). Identifying the dimensionality of oral language skills of children with typical development in preschool through fifth grade. *Journal of Speech, Language, and Hearing Research*, 60(8), 2185–2198. https://doi.org/10.1044/2017_JSLHR-L-15-0402

Wackerle-Hollman, A., Spencer, T. D., Artman-Meeker, K., Kelley, E., Durán, L., & Foster, M. E. (2021). Multi-tiered system of support in early childhood: Identifying gaps, considerations for application and solutions. *Early Childhood Research Quarterly*, 56, 201–212. <https://doi.org/10.1016/j.ecresq.2021.03.010>

3.2 Universal screening does not include oral language

National Early Literacy Panel. (2008). *Developing early literacy: Report of the National Early Literacy Panel*. National Institute for Literacy.

Snowling, M. J., & Hulme, C. (2025). The reading is language model: A theoretical framework for language and reading development and intervention. *Annual Review of Developmental Psychology*, 7(1), 195–218. <https://doi.org/10.1146/annurev-devpsych-111323-084821>

Storch, S. A., & Whitehurst, G. J. (2002). Oral language and code-related precursors to reading: Evidence from a longitudinal structural model. *Developmental Psychology*, 38(6), 934–947. <https://doi.org/10.1037/0012-1649.38.6.934>

3.3 Universal screening not connected to tiered instruction or support

Greenwood, C. R., Carta, J. J., Atwater, J., Goldstein, H., Kaminski, R., & McConnell, S. (2013). Is a response to intervention (RTI) approach to preschool language and early literacy instruction needed? *Topics in Early Childhood Special Education*, 33(1), 48–64. <https://doi.org/10.1177/0271121412455438>

Greenwood, C. R., Carta, J. J., Goldstein, H., Kaminski, R. A., McConnell, S. R., & Atwater, J. (2015). The Center for Response to Intervention in Early Childhood: Developing evidence-based tools for a multi-tier approach to preschool language and early literacy instruction. *Journal of Early Intervention, 36*(4), 246–262. <https://doi.org/10.1177/1053815115581209>

Wackerle-Hollman, A., Spencer, T. D., Artman-Meeker, K., Kelley, E., Durán, L., & Foster, M. E. (2021). Multi-tiered system of support in early childhood: Identifying gaps, considerations for application and solutions. *Early Childhood Research Quarterly, 56*, 201–212. <https://doi.org/10.1016/j.ecresq.2021.03.010>

3.4 Assessment system measures language and early literacy development

Lonigan, C. J., & Milburn, T. F. (2017). Identifying the dimensionality of oral language skills of children with typical development in preschool through fifth grade. *Journal of Speech, Language, and Hearing Research, 60*(8), 2185–2198. https://doi.org/10.1044/2017_JSLHR-L-15-0402

National Early Literacy Panel. (2008). *Developing early literacy: Report of the National Early Literacy Panel*. National Institute for Literacy.

Wackerle-Hollman, A., Spencer, T. D., Artman-Meeker, K., Kelley, E., Durán, L., & Foster, M. E. (2021). Multi-tiered system of support in early childhood: Identifying gaps, considerations for application and solutions. *Early Childhood Research Quarterly, 56*, 201–212. <https://doi.org/10.1016/j.ecresq.2021.03.010>

3.5 Universal screening includes oral language

National Early Literacy Panel. (2008). *Developing early literacy: Report of the National Early Literacy Panel*. National Institute for Literacy.

Snowling, M. J., & Hulme, C. (2025). The reading is language model: A theoretical framework for language and reading development and intervention. *Annual Review of Developmental Psychology, 7*(1), 195–218. <https://doi.org/10.1146/annurev-devpsych-111323-084821>

Storch, S. A., & Whitehurst, G. J. (2002). Oral language and code-related precursors to reading: Evidence from a longitudinal structural model. *Developmental Psychology, 38*(6), 934–947. <https://doi.org/10.1037/0012-1649.38.6.934>

3.6 Screening results connected to tiered instruction and support within MTSS

Greenwood, C. R., Carta, J. J., Atwater, J., Goldstein, H., Kaminski, R., & McConnell, S. (2013). Is a response to intervention (RTI) approach to preschool language and early literacy instruction needed? *Topics in Early Childhood Special Education, 33*(1), 48–64. <https://doi.org/10.1177/0271121412455438>

Greenwood, C. R., Carta, J. J., Goldstein, H., Kaminski, R. A., McConnell, S. R., & Atwater, J. (2015). The Center for Response to Intervention in Early Childhood: Developing evidence-based tools for a multi-tier approach to preschool language and early literacy instruction. *Journal of Early Intervention, 36*(4), 246–262. <https://doi.org/10.1177/1053815115581209>

Wackerle-Hollman, A., Spencer, T. D., Artman-Meeker, K., Kelley, E., Durán, L., & Foster, M. E. (2021). Multi-tiered system of support in early childhood: Identifying gaps, considerations for application and solutions. *Early Childhood Research Quarterly, 56*, 201–212. <https://doi.org/10.1016/j.ecresq.2021.03.010>

3.8 Benchmarks set beyond typical Pre–K expectations

Anthony, J. L., Lonigan, C. J., Driscoll, K., Phillips, B. M., & Burgess, S. R. (2003). Phonological sensitivity: A quasi-parallel progression of word structure units and cognitive operations. *Reading Research Quarterly, 38*(4), 470–487. <https://doi.org/10.1598/RRQ.38.4.3>

Piasta, S. B., Petscher, Y., & Justice, L. M. (2012). How many letters should preschoolers in public programs know? The diagnostic efficiency of various preschool letter-naming benchmarks for predicting first-grade literacy achievement. *Journal of Educational Psychology, 104*(4), 945–958. <https://doi.org/10.1037/a0027757>

3.9 Narrow focus on print-related skills

National Early Literacy Panel. (2008). *Developing early literacy: Report of the National Early Literacy Panel*. National Institute for Literacy.

Snowling, M. J., & Hulme, C. (2025). The reading is language model: A theoretical framework for language and reading development and intervention. *Annual Review of Developmental Psychology, 7*(1), 195–218. <https://doi.org/10.1146/annurev-devpsych-111323-084821>

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3.15 Developmentally appropriate, efficient, and embedded in authentic activities

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3.16 Developmentally appropriate, reliable, and valid for their intended purpose

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3.17 Aligned with standards and the scope and sequence of instruction

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3.19 Data used within an MTSS framework to guide differentiated instruction

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