

## Scientifically Based Reading Terms to Know

**Academic Language:** Language of the classroom; an essential part of the oral and written discourse necessary for academic success that should be used liberally throughout the school day. It includes, for example, discipline-specific vocabulary, grammar and punctuation, and applications of rhetorical conventions and devices that are typical for a content area (e.g., essays, lab reports, discussions of a controversial issue.)

**Accent:** Stress or emphasis on one syllable in word or one or more words in a phrase or sentence. The accented part is spoken louder, longer, and/or in a higher tone. The speaker's mouth opens wider while saying the accented syllable.

**Alliteration:** The occurrence of the same sound at the beginning of adjacent or closely connected words.

**Advanced phonics:** Typically occurs in grade 2 and beyond. Students learn about advanced concepts such as vowel teams, vowel-r, consonant -le and begin reading multisyllable words containing prefixes and suffixes.

**Affix:** A morpheme or meaningful part of a word, includes prefixes, roots, suffixes

**Affricate:** Consonant phoneme articulated as a stop before a fricative, such as /ch/ or /j/

**Allophones:** A predictable phonetic variant of a phoneme, such as nasalized vowels.

**Allophonic Variation:** Systematic variability in the production of phonemes; the same phonemes can sound different slightly depending on where they occur in a word.

**Alphabetic principle:** Letters and letter patterns that represent the sound of spoken language.

**Alveolar:** Consonant spoken with the tip of the tongue on the ridge behind the upper teeth, such as /t/.

**Analytic phonics:** Students learn phonics through analogy. Typically found in a balanced literacy program.

**Articulation:** The formation of clear and distinct sounds in speech.

**Articulators:** Any of the vocal organs above the larynx, including the tongue, lips, teeth, and hard palate that we use to create sounds.

**Aspiration:** A puff of breath that accompanies voiceless stop consonants in the initial position.

**Automaticity:** Typically used in regards to fluency. The ability to read letters or words automatically without having to think about it.

**Base word:** Base words can stand alone. They are free morphemes, usually of Anglo-Saxon origin to which affixes can be added.

**Benchmark Assessment:** See Screening and Benchmark Assessment

**Bilabial:** Consonant formed with the lips together, such as /b/.

**Blend:** See Consonant Blend

**Blending:** The process of combining phonemes to create words.

**Chameleon Prefix:** A prefix changed from its abstract form so that it matches the initial sound of the root to which it is attached, such as attach (ad + tach= attach).

**Closed Syllable:** A syllable with a short vowel followed by one or more consonants. Unaccented closed syllables typically have the schwa vowel sound.

**Coarticulation:** When saying a word, the phonemes seem to overlap or are influenced by the adjacent sound, for example, in the word ham.

**Cognates:** Words in different languages that have the same morphemes i.e. geography in English, geografia in Spanish.

**Complex sentence:** Composed of one independent clause and one dependent clause joined by a subordinate conjunction.

**Compound sentence:** Two complete sentences joined by a coordinating conjunction.

**Comorbidity:** When two diagnoses are present. ADHD and Dyslexia have a high comorbidity rate.

**Connected Phonation:** The method of blending phonemes without breaking the speech steam (“mmmmaaaaaannn”). CVC words with initial continuant sounds are able to be stretched and connected in this way.

**Connected Text:** A group of sentences that relate to one another.

**Consonant blend-** When two consonants come together where both sounds are heard, yet flow together i.e. tr, br, and bl.

**Consonant digraph-** When two written consonants represent one sound i.e. sh, ph, th.

**Constitutional Causes of Reading Difficulty:** Neurobiological factors that may include specific learning disabilities, executive function deficits, and limited cognitive ability.

**Continuant Sounds-** A speech sound that can be spoken until the speaker runs out of breath, such as /m/ or /f/.

**Core instruction (Tier 1)-** Daily whole classroom instruction where all students receive an evidence-based, scientifically researched core program. It is sometimes referred to as Universal instruction.

**Criterion-Referenced:** Informal or formal assessments that compare a student's reading skills to a set of skills (criterion) that are identified as needed for mastery.

**Curriculum-Based Measurement:** A criterion-referenced assessment that is tied to specific reading skills and can be used for screening and benchmarking purposes.

**Decoding-** When students decode a word, they translate how a word is spelled into the represented speech sounds. Decoding involves reading.

**Decodable text:** Text that is written using words that utilize phones/decoding skills that students have been taught. Students can read all the words because the words contain known sounds and irregular words have been taught. Each text typically focuses on a phonic pattern that is clearly identifiable and repeated.

**Derivational Suffix:** Added to roots or bases to form new words that change the meaning or the form of the word. Examples: joyful, treatment.

**Diagnostic:** A state board-approved assessment that schools are required to use for students identified through screening as possibly having a significant reading deficiency so as to pinpoint a student's specific area(s) of weakness and provide in-depth information about students' skills and instructional needs. \*

**Digraph:** See Consonant Digraph

**Diphthong-** When two vowels blend together and a slide or shift occurs during the production of the syllable i.e. the /ow/ and /oi/ sounds in cow and boy.

**Dyslexia-** A specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically

result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede the growth of vocabulary and background knowledge.

**Emergent literacy:** Describes the reading and writing experiences of young children before they learn to write and read conventionally

**Encoding:** When students translate the sounds of a word into the corresponding sequence of letters. Encoding is another term for spelling.

**Environmental Causes of Reading Difficulty:** Situational factors, may include inadequate instruction, limited exposure to spoken or written language prior to starting school, or English Language Learners.

**Evidence-Based:** The instruction or item described is based on reliable, trustworthy, and valid evidence and has demonstrated a record of success in adequately increasing students' reading competency in the areas of phonemic awareness, phonics, vocabulary development, reading fluency, including oral skills, and reading comprehension.

**Executive Functions:** Mental skills that students and adults use to manage tasks and achieve goals.

**Explicit Instruction-** Instruction that involves direct explanation in which concepts are explained and skills are modeled, without vagueness or ambiguity. The teacher's language is concise, specific, and related to the objective, and guided practice is provided. \*

**Etymology:** The study of the origins and historical development of words.

**Final-e Syllable:** See Silent-e Syllable

**Five components of reading:** Identified by the National Reading Panel report in 2000: phonological awareness, phonics, fluency, vocabulary, and comprehension.

**Floss rule:** Used when there is one syllable, a short vowel and ends with /f/, /l/, /s/ or /z/ double the ending letter.

**Fluency:** Reading words at an adequate rate, high accuracy, and with prosody. Fluency is measured in Word Count Per Minute (WCPM).

**Free morpheme:** A morpheme that can stand alone.

**Fricatives:** A class of speech sounds articulated with a hiss or friction, such as /v/ or /sh/.

**Frustrational/instructional/independent reading level:** These levels are typically used in conjunction with how accurately a student can read a text. Independent levels are usually between 95%-100%, Instructional between 90%-94%, and Frustrational below 90%. There are several groups that recommend that accuracy should be at 98% in order to not deter from comprehension.

**Generalization:** A pattern in the spelling system that generalizes to a substantial group of words. Commonly referred to as spelling rules.

**Glide:** A consonant phoneme that glides immediately into a vowel.

**Gradual Release of Responsibility:** A teaching methodology that includes “I do” where the teacher models, “We do” where the class works with the teacher or with each other, and “You do” where students work independently.

**Grammar:** The set of rules in a language that governs the forms of words used in context (morphology) and how words can be combined in sentences (syntax).

**Grapheme:** A grapheme is a written letter or letters that represent a single speech sound.

**Heart Word:** Heart words are irregular words that are taught to students using the Heart Word Routine. They do not follow a rule for at least one grapheme that is present in the word. Typically the irregularity is in the spelling of one phoneme, which is usually the vowel phoneme. Heart words can also include regular patterns that the student has not yet learned

**High-frequency word:** High-frequency words (HFW) are the most common words used in the English language. HFW can be decodable or irregular and can be found on such lists such as Fry or Dolch.

**Immediate corrective feedback:** Locating and correcting students’ errors and explaining specifically what each error is and how it can be corrected.

**Inflectional Suffix:** A bound morpheme that combines with a base word to indicate tense, number, mood, person, or gender (peaches, walking).

**Informational text:** Typically a non-fiction text that is structured with topics, examples, information, and ending. It also includes text features such as headings, subheadings, captions, diagrams, photos, and tables. The purpose of the text is to inform/describe/explain to the reader.

**Intensive Instruction (Tier 3):** Typically a small portion of students who need Core+more+more instruction and sometimes labeled as special education. Instruction should occur in small groups of no more than 3. Intervention may include looking at time, intensity, frequency, and group size in order to meet the student’s

needs. The focus of instruction is on foundational skills that are missing. Formal progress monitoring occurs every 7-10 days.

**Interdental:** Consonant sounds spoken with the tongue between the teeth.

**Intonation:** Pitch level of the voice.

**Irregular Words:** Irregular words are often found on high-frequency word lists as many of the most common words in the language contain an irregularity. Irregular words do not follow a typical pattern for at least one grapheme that is present in the word. Usually only one part of the word is irregular, often the vowel. Examples: said, from, the .

**Kinesthetic:** Relating to a person's awareness of the position and movement of the parts of the body. Kinesthetic learning involves movement and is one part of multisensory instruction.

**Labiodental:** Consonant sound articulated with the lower lip and upper teeth, such as /f/ and /v/.

**Language Comprehension Skills-** One variable in the Simple View of Reading leading to reading comprehension which includes the subskills of vocabulary and text comprehension skills.

**Leveled Reader:** Identified by readability rate which is determined by count of words in sentences and length of words. Focused on meaning and high frequency words, tend towards high-interest subjects or stories and have strong support from pictures. May repeat words.

**Liquid:** Speech sound in which air is obstructed but not enough to cause friction, like in /l/ and /r/.

**Long vowel:** A vowel that is spoken with tension in the vocal cords and that is often pronounced with relatively longer duration than lax or short vowels. We sometimes tell students that long vowels say their names. Long vowels are marked with a macron.

**Magic-e Syllable:** See *Silent-e Syllable*

**Metacognition:** The process of considering and regulating one's own learning. While reading, readers think critically about their own understanding as they read. It can be described as "thinking about thinking."

**Morpheme:** A morpheme is the smallest unit of meaning.

**Morphology:** Morphology is the study of word formation patterns.

**Morphophonemic:** The writing system in English takes into account morphemes (units of meaning) and phonemes (sounds) making it morphophonemic.

**Multi-sensory Structured Literacy:** Instructional approach that incorporates systematic, cumulative, explicit, and sequential approaches and utilizes multiple senses at once— visual, auditory, kinesthetic, and tactile (VAKT).

**Narrative text:** The purpose of a narrative text is to tell the story (real or imagined) of an experience, event, or sequence of events. It is typically structured around story elements such as setting, characters, problem, solution, theme.

**Nasal:** Spoken with the air stream directed through the nasal cavity.

**Norm-Referenced:** Formal, standardized assessments that reference a student’s reading skills and ability as compared to other students at the same grade or age level.

**Onset:** The initial written or spoken single consonant or consonant cluster before the first vowel in a single syllable. I.e. str-ip, b-ack.

**Open Syllable:** A syllable that ends in a single vowel that is typically a long vowel sound. Unaccented open syllables typically have the schwa vowel sound.

**Orthographic mapping:** (OM) involves the formation of letter-sound connections to bond the spellings, pronunciations, and meanings of specific words in memory. It explains how children learn to read words by sight, spell words from memory, and acquire vocabulary words from print.

**Orthography:** The writing system of a language. Correct or standardized spelling according to established usage.

**Phoneme:** A single speech sound; words are formed by combining phonemes.

**Phonemic awareness:** A subset of phonological awareness in which listeners are able to hear, identify, and manipulate phonemes, the smallest units of sound that can differentiate meaning. \*

**Phoneme Addition:** An advanced phoneme awareness task in which students create a new word by adding a phoneme to a word. Example: What new word would we create if we added /s/ to the beginning of the word lip?

**Phoneme Blending:** A basic phoneme awareness task in which students combine a sequence of separately spoken phonemes to create a word. Example: What is the word /m/.../a/.../p/?

**Phoneme Categorizing:** A basic phoneme awareness task in which students recognize the word in a set of words that is the odd one out. Example: Which word does not belong: pop, pick, bet, pep?

**Phoneme Deletion:** An advanced phoneme awareness task in which students remove a phoneme from a word to create a new word. Example: The word is slip. If we delete the /s/ sound, what do we have left?

**Phoneme-Grapheme Mapping:** An activity that helps associate phonemes with the graphemes that represent them.

**Phoneme Identification:** A basic phoneme awareness task in which students recognize the same phonemes in different words. Example: What sound is the same in cat, cot, and kept?

**Phoneme Isolation:** A basic phoneme awareness task in which students recognize individual phonemes in a word. Example: What is the first sound in pot?

**Phoneme Manipulation:** Another term for Advanced Phonemic Awareness tasks. These tasks can be remembered by the acronym ROAST: reversals, omissions (deletion), addition, substitution, and transposition (switching).

**Phoneme Omission:** See Phoneme Deletion

**Phoneme Segmentation:** A basic phoneme awareness task in which students segment a word into separate phonemes, saying each phoneme as it is counted, tapped, or signaled in some way. Example: How many sounds are in the word tap? Say each sound.

**Phoneme Substitution:** An advanced phoneme awareness task in which students substitute one phoneme for another to make a new word. Example: The word is tick. Change the /t/ to /p/, what is the new word?

**Phoneme Switching:** An advanced phoneme awareness task in which students switch the order of phonemes to make a new word. The word is tap. Switch the first and the last sounds, what is the new word?

**Phoneme Transposition:** See Phoneme Switching

**Phonics:** A method of teaching reading and writing by developing learners' phonemic awareness, that is, the ability to hear, identify, and manipulate the sounds (phonemes) in order to teach the correspondence between these sounds and the spelling patterns (graphemes) that represent them. \*



**Phonological Awareness:** Awareness of the sound structure of spoken words at three levels: (1) rhyming to onset and rime; (2) segmenting and blending; and (3) manipulating individual phonemes. \*

**Phonological Representation:** The spoken form of a word.

**Phonology:** The study of speech sounds in a language.

**Pragmatics:** The study of how words are used.

**Progress monitoring:** An assessment used to determine whether students are making adequate progress and to determine whether instruction needs to be adjusted. \*

**Prosody:** Oral reading expression, includes pitch, tone, volume, emphasis, and rhythm in oral reading.

**R-Controlled Syllable-** A syllable where r follows the vowel. When this happens, the r shapes the vowel sound and the vowel makes an unexpected sound. Examples: car, bird

**Reading Comprehension:** The end goal of reading; reading comprehension is the ability to read the words on the page and to understand and comprehend the words that have been read. This can be understood and demonstrated through The Simple View of Reading.

**Rhyme:** In rhyming words, the words have the same ending sounds. Onsets are exchanged with an existing rime to create rhyming words. Examples: cat and bat, bite and sight

**Rapid Automatic Naming (RAN):** Measures a student's ability to quickly retrieve the name of a symbol, such as a series of familiar pictured items, colors, letters or numbers. RAN is seen as an indicator of dyslexia.

**Reliability:** How consistently a test provides dependable, consistent measurement of a skill or ability. The same result should be achieved regardless of who administers the test.

**Rime:** The vowel plus all the letters after it (rime) in a single syllable. I.e. str-ip, b-ack

**Scaffold:** Provide support to students in order to help students succeed with mastery of a concept prior to being able to complete it independently i.e. sentence frames, graphic organizers, visual aid.

**Schema:** A student's prior knowledge and experience relevant to a new topic, thus creating links through which new information can be assimilated.

**Schwa:** An unaccented vowel whose pronunciation is close to the short /u/ sound and on occasion a short /i/ sound.

**Scientifically Based:** The instruction or item described is based on research that applies rigorous, systematic, and objective procedures to obtain valid knowledge that is relevant to reading development, reading instruction, and reading difficulties. \*

**Screener:** see *Screening Assessment*

**Screening assessment:** An assessment that provides a quick sample of critical reading skills that will inform the teacher if the student is on track for grade-level reading competency by the end of the school year. A screening assessment is the first alert that a student may need extra help to make adequate progress in reading during the year. \* It is sometimes referred to as a Benchmark assessment.

**Segmenting:** Separating a word into smaller units, such as syllables, onsets, rimes, or individual phonemes.

**Segmentation:** See Segmenting

**Semantic feature analysis:** Helps students recognize similarities and differences among related words through the use of a matrix or grid.

**Short Vowel:** A vowel that usually occurs in a closed syllable and is marked with a breve.

**Sight word:** Any known or familiar, instantly recognizable word, regardless of whether it is phonically regular or irregular, or whether it is a common or uncommon word.

**Sight Recognition:** The ability to immediately and automatically recognize words that have been stored in one's long-term memory.

**Significant Reading Deficiency:** A student does not meet the minimum skill levels for reading competency in the areas of phonemic awareness, phonics, vocabulary development, reading fluency, including oral skills, and reading comprehension established by the state board for the student's grade level. \*

**Simple View of Reading:** Developed by Gough and Tunmer in 1986, this model determines that the product of decoding and language comprehension equals reading comprehension. Without one side of the equation, reading comprehension fails.

**Silent-e Syllable-** A syllable with a silent e at the end that makes the initial vowel long. Examples: bike, made, cube

**Stop Sounds:** A consonant that is produced with a complete obstruction of the air: /p/, /b/, /t/, /d/, /k/, /g/.

**Summative Assessments:** Sometimes called outcome assessments. The most common type of summative assessment are standardized tests that are group administered. Typically given at the end of the school year.

**Structural Analysis:** A reading strategy that focuses on the recognition of morphemes: prefixes, roots, suffixes. Successful readers apply both word analysis and structural analysis to decode multisyllabic words.

**Syllabication:** *See Syllable Division*

**Syllable:** A word or word part that contains a vowel sound.

**Syllable Division:** The process of breaking multisyllabic words into separate syllables using a reliable pattern to aid pronunciation.

**Syllable Division Patterns:** Patterns for dividing words into syllables. There are four major syllable division patterns in English: VCCV, VCV, VCCCV, VV.

**Syllable Types:** There are six syllable types in the English language represented by the acronym CLOVER: Closed, Consonant-le, Open, Vowel Team, Silent-E, and R-Controlled (Vowel-R)

**Syntax:** Is the study and understanding of grammar- the system and arrangement of words, phrases, and clauses that make up a sentence.

**Syntactic awareness:** The ability to monitor the relationship among the words in a sentence in order to understand while reading or composing.

**Systematic Instruction:** A carefully planned sequence of instruction that is thought out and designed before activities and lessons are planned, maximizing the likelihood that whenever children are asked to learn something new, they already possess the appropriate prior knowledge and understandings to see its value and to learn it effectively. \*

**Synthetic phonics:** Uses an explicit, systematic approach to teaching phonics. Students learn to read by blending English sounds to form words.

**Tactile:** Relating to the sense of touch.

**Target Instruction (Tier 2):** Small groups of 3-7 students who are at risk of failing and receive a double dose of instruction: Core+more. Formal progress monitoring occurs every 10-14 days.

**VAKT (Visual, Auditory, Kinesthetic, Tactile):** *See Multisensory instruction*

**Validity:** A test is valid if it measures the skill or ability it says it is measuring. The results are used to make useful, accurate, and beneficial decisions.

**Velar:** Sounds produced when the tongue and the roof of the mouth contact near the soft palate or velum.

**Voiced:** Consonant sounds articulated with vocal vibration, such as /z/, /v/, /g/.

**Voiceless:** Consonant sounds articulated with no vocal vibration, such as /s/, /t/, /k/.

**Vowel:** A class of open speech sounds produced by the easy passage of air through a relatively open vocal tract. Written vowels in English are a, e, i, o, u, and sometimes y.

**Vowel-R Syllable:** See R-Controlled Syllable

**Vowel Team:** When two adjacent vowels say one sound i.e. **toad**, **meet**, **head**. Some vowel teams also include consonants to represent the vowel sound like in the vowel teams igh, ow, ough.

**Vowel Team Syllable:** A syllable that contains a vowel team grapheme.

**Word Analysis:** A reading strategy that focuses on syllables and applying syllable division principles. Successful readers apply both word analysis and structural analysis to decode multisyllabic words.

**Word Awareness:** Having the ability to separate words in a spoken sentence, can be developed in your children before they start school.

**Word Recognition Skills:** The application of decoding skills; Successful word recognition is the ability to read written words accurately and effortlessly.

**Word Study:** Word study allows students to learn about predictable patterns in the language and read any new word by applying word analysis skills and structural analysis skills.

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\* Definitions obtained from READ act rules from the State Board of Education