CURRICULUM EVALUATION GUIDELINES (3rd Edition)

Use these guidelines to evaluate how a curriculum aligns with the findings from the science of reading and the science of learning.

K-5 English Language Arts (ELA)

Important Preliminary Statements

Unlike learning to speak and understand language, learning to read and write is not naturally acquired (Lyon, 1998). However, the vast majority of students can learn to read and write when provided with effective instruction. These guidelines have been developed to assist educators and decision-makers in selecting curricula and instructional materials that support maximally effective instruction.
The foundation of effective instruction in word recognition is built upon explicitly, systematically, cumulatively, and diagnostically teaching how letters represent the sounds within spoken words, how letters are used to sound out printed words, and how to read words accurately, automatically, and fluently so that comprehension takes place and reading development can proceed beyond the basic level.
Reading ability must develop so that students can comprehend at increasing levels of sophistication—the very purpose of reading. Thus, curricula must not emphasize foundational word recognition skills to the exclusion or near-exclusion of language development (e.g., vocabulary, syntax, discourse) and the building of background knowledge. Curricula should first emphasize developing these key aspects of language comprehension orally, while foundational reading skills are being developed. Then, once students can read fluently, development of these elements should continue through independent reading.
As is true of all complex human behaviors, some students will require additional instruction and practice in building skills related to reading and writing (e.g., vocabulary, handwriting, knowledge building, syntactic awareness, morphological awareness, phoneme awareness, phonic decoding, fluency) while others will require much less. Instruction should be adjusted based on proper assessment: provide more intensive skills instruction to those whose scores indicate they are exhibiting difficulties in developing foundational reading and writing skills, and allow more opportunities to read and write about complex text to those whose scores indicate they have already mastered foundational reading and writing skills.

If 85% of students are not achieving proficiency in foundational skills with a Tier 1 curriculum, as measured by a reliable and valid curriculum based measure, the first assumption should be that something vital is lacking in the program or its implementation, not the students.

What is the Science of Reading?

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

For more information, visit https://www.thereadingleague.org/what-is-the-science-of-reading/ to download the Defining Guide.

What the Science of Reading Reveals About How Skillful Reading Develops

To understand how a student develops into a skillful reader (i.e., a fluent reader who can comprehend text), we look toward two theoretical frameworks aligned with science. We encourage all stakeholders to familiarize themselves with these frameworks as they should be used to inform reading assessment and instruction.

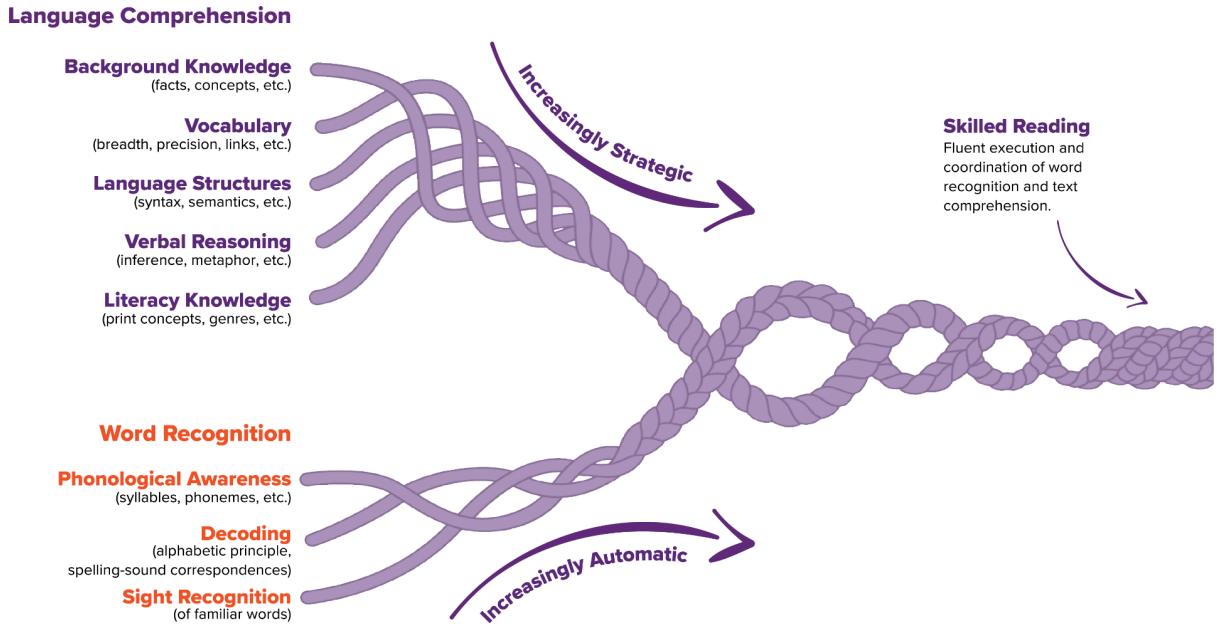
The simple view of reading has been empirically validated by over 150 scientific studies. It shows us that reading comprehension is not the sum, but the product of two components—word recognition and language comprehension-such that if either one is weak, reading comprehension is diminished.

For a more in-depth understanding of the subcomponents within word recognition (WR) and language comprehension (LC), we turn next to Scarborough's reading rope.

The reading rope is a visual metaphor for the development of skills over time (Scarborough, 2001). It breaks out the subcomponents of word recognition and language comprehension to expose their development as they intertwine and become increasingly strategic and automatic over time to develop fluent, skilled reading.

The simple view of reading and the reading rope are helpful to understand and refer to as you evaluate Tier 1 curricula, aligned intervention materials, and your suite of assessments.

Although word recognition and language comprehension are shown as separate components in these models, that does ***not*** mean they should be taught separately. Many elements of instruction, such as morphology and grammar, impact both language comprehension and word recognition, and the strengthening of either component positively supports the development of the other. Therefore, these components should be integrated within evidence-aligned instruction rather than taught in isolation (see Design and Delivery).



Red Flags

Research findings from the science of reading have revealed approaches to teaching reading that are less effective and could impair the acquisition of skilled reading for many students. These approaches are labeled in this document as **Red Flags.**

What Do We Know From the Science of Learning?

Before reviewing instructional materials for content, there are some general concepts from the science behind how students learn that must be taken into consideration. Professional development, instructional time, selection of materials, and who will deliver intervention must be considered for the most successful learning outcomes. Both instructional quality and intensity are key elements that must be aligned with the research literature (Torgesen et al., 2001).

Research shows the important role of practice in the design of instructional materials, particularly for students who are behind their peers. Instructional materials should have many practice opportunities, and be aligned across all tiers of instruction.

Instructional materials should include multiple opportunities for student responses with built-in, immediate, corrective feedback (Burns, et al., 2014; Archer & Hughes, 2011).

Design and Delivery

To identify effective literacy curricula, the instruction must provide appropriate practice, materials, and guidance for scheduling and pacing. It is a Red Flag if your reading and writing instruction does not attend to these important design and delivery components.

Red Flags: Practices Not Aligned With the Science of Reading	Red Flag (Rate: 1-4)
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).	
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, Roediger, McDaniel, & McDermott, 2020, p. 2).	

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, 2019, p. 3).	
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).	
No evidence of interleaved practice: 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, P. & Hendrick, C., 2020).	
Student Interest: The materials are generally not intrinsically interesting and engaging for most students in that grade.	
Cohesion: The program components are disjointed and not seamlessly related to one another. Instruction based on the science of reading must be integrated, acknowledging the impact of various component skills upon each other.	
Usability: The materials are confusing and/or difficult to manage and use in a classroom setting.	

IMPORTANT: Read Directions Before You Begin

1. Assemble a review team that has a base of knowledge in the science of reading. It is important to include school and district leaders, educators, special educators, and specialists who have been trained in the science of reading and who understand the terms within each section's glossaries.

2. It is recommended that reviewers undergo reliability training. Your team should practice using the workbook, compare your findings to a curriculum that the Reading League has already reviewed (see Curriculum Navigation Reports [CNR] on The Reading League Compass Curriculum Decision Makers page), and check your work against the CNR.

3. Familiarize yourselves with the curriculum materials to be evaluated, including their scopes and sequences and several lessons from the targeted grade(s). For the final section of this evaluation, the review team will need to have the suite of assessments from your school or Local Education Agency on hand.

4. Note that the structure of these guidelines aligns with Scarborough's reading rope and includes the following sections: word recognition, language comprehension, reading comprehension, writing, and assessment materials.

5. When reviewing curricula, it is very important to prioritize looking for **Red Flags, which are practices *not* aligned with the science of reading.** Search each section for Red Flags that indicate the presence of *nonaligned* 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 use/build their knowledge and supplemental materials to ensure this nonaligned practice is not included in instruction.**
    b. If many red boxes are checked in a section, it is likely that the overall program is not aligned with the findings from the science of reading. Keep searching for a suitable curriculum rather than trying to supplement such a program.

6. 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 can opt to continue reviewing 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). Instead, **for any missing practices, use the notes section to address how educators will use/build their knowledge and supplemental materials in that area.**
    b. If many of the evidence-aligned practices are included, it is likely that the curriculum is aligned with the science of reading—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 science of reading. The numbers to the left of the “Red Flags” and the “Aligned Practices" assist you in finding the corresponding source(s) in the Reference section at the end of the guidelines.

The Reading League recommends using the companion Curriculum Evaluation Guidelines Reviewer Workbook found on The Reading League website. This workbook includes a review gradient for teams that want a more detailed picture of how true or untrue a Red Flag statement is for a given curriculum. The workbook also includes areas for teams to note specific information during their review.

The Reading League has also reviewed the nation’s most widely used curricula using the Curriculum Evaluation Guidelines. To access these informational reports, visit The Reading League Compass’ Curriculum Decision Makers Page: www.thereadingleague.org/compass/curriculum-decision-makers/

The Curriculum Evaluation Guidelines, 3rd Edition, have been updated to include a section on The Science of Learning. Other updates are noted with an asterisk.

IMPORTANT:

Evidence-aligned materials are an essential component of successful literacy instruction; however, they will not produce positive results on its own. It is vital to build educator and leader knowledge in the science of reading and to develop a coaching system to support implementation. For the greatest positive impact, it is also essential to ensure practices are aligned across all systems (e.g., grade levels, tiers of instruction, etc.).

Section 1: WORD RECOGNITION

NON-NEGOTIABLES: WORD RECOGNITION

	Red Flags: Practices Not Aligned With the Science of Reading	Red Flag ✓
1.1	The three-cueing system is taught as a decoding strategy in the early grades (i.e., directing students to use picture cues, context cues, or to attend to the first letter of a word as a cue).	
1.2	Guidance is given to memorize whole words, including high-frequency words, by sight, without attending to the letter-sound correspondences.	
1.3	Supporting materials do not provide a systematic scope and sequence nor opportunities for practice and review of elements taught (e.g., phonics, decoding, encoding).	
	Practices Aligned With the Science of Reading	
1.4	There is explicit instruction of phonemic awareness, phonics, and spelling.	
1.5	There is a systematic scope and sequence of skills building from simple to complex.	
1.6	Curriculum and support materials provide opportunities for practice and interleaving of elements taught (e.g., phonics, decoding, encoding).	

WORD RECOGNITION

Phonological and Phoneme Awareness

	Red Flags: Practices Not Aligned With the Science of Reading	Red Flag ✓
1.7	Instruction only attends to larger units of phonological sensitivity (syllables, rhyme, onset-rime) as a focus of instruction without moving to the phoneme level.	
1.8*	Blends such as /b/ /l/ are kept intact rather than having students notice their individual sounds.	
1.9*	Students do not practice the phonemes as soon as they learn the graphemes.	
1.10	Instruction is focused on letters only without explicit instruction and practice with the phonemes that letters represent.	
1.11	Phoneme awareness is not taught as a foundational reading skill.	
1.12	Phoneme awareness is not assessed and monitored (e.g., a student's ability to identify the initial, final, and medial phonemes in a word).	
	Practices Aligned With the Science of Reading	
1.13	Instruction includes larger units of phonological awareness (syllable, rhyme, onset-rime) in pre-K and beginning of K, progressing to the phoneme level as soon as possible in K.	
1.14	Phoneme awareness is taught directly, explicitly, and systematically.	

1.15	Instruction includes conversations about the way sounds are made in the mouth (i.e., how the articulatory gestures of air flow, tongue and lip placement, and vocal cord voicing are happening).
1.16	Instruction includes a focus on attuning students to all phonemes in words (e.g., first, final, medial and phonemes, phonemes in blends).

Glossary

Explicit Instruction: Instruction that is taught directly and clearly, leaving little to chance. Teachers begin by modeling the objective, ensuring that students know what is expected. Students then practice along with the teacher, and finally, they complete the task individually (e.g., I do, we do, you do). Explicit instruction includes practice with immediate corrective feedback.

Grapheme: A letter or letter combination that spells a phoneme; it can be one, two, three, or four letters in English (e.g., i, ou, igh, ough).

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

Phoneme Awareness: The ability to notice, think about, or manipulate the individual phonemes (sounds) in spoken words. It is the highest level of phonological awareness and a potent predictor of future reading success.

Phonological Sensitivity (Awareness): One's sensitivity to, or explicit awareness of, the phonological structure of words in one's language. It is an "umbrella" term that encompasses awareness of individual words in spoken sentences, syllables, onset-rime segments, and individual phonemes.

Systematic Instruction: The use of a planned, logical sequence to introduce elements taught, building from the simplest to those that are more complex.

Phonics and Phonic Decoding

Note: Decoding and encoding are reciprocal processes and should be taught as such. This section includes similar components to the spelling components in Section 4. Reviewing these sections together may take less time than reviewing them separately.

	Red Flags: Practices Not Aligned With the Science of Reading	Red Flag ✓
1.17	Letter-sound correspondences are taught opportunistically or implicitly during text reading.	
1.18	Instruction is typically “one and done”; phonics skills are introduced but with very little or short-term review.	
1.19	The first letters of key words for letter/sound correspondences are not aligned with the pure phoneme being taught (e.g., earth for /ĕ/, ant for /ă/, orange for /ŏ/).	
1.20	Phonics instruction takes place in short (or optional) “mini-lessons” or “word work” sessions.	
1.21	The initial instructional sequence introduces many (or all) consonants before a vowel is introduced, short vowels are all taught in rapid succession, and/or all sounds for one letter are taught all at once.	
1.22	Blending is not explicitly taught nor practiced.	
1.23	Instruction encourages students to memorize whole words, read words using the first letter only as a clue, guess at words in context using a “What would make sense?” strategy, or use picture clues rather than phonic decoding.	
1.24	Words with known letter-sound correspondences, including high-frequency words, are taught as whole-word units, often as stand-alone “sight words” to be memorized.	
1.25	There are few opportunities provided for word-level decoding practice of new phonics patterns and interleaving practice for prior phonics patterns.	
1.26	Early texts are predominantly predictable and/or leveled texts which include phonic elements that have not been taught; decodable texts are not used or emphasized.	

1.27	Advanced word study (Grades 2-5): Instruction in phonics ends once single-syllable phonics patterns (e.g., CVC, CVCe) are taught.	
1.28	Advanced word study (Grades 2-5): There is no evident instruction in multisyllabic word decoding strategies and/or using morphology to support word recognition.	
Practices Aligned With the Science of Reading		
1.29	Letter-sound correspondences are taught to automaticity in an explicit manner.	
1.30	Phonics instruction includes cumulative review including application in reading and writing.	
1.31	Phonics instruction is systematic and sequential, building from simple letter-sound correspondences to complex phonic patterns (i.e., instruction begins with short vowels and consonants) within a clear scope and sequence.	
1.32	Segmenting and blending are taught explicitly and practiced regularly in both decoding and encoding.	
1.33	Explicit instruction directs students' attention to the structure of the word; the emphasis is on phonic decoding for beginning readers and on the morphemes within words for advanced readers.	
1.34	Irregular high-frequency words are taught by drawing attention to both regular and irregular sounds once sound-spellings have been taught.	
1.35	There are opportunities to practice decoding regular and irregular words in isolation.	
1.36	Instruction includes spaced practice and interleaving of skills taught (e.g., practicing old and new phonics patterns in one activity, practicing a learned phonics pattern in reading *and* spelling).	
1.37	Phonics skills are practiced by applying letter-sound knowledge in decodable texts that align with the phonics elements taught, reinforcing phonetic decoding.	
1.38	Advanced Word Study: Instruction begins with basic letter-sound correspondences followed by increasingly complex linguistic features, such as syllable types, morphemes, and etymological influences (i.e., word origins).	

1.39	Advanced Word Study: More advanced phonics skills are included (e.g., second sounds of c/g, digraphs, variant vowels).
1.40	Once multilingual learners decode a word accurately, supports (e.g., descriptions, pictures, or gestures) are used to teach or confirm the meaning of the decoded word.
1.41	Instruction for multilingual learners includes attention to positive transfer of letters and sounds from their home language, in addition to explicit instruction in letters and sounds not present in their home language.

Glossary

Blending: Putting phonemes together to form a word.
Encoding: Using knowledge of individual phonemes in spoken words to spell words both orally and in print; a skill that develops reciprocally to decoding when explicitly taught.
Etymology: The history of a word or word part that includes its origin.
High-Frequency Words: Words that appear most often in printed text.
Interleaving Practice: Practice that is 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
Morpheme: The smallest unit of a word that carries meaning (e.g., prefix, suffix, base element).
Phonics: Instruction to teach how print/letters represent the sounds of spoken language.
Phonic Decoding: The process of sounding out words using letter-sound knowledge and blending those sounds together to pronounce the word. In the research literature, this process is referred to as phonological recoding or simply recoding.
Segmenting: Breaking a spoken word into its individual phonemes.

Letter-Sound Correspondences: The relationship between a grapheme, or printed letter(s), and its corresponding phoneme, or individual speech sound (e.g., “c” can correspond to the phoneme /k/ or /s/).
Spaced Practice: Practice that occurs over time.
Syllable Types: The six common syllable patterns in English: closed, open, vowel-consonant-e, r-controlled, vowel team, and consonant-le.
Types of Text:

- *Decodable*: Texts with a high proportion of phonetically regular words matched to common letter-sound relationships found within the program’s systematic scope and sequence.
- *Leveled*: Texts are leveled according to a gradient of difficulty typically based on features like vocabulary, text structures, and content.
- *Predictable*: Texts with predictable text structures such as repetitive sentences, words, and phrases.

Variant Vowels: Groups of letters that produce the same vowel sound (e.g., ai, ay, eigh).

Fluency

	Red Flags: Practices Not Aligned With the Science of Reading	Red Flag ✓
1.42	Fluency instruction focuses primarily on student silent reading.	
1.43	Rate is emphasized over accuracy; priority is given to the student's ability to read words quickly.	
1.44	Word-level fluency practice to automaticity is not provided, or fluency is viewed only as text-reading fluency.	
1.45	Fluency is practiced only in narrative text or with repeated readings of patterned text.	
1.46	Fluency assessment allows acceptance of incorrectly decoded words if they are close in meaning to the target word (e.g., accepting the word “house” instead of the printed word “home”).	
	Practices Aligned With the Science of Reading	
1.47	Letter names and its associated sounds are given sufficient practice opportunities with feedback to ensure accuracy and automaticity.	
1.48	Instruction includes teacher-led modeling, oral reading by students, and immediate feedback.	
1.49	Reading accuracy and automaticity are emphasized as the hallmarks of fluent reading.	
1.50	Word-level fluency practice is provided.	
1.51	Connected-text fluency practice is provided, encouraging students to read with prosody (e.g., decodable texts, poetry, readers’ theater, paired reading).	
1.52	For multilingual learners, additional support is included whenever possible to ensure these students understand the meaning of the words being read.	

Glossary
Accuracy: Decoding words without any letter-sound errors.
Automaticity: Performing a reading task without conscious effort to decode words.
Connected Text: Text that includes multiple sentences that are related to one another.
Prosody: Reading smoothly with expression and intonation that represents the meaning and comprehension of connected text.

Sections 2-4: LANGUAGE COMPREHENSION, READING COMPREHENSION, AND WRITING

NON-NEGOTIABLES: LANGUAGE COMPREHENSION (LC), READING COMPREHENSION (RC), AND WRITING (W)		
Red Flags: Practices Not Aligned With the Science of Reading		**Red Flag ✓**
2-4.1	(LC, RC, W) In early grades, the instructional framework is primarily a workshop approach, emphasizing student choice and implicit, incidental, or embedded learning.	
2-4.2	(LC, RC, W) Students are not exposed to rich vocabulary and complex syntax in reading and writing materials.	
2-4.3	(RC) Comprehension instruction focuses mainly on reading a text and answering comprehension questions instead of supporting the process of and providing scaffolds for comprehending texts.	
2-4.4	(RC, W) Writing is not taught or is taught separately from reading at all times.	
2-4.5	(LC, RC) Questioning during read-alouds focuses mainly on lower-level thinking skills.	
Practices Aligned With the Science of Reading		
2-4.6	(LC, RC, W) There is a clear and consistent instructional framework, featuring a comprehensive scope and sequence of elements of language comprehension, reading comprehension, and writing taught in an explicit system.	

2-4.7	(LC, RC, W) Students are exposed to rich vocabulary and complex syntax orally and in reading and writing materials, including, but not limited to, read-alouds at language levels beyond students' reading levels.
2-4.8	(LC, RC, W) For multilingual learners, instruction in English-language development (ELD) and acquisition is included to support reading comprehension and continued reading and writing development.

Section 2: LANGUAGE COMPREHENSION

A NOTE ON EVALUATING LANGUAGE COMPREHENSION

This section may take longer to complete, so it is recommended to review after you are familiar with a curriculum's design. Elements of language comprehension may not be apparent from the lesson title, so be sure to read multiple complete lessons across grade levels to review this section.

Background Knowledge

	Red Flags: Practices Not Aligned With the Science of Reading	Red Flag ✓
2.1	Read-aloud opportunities emphasize simple stories or narrative texts. Read-aloud text is not sufficiently complex and/or does not include knowledge-building expository texts (i.e., topics related to science, social studies, current events).	
2.2	Opportunities to bridge existing knowledge to new knowledge is not apparent in instruction.	
2.3	Advanced (Grades 2-5): For students who are automatic with the code, texts for reading are primarily leveled texts that do not feature a variety of diverse, complex, knowledge-building text sets to develop background knowledge in a variety of subject areas.	
	Practices Aligned With the Science of Reading	
2.4	Read-aloud opportunities for students who are still learning the code and text reading opportunities for students who are automatic with the code feature a variety of diverse, complex texts, including narrative and expository texts above grade-level to develop background knowledge and vocabulary in a variety of subject areas.	
2.5	Opportunities are available to bridge existing knowledge to new knowledge.	
2.6	Opportunities for multilingual learners are identified for building background knowledge in a students' home language and/or by using visuals and clarification whenever possible.	

Glossary

Background Knowledge: A specific subset of knowledge needed to comprehend a particular situation, lesson, or text.

English Language Development (ELD): Instruction that is specially designed for multilingual learners to develop their listening, speaking, reading, and writing skills in English.
Expository Text: Text that provides factual information about a topic.
Narrative Text: Text that relates a series of events; this can include both fiction and nonfiction.

Vocabulary

	Red Flags: Practices Not Aligned With the Science of Reading	Red Flag ✓
2.7	Vocabulary worksheets and activities are used with little opportunity for deep understanding of vocabulary words.	
2.8	Instruction includes memorization of isolated words and definitions out of context.	
2.9	Tier 2 words are not explicitly taught and practiced; students are not given opportunities to use them in their speech, see them in print, and use them in writing.	
2.10	Students are not exposed to and taught Tier 3 words.	
2.11	Explicit instruction in morphology is either absent or not consistently taught according to a scope and sequence (i.e., simple to complex) throughout K-5 instruction.	
	Practices Aligned With the Science of Reading	
2.12	Vocabulary instruction includes robust teacher-student and student-student conversations to illustrate examples and non-examples of the vocabulary word being taught.	
2.13	Vocabulary words are taught deeply by using concept maps, pictures, or other devices that help students understand multiple layers of the word.	
2.14	Explicit instruction in vocabulary for Tier 2 and 3 words is evident, along with instruction of Tier 1 words within texts.	
2.15	Students are given opportunities to use Tier 2 words in their speech, see them in print, and use them in writing (when appropriate).	
2.16	Explicit instruction in morphology is provided with numerous opportunities for students to read and write words with these morphemes and to use morphemes to infer the meaning of words.	
2.17	For multilingual learners, instruction in ELD is included to support continued vocabulary development.	

Glossary
English Language Development (ELD): Instruction that is specially designed for multilingual learners to help develop their listening, speaking, reading, and writing skills in English.
Morphology: The system of meaningful parts, or morphemes, that make up words.

Tiered Vocabulary Words: A means of classifying words due to their level of difficulty and frequency of use. It is important to note that these tiers are *not* related to tiers of instruction in a Multi-Tiered System of Supports.

- Tier 1 Vocabulary Words: Words that are familiar to chilean and occur often in text and conversation (e.g., house, car, dog, school).
- Tier 2 Vocabulary Words: Words that are not likely to be familiar to young children but reflect a concept they can identify with and can use in conversation (e.g., shiver, excitement, remarkable). Tier 2 words can appear in multiple domains and content areas.
- Tier 3 Vocabulary Words: Words that are low frequency and domain or content-area specific (e.g., words like rhombus, molecule, democracy, baroque).

Knowledge of Language Structures

	Red Flags: Practices Not Aligned With the Science of Reading	Red Flag ✓
2.18	Conventions of print, grammar, and syntax are taught implicitly or opportunistically with no evidence of consistent, explicit, simple to complex instruction across all grade levels.	
2.19	Instruction does not include teacher modeling nor sufficient opportunities for discussion.	
2.20	Students are asked to memorize parts of speech as a list without learning in context and through application.	
	Practices Aligned With the Science of Reading	
2.21	There is a clear scope and sequence for teaching conventions of print, grammar, and syntax (i.e., sentence structure) in reading and writing.	
2.22*	There is instruction that attends to the function of words (e.g., parts of speech, phrases, clauses) in context.	
2.23	Instruction attends to sentence-level comprehension, including simple, compound, and complex sentences, as well as cohesive devices within and between sentences.	
2.24	Instruction includes sufficient time for discussion, including teacher modeling of full ideas and complete sentences.	
2.25	The difference in complexity between conversational speaking and sentences found in expository and narrative texts is highlighted.	
2.26	For multilingual learners and speakers of English language variations, an asset-based approach is used to engage in a contrastive analysis between home and school language, including sentence structures, suffixes, and subject-verb agreement.	

Glossary

Cohesive Devices: Words used to connect ideas within a sentence or text (e.g., pronouns, synonyms, connectives including coordinate and subordinate conjunctions).

Contrastive Analysis: A systematic study of two languages (or language variations) with the intent of identifying their structural similarities and differences.

Syntax: The arrangement of words to form sentences in a given language.

Verbal Reasoning

	Red Flags: Practices Not Aligned With the Science of Reading	Red Flag ✓
2.27	Inferencing strategies are not taught explicitly and may be based only on picture clues (i.e., picture walking), and not connecting them to background knowledge and instructional texts.	
2.28	Students do not practice inferencing as a discrete skill.	

	Practices Aligned With the Science of Reading
2.29	Inferencing is explicitly taught within text, including opportunities for metacognition and use of appropriate and accurate background knowledge.
2.30	Students are instructed how to interpret inferential language (i.e., ideas beyond the immediate context) both in reading and in conversation.
2.31	Students are instructed how narrative language is used to describe a series of events, both fictional (e.g., setting, characters) and non-fictional.
2.3	Instruction includes queries to develop a student's metacognitive ability (i.e., to think about their thinking while they read).

Glossary:
Inference: Using prior knowledge and information from the text to comprehend what is not directly stated.
Metacognition: Developing an interactive approach with text to recognize when you do not understand something and having options to know what to do about it.

Literacy Knowledge

Red Flags: Practices Not Aligned With the Science of Reading		Red Flag ✓
2.33	Genre types and features are not explicitly taught.	
2.34*	Genre types and text structures (e.g., cause and effect, problem and solution, sequence, compare and contrast) are not used to understand the purpose of what is being read.	
2.35	Specific text structures and corresponding signal words are not explicitly taught and practiced.	
Practices Aligned With the Science of Reading		
2.36	The structures and features of major genre types (e.g., narrative, information, opinion) are explicitly taught and used to support comprehension and build content knowledge.	
2.37	There is explicit instruction of text structures (e.g., cause and effect, problem and solution, sequence, compare and contrast).	
2.38	There is explicit instruction of signal words that help identify the structure of a text (e.g., cause and effect signal words include “therefore,” “because,” and “as a result,” whereas compare and contrast signal words include “however,” “in contrast,” and “on the other hand.”)	
2.39	Graphic organizers are provided to support student understanding of text and genre types.	

Glossary
Genre: A type of text or literature that has a particular form and style (e.g., poetry, narrative, information, opinion).
Signal Words: Words that signal readers as to the text structure. For example, signal words for cause and effect texts include “therefore,” “because,” and “as a result” whereas signal words for compare and contrast texts include *however, in contrast,* and *on the other hand.*

Section 3: READING COMPREHENSION

	Red Flags: Practices Not Aligned With the Science of Reading	Red Flag ✓
3.1	Comprehension strategies such as identifying the main idea, summarizing, noting text structure, inferencing, and fix ups are not taught and practiced throughout the year using a gradual release of responsibility (i.e., I do, we do, you do) using appropriate instructional text that students can accurately decode.	
3.2	Students are asked to independently apply reading comprehension strategies primarily in short, disconnected readings at the expense of engaging in knowledge-building text sets.	
3.3	Emphasis is on independent reading and book choice without engaging with complex texts.	
3.4	Materials for comprehension instruction are predominantly predictable and/or leveled texts.	
3.5	Students are not taught methods to monitor their comprehension while reading.	
	Practices Aligned With the Science of Reading	
3.6	The foundation for reading comprehension is built through rich, read-aloud experiences before children are able to read independently.	
3.7	Comprehension strategies such as identifying the main idea, summarizing, noting text structure, inferencing, and fix ups are taught and practiced all year using a gradual release of responsibility (i.e., I do, we do, you do) using appropriate instructional text that students can accurately decode.	
3.8	Students are taught and practice comprehension-monitoring strategies.	
3.9	Advanced (Grades 2-5): For students automatic with the code, materials for reading comprehension instruction include sufficiently complex literary and knowledge-building informational texts.	

Glossary

Types of Text:

- *Decodable*: Texts with a high proportion of phonetically regular words matched to common letter-sound relationships previously taught in phonics lessons within accompanying teacher guides.
- *Leveled*: Texts are leveled according to a gradient of difficulty typically based on features like vocabulary, text structures, and content.
- *Predictable*: Texts with predictable text structures such as repetitive sentences, words, and phrases.

Section 4: WRITING

A NOTE ON EVALUATING WRITING

These elements may or may not be included in a comprehensive Tier I curriculum. For this section, review all available instructional materials both within and outside of the core curriculum.

Handwriting

	Red Flags: Practices Not Aligned With the Science of Reading	Red Flag ✓
4.1	There is no direct instruction in handwriting.	
4.2	Handwriting instruction is an isolated add-on.	
	Practices Aligned With the Science of Reading	
4.3	There is explicit instruction related to handwriting (e.g., letter formation, posture, grip), and there are opportunities for cumulative practice.	
4.4	Handwriting is integrated into core reading and writing instruction and follows the sequence of letter learning to form upper and lowercase letters during the teaching of letter-sound correspondences.	

Spelling

	Red Flags: Practices Not Aligned With the Science of Reading	Red Flag ✓
4.5	There is no evidence of explicit spelling instruction, no spelling scope and sequence, or the spelling scope and sequence is not aligned with the phonics/decoding scope and sequence.	
4.6	There is no evidence of phoneme segmentation or phoneme-grapheme mapping to support spelling instruction.	
4.7	Patterns in decoding are not featured in encoding/spelling; spelling lists are based on content or frequency of word use and not connected to decoding/phonics lessons.	
4.8	Students practice spelling by memorization only (e.g., rainbow writing, repeated writing, pyramid writing).	
4.9	Spelling patterns for each phoneme are taught all at once (e.g., all spellings of long /ā/) instead of a systematic progression to develop automaticity with individual grapheme/phonemes.	
	Practices Aligned With the Science of Reading	
4.10	There is a clear scope and sequence for explicit spelling instruction, closely aligned with the phonics scope and sequence.	
4.11	Patterns taught for decoding are also practiced in encoding/spelling lessons.	
4.12	Spelling patterns are taught one at a time and not all at once or in a non-systematic manner.	
4.13	Extensive and recursive practice opportunities, not based on memorization, are provided to spell words both in isolation and in context.	
4.14	(Grades 2-5 Advanced Word Study): Spelling instruction continues in grades 2 and above and includes explicit instruction in vowel teams, variant vowels, and how morphology influences spelling.	

Glossary

Encoding: Using knowledge of individual phonemes in spoken words to spell words both orally and in print; a skill that develops reciprocally to decoding when explicitly taught.

Morphology: The system of meaningful parts, or morphemes, that make up words.

Variant Vowels: Groups of letters that produce the same vowel sound (e.g., ai, ay, eigh).

Composition

Red Flags: Practices Not Aligned With the Science of Reading		Red Flag ✓
4.15	Writing tasks and prompts are provided with minimal instruction for the skills needed to complete them and little time for planning prior to writing.	
4.16	Writing assignments are primarily unstructured with few models or graphic organizers.	
4.17	Conventions, grammar, and sentence structure are not explicitly taught, and opportunities for practice to develop automaticity are not provided; instead, they are addressed opportunistically.	
4.18	Writing instruction and assignments are focused primarily on narrative writing or unstructured student choice.	
4.19	Students are not taught the writing process (i.e., planning, drafting, revising, editing, and publishing).	
4.20	Writing is taught as a standalone skill and is not used to further reading comprehension.	
Practices Aligned With the Science of Reading		
4.21	Writing is taught explicitly through a gradual release of responsibility (i.e., I do, we do, you do) and includes sufficient time for modeling, planning, and brainstorming ideas orally before drafting.	
4.22	Writing tasks and assignments are structured; models and graphic organizers are provided to support composition and executive functions (e.g., goal setting, planning, self regulation).	
4.23	The writing process (i.e., planning, drafting, revising, editing, and publishing) is explicitly taught and practiced.	
4.24	Conventions of print, grammar, and syntax (i.e., sentence structure) are taught explicitly in the context of writing, including activities such as sentence combining and sentence deconstruction.	
4.25	Writing instruction includes a variety of text types (e.g., narrative, informational, opinion).	

Glossary
Syntax: The arrangement of words to form sentences in a given language.

Section 5: ASSESSMENT

****Note: Many assessment systems are not featured as a part of curriculum packages. In this section, review any assessments that are included with curricular materials along with the entire suite of assessments from your school or Local Education Agency.****

NON-NEGOTIABLES: ASSESSMENT

	Red Flags: Practices Not Aligned With the Science of Reading	Red Flag ✓
5.1	Assessments measure comprehension only without additional assessment measures to determine what is leading to comprehension weaknesses (e.g., phonics, phoneme awareness, nonsense word fluency, decoding, encoding, fluency, vocabulary, listening comprehension).	
5.2	Assessments include miscue analysis in which misread words are marked correct if the mistake does not substantially alter the meaning of the text.	
	Practices Aligned With the Science of Reading	
5.3	The suite of assessments from school or the Local Education Agency provides multiple, complementary data points that do not overlap, helping to evaluate students' word recognition and language comprehension abilities.	
5.4	Assessment data is used to differentiate instruction across a Multi-Tiered System of Supports (MTSS) based on student progress.	
5.5	Assessments are standardized, reliable, valid, and efficient for their intended purpose.	

Assessment

	Red Flags: Practices Not Aligned With the Science of Reading	Red Flag ✓
5.6	Assessments result in benchmarks according to a leveled-text gradient.	
5.7	Foundational skills assessments are primarily running records or similar assessments that are based on whole language or cueing strategies (e.g., guess the word by looking at the first letter, use picture support for decoding).	
5.8	Phonics skills are not assessed.	
5.9	Phoneme awareness is not assessed.	
5.10	Decoding skills are assessed using real words only.	
5.11	Oral reading fluency (ORF) assessments are not used.	
5.12	The suite of assessments does not address aspects of language comprehension (e.g., vocabulary, syntax, listening comprehension).	
5.13	Multilingual learners are not assessed in their home language.	
	Practices Aligned With the Science of Reading	
5.14	Assessments include screening, diagnostic, and progress monitoring to inform instruction and prevent future reading difficulties.	
5.15	Foundational skills assessments identify students' instructional needs.	
5.16	Phonics skills are assessed using both real and nonsense words.	
5.17	Oral reading fluency (ORF) assessments are used to assess fluency, usually first grade and beyond.	
5.18	A systematic spelling survey/spelling inventory is used to analyze students' application of phoneme, grapheme, and morpheme knowledge.	
5.19	Phonological and phonemic awareness (PA) are assessed in kindergarten and first grade and in older students who exhibit PA weaknesses as evidenced by appropriate assessment.	

5.20	Assessments address both word recognition and language comprehension (e.g., vocabulary, syntax, writing, listening comprehension).
5.21	Trends in groups of student scores can be used to identify the overall effectiveness of the Multi-Tiered System of Supports (MTSS).
5.22*	Assessments have an explicitly defined purpose that aligns with their use (i.e., distinguishing between quick screeners and more comprehensive diagnostics) and are carefully designed to minimize time taken from instruction.
5.23	Multilingual learners are assessed in their home language when feasible.

Glossary

Diagnostic Assessments: Used to assess specific skills or components of reading (such as phonics or fluency) to help educators plan targeted and individualized instruction.
Grapheme: A letter or letter combination that spells a phoneme; it can be one, two, three, or four letters in English (e.g., i, ou, igh, ough).
Morpheme: The smallest unit of a word that carries meaning (e.g., prefix, suffix, base element).
Multi-Tiered System of Supports (MTSS): A framework for school improvement that ensures all students are supported to meet positive academic, behavioral, and social-emotional outcomes, beginning with core instruction in Tier I and interventions at increasing intensity at Tiers 2 and 3.
Phoneme: The smallest unit of sound in a spoken word; an individual speech sound.
Progress Monitoring: Frequent assessments given to students receiving intervention that measure progress toward acquiring specific skills.
Reliable: The extent to which assessments are consistent over time within the same settings.
Screening/Screeners: Brief assessments given to all students to determine which students are at risk of struggling with reading.
Standardized: Administered and scored in a consistent manner.
Syllable Types: The six common syllable patterns in English: closed, open, vowel-consonant-e, r-controlled, vowel team, and consonant-le.
Systematic Instruction: The use of a planned, logical instructional sequence to introduce concepts, building from the simplest to those that are more complex.
Valid: The extent to which an assessment is accurate (i.e., whether or not it measures what it is supposed to measure).

These guidelines include elements of instruction related to word recognition, language comprehension, reading comprehension, writing, and assessment that are both aligned and not aligned with the science of reading. This resource does not include other essential, contextual elements, including student representation in culturally responsive texts, differentiated learning opportunities to support neurodiverse learners, cultural and linguistic diversity of materials, and opportunities for text choice in older grades. Consider these and other factors when seeking a curriculum that provides equitable learning opportunities for all students.

Additionally, these guidelines serve as an overview. For a more comprehensive rating system of elements to look for in curricula, refer to the Colorado Department of Education's Core, Supplemental, and Intervention Curriculum Review Rubrics, and/or the REL Rubric for Evaluating Reading/Language Arts Instructional Materials for Kindergarten to Grade 5.

NOTES: 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.

Reference Section

This reference section begins with influential reports that consolidate evidence of how to teach reading and writing. The *Introduction* section is supported with research demonstrating principles of teaching reading and writing according to findings from the science of reading, which is a body of scientifically-based research about reading and issues related to reading and writing (see Defining Guide, 2022 for an explanation of what constitutes scientifically-based research). The inclusion of meta-analyses (a systematic literature review) provides the converging evidence of findings for each section. This reference section provides a reliable collection of studies that provide potent evidence to implement the practices aligned with the science of reading.

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