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Evaluating Literacy Curriculum: Making Sure Elementary Students Learn to Read

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ABSTRACT

Reading problems for adults and school-age students have significant and varied costs. Existing as an illiterate citizen in the United States has monetary consequences such as living expenses, career relevance, and societal advancement. American employers spend money to edify prospective employees in areas of remedial reading, writing, and mathematical skills. Educators must act on scientific research to select appropriate literacy curriculum to teach students to read. As reading is not a natural process, teachers must teach students to read using materials aligned with the science of reading. Utilizing document analysis to evaluate learning to read instructional materials and strategies must incorporate all the fundamentals and modalities in one complete, research-based curriculum. Knowing how to purposefully evaluate literacy curriculum is necessary for teaching all students to read. A dynamic, reading curriculum evaluation tool is necessary to determine alignment to the science of reading with an accredited literacy curriculum.

1. Introduction

Teachers, administrators, and instructional coaches have the arduous task of selecting the reading curriculum for their students. This task is intimidating because students learning to read is vital to a successful life. Many reading curriculums and programs are available at varying prices from commercial companies for schools to select. In fact, the curriculum decision-makers are inundated with claims from commercial reading programs stating their curriculum is best. To make things even more complicated, reading is such a complex task that involves dependent variables such as student diversity, student prior knowledge and student ability that requires the curriculum decision-makers to address a variety of issues (O'Cummings & Gerver, n.d.). Children who fall behind their fellow students in learning to read in the early grades are at increased risk for chronic failure (Juel 1988; Lonigan, Burgess, and Anthony, 2000). A substantial number of students never master the reading process. It continues to be a challenge all through life.

Multiple modalities address reading development of children learning to read as well as address reading differences. The most effective, however, are grounded in science-based reading

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instruction, objective, evidence-based methodologies. The science of reading adheres to a body of research from "…education, cognitive psychology, developmental psychology, and neuroscience…" (Jenner, 2021). The science of reading, with the support of research, identifies how people learn to read as well as significant strategies for appropriate instruction. Thanks to technology and an understanding of neurobiology, educators and researchers understand how the brain learns to read whether one is a typical or struggling reader. It is important for educators to understand what skills are needed to be a proficient reader. These advances in research affect how reading is taught and what methods do not provide support for the new reader.

Based on The National Reading Panel (NRP) Report (National Institute of Child Health and Human Development {NICHD}, 2000), meaningful learning to read instruction centers on five significant components: phonemic awareness, phonics (word recognition), fluency, vocabulary (language comprehension), and comprehension. These five components compose the WHAT (content) of teaching reading. In addition to the five components detailed by the NRP, spelling cannot be left out of a reading curriculum. According to Gentry & Ouellette (2019), spelling assists the brain to be specialized for reading as it collects brain-based spelling representations. This process is known as orthographic learning. In other words, the NRP should have included spelling in its claim of the five important components for learning to read.

As this learning progresses, so does fluent reading (Seidenberg, 2017). As described eloquently in the frequently used Simple View of Reading, decoding times language comprehension is equal to reading comprehension (Gough & Tunmer 1986). Scarborough (2001) enhances this simple view of reading by providing descriptors for each category. Language understanding includes reader background knowledge, vocabulary knowledge, language structures, verbal reasoning, and literacy knowledge. Word recognition includes phonological awareness, decoding (spelling) and sight recognition of words. Scarborough affirms that language comprehension and word recognition are intertwined to build a skilled reader who is confident in reading fluency and synchronization of word detection and text comprehension. Reading is a multidimensional skill that learners slowly attain over years of effective instruction and regular practice. Practice and instruction lead the reader to become automatic and increasingly strategic (Scarborough, 2001). Skillful reading and reading comprehension are the ultimate result. Meaningful reading is when all strands of Scarborough's reading rope are firmly interlocked together. When even one strand is distressed, the entire braided rope is weakened.

In addition to the specific five components of effective teaching of reading, several other elements should be considered: teaching handwriting, writing skills, learning to spell, and using various assessments. While some educators may scoff at the teaching of handwriting, it does play a significant role in reading and learning. According to Asher (2006), handwriting instruction is vital to literacy instruction, but very little explicit instruction in handwriting is done in schools. Students who learn handwriting not only understand how to read more precipitously, they also are better at producing thoughts and retaining knowledge. Students who write by hand create more words at a faster pace than when typing on a computer keyboard as well creating more ideas and thoughts (Konnikova, 2104). Several studies have identified the connection between handwriting and the writing experience as they are related in learning to read (Abbott & Berninger, 1993); Berninger et all., 2002; Jenkins et al., 2004; Juel, 1988; Juel et al., 1986; Shanahan, 1984; Tierney & Shanahan, 1991). According to Pugh et al. (2006), neuroimaging studies indicate that the reading part of the brain and the writing part of the brain overlap in the same region.

Along with handwriting and writing skills, teaching students to spell is an important aspect of learning to read. Research studies indicate that learning to spell and learning to read depend on

a significant amount of fundamental knowledge like the relationship between letters and the sounds the letters represent. Catherine Snow et. al. (2005) addresses the value of spelling for reading, "Spelling and reading build and rely on the same mental representation of a word. Knowing the spelling of a word makes the representation of it sturdy and accessible for fluent reading." According to Ehri and Snowling (2004), students who are able to "by sight (i.e. automatically)" read words are better able to use orthographic mapping skills. Students who are poor spellers are more likely to limit what they write due to lack of spelling skills. As a result, the lack of spelling skills leads to a loss of verbal power (Moats, 2005). It is difficult for students with low spelling skills to spend the necessary cognitive resources on trying to spell a word. This lack of spelling skills may cause the writer to lose track of his/her thoughts because so much time is spent on trying to spell.

While all the above elements of literacy curriculum address the WHAT of a reading curriculum, the HOW of the learning to read curriculum cannot be forgotten: simultaneous and multisensory, methodical and cumulative, direct instruction, analytical teaching and instruction (assessment), as well as synthetic instruction. Authentic and purposeful teaching is done using all the learning conduits in the brain such as visual/auditory, kinesthetic/tactile simultaneously to augment memory and learning. Students' various sensory modalities are employed to make neural links that propel learning to read and move toward mastery (Birsh & Ghassemi, 2010). According to Farrell & Sherman (2011), requiring students to use more than one of their senses drives learner engagement.

Another essential element of a reading curriculum is systematic and cumulative instruction or the HOW of a learning to read curriculum. Multisensory language instruction necessitates that the design of curriculum and resources follow the reasonable arrangement of one's language. The progression must begin with the easiest and most foundational elements and proceed systematically to more complicated literacy skills (Ehri, et. al, 2001). Progress is grounded in skills already learned. The learner must regularly review foundational reading concepts to strengthen memory.

Direct instruction or explicit teaching plays a key role in how a reading curriculum is taught. The inferential understanding of any literacy skill or concept cannot be taken for granted. Multisensory language instruction requires the explicit teaching of all skills with continuous student-teacher interaction. Compared to other strategies for instruction, direct instruction is particularly beneficial for students with learning differences, but all learners benefit (Marchand-Martella, et., al, n.d.). Direct instruction can have a range of benefits for all learners.

Another element of a learning to read curriculum is assessment used for diagnostic teaching. Teachers must know if students are learning. Hamilton, et. al. (2009) state that using data purposefully, pose questions, and gather understanding regarding student progress in a meaningful way promotes teacher ability to adapt instruction to the needs of those learning to read. Equipped with information and the ability to gather this information provides teachers with the necessary learning opportunities students need to read. The process of assessing relates to the actions and decisions educators take as assessments are given to learners, data is collected, interpreted, and shared. (Sedita, 2019). The teacher must be adept at meeting learners' individual needs. The instructional plan is developed on careful and continuous assessment of the learner's needs.

Lastly, a reading curriculum should include synthetic, or present the parts of the language and then teach how the parts work together as a whole. While analytic instruction presents the whole and teaches how it can be broken down into its component parts. Multisensory, structured language programs include both synthetic and analytic instruction. Synthetic instruction presents the individual components of language and then instructs how the parts

work together to create a whole. Analytic instruction presents the whole and teaches how language can be broken apart into smaller parts. According to the National Reading Panel (2000), using both synthetic and analytic instruction is equally important when teaching students to read. Both types of instruction provide students with a learning advantage.

Important to note, research shows a similarity in the development of literacy between English Learners and native English speakers. Their brains learn to read in the same way. "Studies show networks of brain activation that are similar across a reader's two languages in linking print and speech processes and in supporting phonological awareness, grapheme-phoneme mapping, morphological decomposition, syntactic binding and text and situation modeling with support of uniform control networks" (Verhoeven, L., Perfetti, C., & Pugh, K., 2019). A scientific, evidence-based practice to address the needs of ELs is the direct, explicit instruction of sounds in both English and their native language. Systematic comparisons between the language they are learning to read and write, and their oral language are important.

2. Purpose

With so many crucial elements to effective reading instruction, it is vital that an effective learning to read curriculum is used. The question becomes what an effective learning to read curriculum is. It is worthy to note that a difference does exist between learning to read curriculum and reading programs. Curriculum is important in any educational system. Curriculum outlines principles, knowledge and skills that are taught to learners, influences teaching strategies, resources, and materials while highlighting various assessments of students at each grade level (Mulinti, 2021). Wiles and Bondi (1986) declared curriculum is a standard or established standards rooted with ideals, which are attained through a progressive process of classroom activities and experiences. According to Chidananda (2019), a curriculum is all the academic and non-academic experiences of learners in a school. Curriculum is thought to be the essential mainstay of how students are educated, trained, and engaged in official learning events (Dodd, 2020). A curriculum is the "What" (content) and the "How" (instruction) curriculum should help students learn to be literate. For this investigation, a reading curriculum is a specific set of courses, coursework, content, materials, resources, assessments, scope and sequence, and teaching strategies that provide students with opportunities to learn how to read. A learning to read curriculum for this investigation also includes the WHAT and HOW of a curriculum. A reading program merely provides learning activities for a reading content area. It is understood that curriculum is a dynamic document created from research-based theories and values that are designed for workable and practical learning opportunities which provide students with knowledge and skills necessary for a particular content area and grade level.

Most educators acknowledge that curriculum is one of the most crucial factors in learner success. Educators employ curriculum to safeguard that all learners meet the expected standards. Therefore, curriculum should be gauged to guarantee students learn the necessary knowledge and skills in the best way possible.

3. Methods

For this investigation, the qualitative research of document analysis, which is a social, systematic type of research, in which documents are elucidated by a researcher to articulate meaning concerning an assessment subject (Bowen, 2009) is used. As all the text, materials, or instructional strategies within the document were not created or recorded with the researcher's intervention, such documents are considered "social facts" (Atkinson & Coffey, 1997). Merriam (1988) states, "Documents of all types can help the researcher uncover meaning, develop understanding, and discover insights relevant to the research problem" (p. 118).

In this case, the research question is how a learning to read curriculum rates when evaluation rubrics are used to identify if the elements of the science of reading are applied. A curriculum analysis to determine if and how many elements of the science of reading were present as well as how the curriculum was applied with early readers. A score in this analysis is the presence of researched-based, science of reading components used and applied in the teaching of learning to read curriculum. O'Leary (2014) poses three types of document analysis (Public Records which would include birth certificates, land deeds and the like, Personal Documents perhaps a diary or letters, and Physical Evidence or an artifact). The physical evidence or artifacts used in this investigation include the written curriculum, the materials and resources used for teaching, instructional practices, assessments, and educator training materials. This research method required the researcher to determine data selection, such as learning to read curriculum and the evaluation tool used, instead of data collection. This research method was selected as the most unobtrusive to teachers and students. To maintain an unbiased analysis (Yin, 1994), the researcher selected a reading curriculum that she did not write any part of or receive financial gain from its use in the analysis or within schools and universities. In addition, learning to read curriculum was created, maintained, and supported by a non-profit organization titled The Apple Group.

For the investigation, *Connections: OG in 3D*® (Frierson & Scholtens, 2014) learning to read curriculum document was analyzed using the Curriculum Evaluation Tool (CET) from The Reading League (2020). The mission of The Reading League, a national non-profit organization led by teachers and reading researchers who seek to improve the perception, knowledge, and usage of evidence-based reading instruction. The Reading League's curriculum evaluation tool was selected for this analysis because it features elements that support the Simple View of Reading (Gough & Tunmer, 1986) and Scarborough's Rope (Scarborough, 2001). In addition, The Reading League's learning to read curriculum evaluation tool was developed based upon the science of reading (Jenner, 2021; National Institute of Child Health and Human Development [NICHD], 2000). Furthermore, this evaluation tool was used as it is seen as a dynamic document that will be updated as new research is identified. Thus, it will be updated as new research emerges.

4. Results

In evaluating the learning to read curriculum from The Apple Group (2014) *Connections: OG in 3D*® (Frierson & Scholtens, 2014) using the curriculum evaluation tool from The Reading League (2020), all criteria were met. Every aspect of word recognition and language comprehension was addressed. With the expectations met, the significance is that students learning to read have every opportunity to experience the necessary knowledge and skills for success. In other words, The *Connections: OG in 3D*® (Frierson & Scholtens, 2014) learning to read curriculum met all the necessary content elements or the WHAT of learning to read. Based on The Reading League's (CET) (2020), the HOW to teach students to read was met as well.

Table 1 provides an overview of the entire CET document used for the curriculum analysis. Section 1 of the table provides elements of the curriculum that promote word recognition. *Connections: OG in 3D*® (Frierson & Scholtens, 2014) curriculum section 1 criterion lists how word recognition is taught and assessed. For example, the student is to practice sounds with letters, spelling as well as breaking words down into their parts using fingerspelling as well as object spelling. Encoding is practiced with writing sentences.

Sections two-four in Table 1 provide the overview that all the criterion of the *Connections: OG in 3D*® (Frierson & Scholtens, 2014) curriculum is aligned with language and reading

comprehension as well as writing skills. In Appendix 1, several examples of how these comprehension skills are addressed and achieved. Section 2 of Appendix 1 identifies that vocabulary is directly taught via spelling practice and sentence writing. The students also engage with Personalized Readers that are read several times, illustrated, and various mastered skills are practiced such as using a green pencil to circle the suffixes learned. Reading comprehension incorporates read-alouds in fictional text and non-fiction texts. Reading comprehension strategies for both types of texts are taught and utilized. The importance of background knowledge is addressed in the curriculum as well as the toll vocabulary plays in reading comprehension.

The final section, five, addressed the importance of assessment in teaching reading. *Connections: OG in 3D*® (Frierson & Scholtens, 2014) curriculum. Assessment is an important element throughout the entire curriculum. Assessment takes place formally and informally. Assessment takes place at the beginning of every lesson in the form of I Do, We Do, You Do. Any letter or sound that is not pronounced correctly, must be retaught until mastery. Blending drills are a part of every lesson. The sounds learned previously are reviewed at each meeting. Assessment takes place when using the Personalized Reader as well as spelling and writing practices. Various checkpoints throughout the curriculum are used: after each lesson, after every 5 lessons, and so on. Fluency checks are done at the end of each lesson. The *Connections: OG in 3D*® (Frierson & Scholtens, 2014) curriculum clearly meets all of the standards set up by The Reading League's Curriculum Evaluation Tool and even goes beyond in several areas.

Table 1.
The Reading League's Curriculum Evaluation Tool Applied to The Connections: OG in 3D® Curriculum

NON-NEGOTIABLES	**PRESENT IN Connections: OG in 3D®**	**PRACTICES ALIGNED WITH THE SCIENCE OF READING**
SECTION 1: Word Recognition	Yes	Explicit, systematic scope and sequence skills building provide opportunities for practice in phonics, decoding, fluency, and encoding
SECTIONS 2-4: Language Comprehension (LC), Reading Comprehension (RC), and Writing	Yes	Clear and consistent instructional framework with a comprehensive scope and sequence of elements of language comprehension, reading comprehension, and writing taught in an explicit system. Students exposed to rich vocabulary and complex syntax in reading and writing materials and orally at language levels beyond students' reading levels.
SECTION 5: Assessment	Yes	Assessments provide multiple data points to understand students' word recognition and language comprehension abilities. Assessment data is used to differentiate instruction across tiers of instruction based on student progress.

Used with permission from The Reading League (2022) "Curriculum Evaluation Guidelines". www.thereadingleague.org/curriculum-evaluation-guidelines. The completed scoring tool can be found in Appendix A.

Document analysis identified the curriculum did have several elements in the teaching and learning of reading in the HOW approaches, which were not addressed in the curriculum evaluation tool; the use of multisensory teaching and learning, ongoing training and support for the educators who use the curriculum, and accreditation from an international reading organization or any accrediting body. Ideas are taught from concrete to abstract, via a hands-

on, kinesthetic approach with 3-D materials. 3-D objects developed from the multisensory approach of teaching learners to read using the Orton-Gillingham (Gillingham & Stillman, 1960, 1997) approach. The learner can "hold" and manipulate sounds using 3-D objects in their hands. For instance, a 3-D object used in this learning to read curriculum might be an actual apple. The student holds the apple, smells the apple, and even tastes the apple, if appropriate, to understand the short vowel sound of /a/. The *Connections: OG in 3D*® (Frierson & Scholtens, 2014) curriculum is unique from other Orton-Gillingham learning methods (Gillingham & Stillman, 1960, 1997) {OG} because it incorporates objects for learning the foundational skill of phonemic awareness. By holding the object, which represents the sound the student is learning, he/she/they can "feel" the sound, thus making more connections to the brain to remember that sound. Objects are used to teach phonics and spelling patterns based on the position of the sound in a word. An object is used for each way a sound is spelled. 3-D objects are used to teach phonological awareness, vocabulary, comprehension, and handwriting.

Another element found in the *Connections: OG in 3D*® (Frierson & Scholtens, 2014) curriculum, but not within The Reading League's CET is the accreditation of the curriculum from a well-known, international professional organization such as The International Dyslexia Association. While the curriculum is geared toward teaching all learners how to read, the *Connections: OG in 3D*® (Frierson & Scholtens, 2014) curriculum is also valued for working with students who show the characteristics of dyslexia. The CET did not address if a curriculum is accredited. It seems significant for a learning to read curriculum to be accredited by a professional organization. While the accreditation status is not located within the actual curriculum, it is noted in the preview and introductory information. Accreditation in literacy curriculum is a voluntary process with no monetary exchanges. Accreditation can improve curriculum as it provides set guidelines and frameworks for how materials and strategies for teaching learners to read. In this manner, a curriculum can align with an established vision, purposes, and objectives. Accreditation provides, in this case, that the learning to read curriculum has met specific standards and quality.

Lastly, the CET did not address any type of educator training and preparation for using a learning to read curriculum while the *Connections: OG in 3D*® (Frierson & Scholtens, 2014) curriculum did. If educators do not receive any type of instruction or guidance on how to successfully and with fidelity implement a curriculum, there is little guarantee the curriculum will be used appropriately. If the curriculum is not used appropriately, there is little guarantee that learners will be successful.

5. Conclusions

The purpose of evaluating a learning to read curriculum is to determine if it meets or exceeds the standards established by national accrediting bodies in the field. Using document analysis as an evaluation tool can provide relevant data by what is present as well as by what is lacking in the curriculum. *Connections: OG in 3D*® (Frierson & Scholtens, 2014) curriculum was not lacking in any area according to the CET of The Reading League. As the CET is based upon the science of reading research and practices, *Connections: OG in 3D*® (Frierson & Scholtens, 2014) curriculum is appropriate, includes purposeful materials and resources for teaching students to read.

Vital aspects for a learning to read curriculum, such as use of multiple modalities, 5 components of effective reading instruction are phonemic awareness, phonics instructions, word recognition, fluency, vocabulary, and comprehension as well as how these elements are taught must be present in a learning to read curriculum. After significant document analysis on

the *Connections: OG in 3D*® (Frierson & Scholtens, 2014) curriculum, each aspect of learning to read is addressed in several locations within that curriculum. For example, language comprehension and reading comprehension are addressed in every lesson with the use of a Personalized Reader. This reader is addressed at the conclusion of each lesson. The learner prints his/her/their name in the blanks already provided. As such, the story becomes about him/her/they. The teacher reads the story first to model fluency. The learner then reads the story. Vocabulary is addressed by discussing any unfamiliar words that appear in the story. Discussion between the teacher and the learner works through the term's meaning. The learner goes on to illustrate what was read in the story. Another discussion takes place as the learner explains how the illustration relates back to the story. The learner reads the story again. The last step is for the learner to spend time with the story by annotating various aspects such as circle the jailbird words or sight words. Use a different colored pencil to underline words that follow the new spelling rule that was learned such as the Floss Rule or a newly learned suffix. Each element of the learning to read approach is addressed in the Personalized Reader. All phonology and phonological awareness with related orthography is applied in the reader. The teacher utilizes both synthetic and analytic instruction with the use of the Personalized Reader because parts of the language are presented and then the reader works to put parts together to form a whole. Analytic instruction is present as the whole and then how it can be broken down into component parts.

The Personalized Reader is the culmination of a specific learning objective taught in a systematic manner. After direct instruction of the entire lesson, the Personalized Reader allows for any diagnostic information regarding syllable instruction, morphology and syntax. As the *Connections: OG in 3D*® (Frierson & Scholtens, 2014) curriculum requires mastery, if any of the learning to read elements are not used correctly and fluently, the learner must go back to that lesson for additional learning. Every researched-based element of teaching someone to read was used in multiple modes in The *Connections: OG in 3D*® (Frierson & Scholtens, 2014) curriculum. Evaluation of student learning is ongoing and so should evaluation of learning to read curriculum.

Evaluation's purpose is to gather, examine, and share data for decision-making matters regarding a curriculum and whether that curriculum revision or replacement. *Connections: OG in 3D*® curriculum met each of the reading components necessary to teach students to read according to The Reading League's curriculum evaluation tool. An essential element of learning to read curriculum is the implementation of that curriculum. While the CET did not address implementation, the *Connections: OG in 3D*® (Frierson & Scholtens, 2014) curriculum did. The *Connections: OG in 3D*® (Frierson & Scholtens, 2014) curriculum incorporated all aspects of the science of teaching reading as well as other vital areas of reading, such as handwriting. Each lesson has a section where the learner practices specific handwriting skills.

Additional data from learning to read curriculums used is collected from schools and school districts across the country to determine if the curriculum is effective in teaching students to read. Further investigations are needed to determine if a common learning to read curriculum evaluation tool is available, applicable, and relevant. Related to establishing a complete reading curriculum evaluation tool, the teachers implementing that curriculum should be part of the conversation. Regardless of how robust a reading curriculum (WHAT and HOW) may be, the role of the teachers who execute it plays a role in the curriculum's ultimate effectiveness. This role should be part of further curricular investigations.

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Appendix A

Curriculum Evaluation Tool from The Reading League: Connections: OG in 3D® Curriculum (Frierson & Scholtens, 2014)

CRITERION Practices Aligned with the Science of Teaching Reading	PRESENT	COMMENTS
Section 1: Word Recognition		
1. Explicit instruction of phoneme awareness, phonics and spelling	Yes	PART TWO, in every lesson, provides instructions for directly, explicitly teaching the new sound or skill.
2. Systematic Scope and sequence of skills building from simple to complex	Yes	Lessons are cumulative and follow a logical order. The scope and sequence presents the alphabetic principle in order of frequency of use, from simplest to most complex. Concepts are taught from concrete to abstract, through hands-on lessons with 3D materials included in the Connections training. Students can "hold" and manipulate a sound in their hands. 5 levels of phonemic awareness, 26 letters, 44 sounds, and 166+ ways to spell those sounds are taught using multisensory techniques and manipulatives. Students learn syllable-spelling conventions to determine vowel pronunciation.
3. Curriculum and support materials that provide opportunities for practice and interweaving of elements taught (e.g., phonics, decoding, encoding)	Yes	Application of sound to symbol knowledge, spelling rules and patterns, grammar, comprehension, and fluency are practiced using nonsense words, real words, phrases, sentences, and connected text. 100% decodable Personalized Readers provide decoding practice. Vocabulary (including multiple meanings and figures of speech) is learned by developing semantic networks of ideas and relationships. To ensure automaticity, frequent distributive practice and checkpoints for mastery are built into each lesson.
Phonological and Phoneme Awareness		
4. Instruction includes larger units of phonological awareness (syllable, rhyme, onset-rime) in Pre-K and beginning of K (Note: instruction should progress to the phoneme level as soon as possible	Yes	Direct, explicit instruction is provided at all levels of phonemic awareness, following a continuum showing the hierarchy of phonological skill acquisition Paulson (2004). The students are taught one or two skills at a time, followed by frequent distributive practice designed to meet the individual needs of each student. The concept is introduced in a whole class setting, with progressive differentiation provided for each student with multiple multisensory activities for each level in small groups. This differentiation is practiced at the beginning of each lesson, during the 2-3 minute warm-up.
5. Phoneme awareness is taught directly, explicitly, and systematically	Yes	Activities in the Phonemic Awareness Kit provide detailed instructions for direct, explicit teaching. Instructional routines for systematic teaching are found in the Reference Folder. Assessment charts and checklists are provided in the Reference Folders, guiding the teachers to know which activity in the kit to use for that lesson.
6. 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, vocal cord voicing are happening	Yes	Articulatory features of phonemes and words are explicitly taught using a mirror, describing the speech sound, or using a hand gesture, mouth pictures, and objects to illustrate the way the speech sound is produced.

CRITERION **Practices Aligned with the Science of Teaching Reading**	PRESENT	COMMENTS
7. Instructional focus on attuning students to all phonemes in words (e.g., first, final, medial, individual phonemes in blends)	Yes	The phonemic awareness kit has five levels of phonemic awareness and three activities for each level. There are explicit instructions included for the 15 activities.Bags 3, 4 and 5 work on isolating the first, medial, and last sounds. Fingerspelling is used in every lesson for phoneme/grapheme mapping, attuning to each phoneme. The student uses fingerspelling in every lesson to identify sounds, sound placement in a word, leading to phoneme/graphing mapping.
Phonics and Phonic Decoding		
8. Letter-sound correspondence are taught to automaticity in an explicit manner	Yes	Curriculum provides instructions for directly, explicitly teaching the new sound and the letter/s that represent the sound. The phoneme/grapheme correspondence is "locked in" though five multisensory steps. Automaticity is practiced and assessed through the visual, auditory, and blending drill at the beginning of each session. before moving on in the lesson. Reteaching the letter-sound correspondence may be necessary before moving on in the lesson if automaticity has not yet been achieved.
9. Phonics instruction includes cumulative review including application in reading and writing	Yes	Drill work is a cumulative review of all skills taught prior to the student's new learning in each session. Everything in the student's drill pack has been previously taught. The sentences to read and write have words using skills and Jailbird Words (words in red) taught in the current lesson, as well as previously mastered lessons. Review is built in with frequent distributive practice of reading word cards. Reading sentences, command sentences and Personalized Readers all provide practice. Students are able to use their old learning from previous lessons combined with new learning taught in every lesson, because the lessons are systematic and cumulative.
10. 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)	Yes	Lessons are cumulative and follow a logical order. The scope and sequence presents the alphabetic principle in order of frequency of use, from simplest to most complex. Concepts are taught from concrete to abstract, through hands-on lessons with 3D materials.
11. Segmenting and blending are taught explicitly and practiced regularly, in both decoding and encoding	Yes	Segmenting and blending are explicitly taught in the blending drill and in the words for reading and spelling part of the lesson. In the beginning, students are taught to blend initial sounds using objects. Students are taught through teachers modeling how to use their fingers to represent a sound, pulling them all together to blend a word or syllable. This decoding is practiced daily in the blending drill. Fingerspelling is also used daily in the spelling part of the lesson. Students are taught how to blend the sounds and read the word on each card. In the Spelling part of each lesson, students segment the word, holding up a finger for each sound. They map the word from phoneme to grapheme, encoding the word using movable alphabet or by writing it.

CRITERION **Practices Aligned with the Science of Teaching Reading**	PRESENT	COMMENTS
12. Explicit instruction directs students' attention to the structure of the word; the emphasis on phonic decoding	Yes	Attention to the graphemes and the sounds they represent are the focus of reading and spelling each word. Morphemes are found, marked, and analyzed, starting in lesson 4. Attention is paid to the position of the vowel within syllables to decode the word. All previously taught spelling patterns, rules, and multiple spellings are practiced as students decode words.
13. Irregular high-frequency words are taught by drawing attention to both regular and irregular sounds once sound-spellings have been taught	Yes	This curriculum calls these types of words "Jailbird" words because they seem to break the rules of spelling and sound. Students learn that orthographic mapping involves letter-sound connections to bond the spellings, pronunciations, and meanings of specific words in memory, whether the word is spelled "regularly" or is a Jailbird Word. The word is analyzed by deciding if each sound is spelled in the most frequent way. Attention is paid to the part that is spelled in an unexpected way. Students mark that part of the word and proceed to practice the word using the 'locking in" multisensory procedures.
14. Opportunities to practice decoding words in isolation are provided	Yes	Drill work at the beginning of each lesson is for this purpose. In the reading and spelling part of each lesson, students practice decoding words in isolation. This is also done with the fluency practice sheets.
15. Instruction includes spaced practice and interweaving of skills taught (e.g., practicing old and new phonics patterns in one activity, practicing a learned phonics pattern in reading and spelling	Yes	Lessons are systematic and cumulative. Daily drill work provides cumulative review. Each lesson contains review of the sounds, skills, patterns, and rules of the lessons before, providing review and mastery. Every sound and multiple spelling is reviewed at the beginning of each lesson, becoming a checkpoint for mastery. Every reading and spelling rule, and every syllable type and syllable division rules are reviewed. Each lesson provides guided practice of everything the student has learned thus far. In word reading, word spelling, sentence reading, sentence dictation and reading connected text, the student encounters everything he has learned up to that point in the curriculum. This provides deliberate practice and mastery through spiraling review, as well as frequent distributive practice within the lesson.
16. Phonics skills are practiced by applying letter-sound knowledge in decodable texts that match the phonics elements taught, securing phonic decoding	Yes	Decodable readers were created for each lesson to practice the new learning in context. The readers include the new skill and skills learned previously in the lesson. In lesson 1-30, the decodables are 100% decodable. In lesson 31-60, they are above 95% decodable.
17. Advanced word study (grades 2 and above): instruction begins with basic-letter sound correspondences followed by increasingly more complex patterns such as syllable types, morphemes, etymological influences (i.e., word origins)	Yes	Connections teaches students the entire structure of the English language. In addition to phoneme-grapheme correspondences, students become aware that the English language is morphophonemic, as layers of etymology and morphology are added in the lessons. Application of sound to symbol knowledge (including multiple spellings), spelling rules and patterns, syllable types, morphemes, and word origin become more complex in later lessons.

CRITERION **Practices Aligned with the Science of Teaching Reading**	PRESENT	COMMENTS
18. Advanced word study (grades 2 and above): Includes more advanced phonics skills (e.g., second sounds of c/g, diagraphs, variant vowels)	Yes	This curriculum is not based on grade level, but mastery. As such, each skill is taught based on mastery of the previous skill. Diagraphs, variant vowels and second sounds and multiple spellings are taught in a systematic manner from simple to complex, in order of frequency.
19. For multilingual Learners, once they decode the word accurately, supports (e.g., descriptions, pictures, or gestures) are used to teach or confirm the meaning of the decoded word (s)	Yes	Once multilingual learners decode the word accurately, supports are used to confirm the meaning of the word or sentence. They include phonemic objects (provided in the training) or gestures from command strips when students read and then act out the sentences to confirm comprehension. Pictures are used when learning homophones, vocabulary, and to illustrate Personalized Readers.
20. For Multilingual Learners, attention is paid to positive transfer of letters and sounds from their home language in addition to explicit attention to those not present in their home language	Yes	Attention is paid to positive transfer of letters and sounds from their home language in addition to explicit attention of sounds not present in their home language. Objects are used to directly, explicitly teach the differences in sound using concrete examples. Connections provides charts comparing phonemes in English and Spanish. Charts comparing English phonemes to other phonemes in the students' home language are available for free from connections trainers.
Fluency		
21. Letter names and associated sounds are given sufficient opportunities for practice with feedback to ensure accuracy and automaticity	Yes	Letter names and sounds are practiced daily for fluency. This happens in the visual, auditory and blending drill at the beginning of each lesson. Immediate feedback is provided. These checkpoints for mastery within the lesson ensure accuracy and automaticity of phoneme/grapheme correspondences.
22. Instruction includes teacher-lead modeling, oral reading by students, and immediate feedback	Yes	Every part of the lesson includes teacher modeling. "I do, you do, we do" direct, explicit teaching occurs in each part of the lesson. Students read words, sentences, command strips, and Personalized Decodable Readers. The lessons are diagnostic, set up for the student to receive immediate corrective feedback and reteaching if needed.
23. Reading accuracy and automaticity are emphasized as the hallmarks of fluent reading	Yes	Accuracy and automaticity at the sound/symbol level is built into each lesson during visual, auditory, and blending review drill work. In the Jailbird and reading words part of the lesson, words are practiced to ensure accuracy and achieve fluency. Command strips and sentences for reading are used to practice fluency. Fluency sheets and checklists for each lesson monitor accuracy and automaticity. Personalized Readers are used for both the teacher and students to monitor fluency with cold and hot reads tables, charting the progress of words per minute.
24. Word-level fluency practice is provided	Yes	Word level fluency is practiced in the Jailbird review, the reading and spelling part of the lesson using the lesson word cards, and on the fluency sheets for each lesson.
25. Connected text fluency practice is provided	Yes	Fluency with connected text is practiced on the sentences for reading fluency sheet. Students also use the Personalized Readers to practice reading connected text.

CRITERION **Practices Aligned with the Science of Teaching Reading**	PRESENT	COMMENTS
26. For Multilingual Learners, additional support is included whenever possible to ensure students understand the meaning of words being read		Additional support is provided during the diagnostic teaching and determined through the checkpoints within the lesson. Special attention is paid to checking on Tier 1 vocabulary words, making sure the student understands the words other students may commonly know, with vocabulary activities from the Reference Folders.
27. Explicit instruction in morphology is given	Yes	The first morpheme is taught in lesson 4. In the lesson, the morpheme is practiced in the words, sentences, and connected text. The suffix cards are marked in red because they stop or end a word. Prefixes are green. Roots are black. The student creates the card with teacher guidance after the teacher provides instruction. The card includes the morpheme, the meaning, and key words. Students and teachers use the word in sentences, discussing the meaning. They learn to analyze words that include the morpheme. Suffix flip cards are used to practice decoding a word, adding the morpheme, then explaining the meaning.
Sections 2 Language Comprehension		
28. 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	Yes	In every lesson, students use language skills for reading and speaking. Introduction of the phonemic object in each lesson becomes a vocabulary lesson and an opportunity to learn background knowledge. Homophones and multiple meaning word instruction add to language comprehension. The Personalized Reader provides consistent practice with reading comprehension. Instructional Routines in the Reference Folder guide teachers in providing direct, explicit instruction of comprehension strategies. These are practiced in the decodable Personalized Reader and in the read-aloud aligned Storyline Online books. Teaching vocabulary words indirectly and directly supports comprehension. Tier 1, 2, and 3 words are provided for the teacher for each aligned read-aloud. Students are exposed to well-written sentences and paragraphs. Written expression is directly taught and modeled as students create types of sentences and use components of fiction and nonfiction in their organized written work.
29. Students are exposed to rich vocabulary and complex syntax in reading and writing materials and orally, including but not limited to read-alouds, at language levels beyond students' reading levels.	Yes	Students listen to Storyline Online books, aligned with each lesson. The books are rich with vocabulary and complex sentence structure. Tier 1, 2, and 3 words are listed so the teacher can provide direct instruction.
30. For Multilingual Learners, instruction in English language development (ELD) and acquisition is included to support reading comprehension and continued reading and writing development	Yes	Additional support is provided during the diagnostic teaching and determined through the checkpoints within the lesson. Special attention is paid to checking on Tier 1 vocabulary words, making sure the student understands the word other students may commonly know. Read-alouds are important for ELLs. The Personalized Reader provides practice. Reading and writing the sentences within the lesson also provides practice.

CRITERION **Practices Aligned with the Science of Teaching Reading**	PRESENT	COMMENTS
Language Comprehension Evaluation: Background Knowledge		
31. 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 above grade level to develop background knowledge and vocabulary in a variety of subject areas	Yes	Training in narrative texts and expository texts is part of The Connections training. The curriculum supports the use of a variety of types of texts as well as how to teach students to appropriately engage with them. Personalized Readers from lesson 31-60 include different genres and contain figurative language that is directly taught. Read-alouds provide diverse, complex text allowing more instruction in vocabulary and background knowledge.
32. Opportunities are provided to make connections between a new word or concept and other known words or concepts, relating ideas to experiences	Yes	Vocabulary is taught both directly and indirectly. Instructional routines, found on the Vocabulary Reference Folder, for learning new words are used in every lesson. Word gradients, graphic organizers, and word matrices are used to make new connections with known words.
33. For Multilingual Learners, opportunities are identified for building background knowledge in a student's home language whenever possible	Yes	Extra attention is paid to Multilingual Learners' needs when ensuring opportunities to teach vocabulary and background knowledge. Teachers have an interactive model of The Simple View of Reading and know the importance of strengthening the Language Comprehension piece. They practice in training how to achieve this using activities and word lists provided.
34. Vocabulary instruction includes robust teacher-student and student-student conversations to support an understanding of literal and inferential comprehension of word knowledge within text	Yes	Instruction routines for vocabulary instruction are found on the Vocabulary Reference Folder. Vocabulary words within text are provided with activities on the Aligned Read-Aloud Reference Folder and the Vocabulary Reference Folder.
35. Explicit instruction in vocabulary for Tier 2 and 3 words is evident, as well as instruction in the context of texts (most Tier 1 words)	Yes	Tier 1, 2, 3 words are defined and discussed in the comprehension and vocabulary materials and skills. Instructional Routines and Activities provide the explicit instruction.
36. Tier 2 words are taught explicitly, and students are given opportunities to use them in their speech, see them in print, and use them in writing (when appropriate)	Yes	Tier 2 words list allow teachers to choose and explicitly teach the words their students need to learn. Through instructional routines and vocabulary activities, direct instruction includes oral discussions, seeing words in context in print, and using the word in a sentence and an illustration on the vocabulary word card.

CRITERION **Practices Aligned with the Science of Teaching Reading**	PRESENT	COMMENTS
37. Explicit instruction in morphology is provided with numerous opportunities to read and write words with these morphemes		Morphemes are explicitly taught and then identified in connected text through Personalized Readers. The student creates the card with teacher guidance after the teacher provides instruction. The card includes the morpheme, the meaning, and key words. Students and teachers use the word in sentences, discussing the meaning. Students generate more words containing the new morpheme, use them in sentences and add them in their writing. They learn to analyze words that include the morpheme. Suffix flip cards are used to practice decoding a word, adding the morpheme, then explaining the meaning. In the reading materials, students identify and code words with Latin and Greek roots. Words are then analyzed to understand meaning. Aligned reading material, listed for each lesson, is also used to identify and teach morphemes. Lesson 54 teaches the Greek root "graph." "Graph" in connected text is found in the book, How I Learned Geography." Students also practice reading words that include the morphemes in the decodable words, sentences, and Personalized Reader.
38. For Multilingual Learners, instruction in ELD is included to support continued vocabulary development	Yes	This development is described and practiced when learning synonyms, antonyms, similes, read-alouds, affixes. This is explained through Scarborough's rope when modeling how to teach vocabulary for breadth or depth. Vocabulary activities and lists of Tier 1, 2, and 3 vocabulary words from Storyline online provide structure to support continued development. Instruction about the importance of directly, explicitly teaching academic vocabulary is explained.
Knowledge of Language Structures		
39. There is a clear scope and sequence for teaching conventions of print, grammar, and syntax (sentence structure) in reading and writing	Yes	The scope for conventions of print begins on lesson one. Types of sentences are taught with each ending punctuation having a physical movement to promote memory of end punctuation. Capital letters and endpoints are circled in the sentences they write and in the decodables they read. The scope and sequence for teaching grammar and syntax, is mapped out on the Reference Folder, aligned to grade level standards.
40. Instruction attends to sentence-level comprehension including simple, compound, and complex sentences, as well as cohesive devices within and among sentences	Yes	Teachers will use the Syntax Instructional Routines listed on the Comprehension Folder to teach and model how to construct and deconstruct simple, complex, and compound sentences. The teacher will use the sentences, and command sentences with in the Connections Lesson. Instructions for explicit teaching cohesive devices are on the Reference Folder. Cohesive devices are practiced with the decodable content in the Personalized Readers. Then students practice using these in their writing.
41. Instruction includes sufficient time for discussion, including teacher modeling of conversational conventions, appropriate tone and rate, and development of full ideas and complete sentences	Yes	The teacher models using some of the activities on the Vocabulary and Comprehension Reference Folders. Students practice the elaboration of ideas, descriptions using graphic organizers, and using complete sentences orally. Then the instruction, modeling and practice moves to reading and writing.

CRITERION **Practices Aligned with the Science of Teaching Reading**	PRESENT	COMMENTS
42. For speakers of English language variations, use an asset-based approach to engage in a contrastive analysis between home and school language including sentence structures, suffixes, and subject-verb agreement	Yes	Educators who teach Connections already use an asset-based approach. They are encouraged to search for and celebrate differences and strengths. Building trust is an important part when instructing students, especially ELLs. To build trust, one example shared in Connections training is having the students finish this sentence anonymously or not: "I wish my teacher knew. . ." Because Connections instruction is diagnostic, it uses strategic scaffolding. Culturally responsive materials are listed on the Connections-aligned read-aloud reference folders. Contrastive analysis, the systematic study of a pair of languages, helps a student identify the structural differences and similarities between English and their home language. This occurs during the sentence dictation part of the lesson. Instruction for teachers can be found in the Multisensory Textbook, which is now included in Connections training.
Verbal Reasoning		
43. Inferencing is explicitly taught within text, including opportunities for metacognition and use of appropriate and accurate background knowledge	Yes	Inferencing is practiced orally using the Personalized Reader from lesson 1 and the instructional routines in the Reference Folder. The teacher uses the instructional routines to build background knowledge and teach vocabulary. Later, the inferencing moves to more difficult reading materials, using manipulatives to teach how inferences are made by reading between the lines, but must be based on facts within the reading.
44. Students are instructed how to articulate ideas by using inferential language (i.e., ideas beyond the immediate context of what they read) in conversation	Yes	Discussion used after the teacher models the use of inferential language with the Personalized Reader. Modeling, discussion, and practice also take place after reading and "feeling" the sentences in the writing sentences part of the lesson.
45. Students are instructed how to use narrative language to describe a series of events, both fictional and non-fictional	Yes	Teachers explicitly teach students the elements of fiction using 3D materials. The knowledge of a plot chart is carried over to use in discussion of Personalized Readers, read-aloud, and their own writing. Narrative nonfiction is also directly taught, modeling and practiced.
46. Instruction includes queries to develop a student's ability to think about their thinking while they read	Yes	Students are explicitly taught how to think about their own metacognition. This is modeled and practiced using the explicit instructional routines in the Comprehension Reference Folder. Discussion takes place with the Personalized Reader and the aligned read-aloud material.
Literacy Knowledge		
47. Appropriate genre types and features are explicitly taught	Yes	A variety of genres is used in the read-aloud material and in Personalized Readers. Literary elements of fiction and components of nonfiction are explicitly taught and practiced with cumulative review, using 3D materials. Students practice finding these in the material they listen to and in the material they read. They also use this in their writing.

CRITERION **Practices Aligned with the Science of Teaching Reading**	PRESENT	COMMENTS
48. Explicit instruction of text types (e.g., cause and effect, problem/solving, sequence, time order, compare/contrast) and signal words	Yes	A variety of text types are explicitly taught using a starfish and a sea urchin. Each text type is practiced using the same object to demonstrate the types of text the student can read and will also practice writing. The Personalized Readers contain all of these text types so students can learn them at the decodable level.
49. Graphic organizers are provided to support student understanding of text and genre types	Yes	3D graphic organizers are used to explicitly teach genre types and text. Students understand it well before they begin their own writing.
Section 3: Reading Comprehension		
50. The foundation for reading comprehension is built through rich read-aloud experiences before children are able to read independently	Yes	The Connections curriculum includes rich, aligned read-alouds using Storyline Online. Students are bathed in good literature to increase vocabulary and background knowledge as they are directly and explicitly taught to read independently.
51. Comprehension strategies (e.g., making inferences, summarizing) are taught via gradual release of responsibility (i.e., I do, we do, you do) using appropriate instructional text that students can accurately decode	Yes	Every lesson in the Connections curriculum has an "I do, we do, you do" element for teaching and practicing comprehension strategies. These strategies are found in the Comprehension Reference Folder and are designed to be used at the most basic decodable level with sentences to read and the Personalized Reader.
52. Advanced (grades 2-5) For students automatic with the code, materials for reading comprehension instruction include sufficiently complex literary and knowledge-building informational texts	Yes	The Connections curriculum has a collection of higher-level fiction stories and nonfiction articles for students to practice the 3D strategies they have learned for comprehension of more difficult material.
Section 4: WRITING		
Handwriting Practices Aligned with the Science of Reading		
53. There is explicit instruction related to handwriting (e.g., letter formation, posture, grip), and there are opportunities for cumulative practice	Yes	Lick the Lines is the handwriting element in the curriculum. This provides explicit, evidence-based handwriting instruction based on the research of Virginia Berninger. Explicit instructions for teaching letter formation are provided for manuscript, cursive, and D'Nealian. Pictures illustrate the posture and pencil grip needed for handwriting. Students practice what they have learned each time they write.
54. Handwriting instruction features lined paper to guide letter formation	Yes	The Lick the Lines instructional resource is lined, and the three lines used are colored and correspond to the sense of taste and smell. Handwriting practice pages have numbers to show where to start the letter formation and arrows to show the direction.

CRITERION Practices Aligned with the Science of Teaching Reading	PRESENT	COMMENTS
55. Handwriting instruction is integrated into core reading and writing instruction and follows the sequence of letter learning	Yes	Handwriting instruction is a part of every lesson. The letters practiced in the handwriting portion of the lesson are the same letters learned in that lesson. They both follow the phonics scope and sequence.
Spelling		
56. There is a clear scope and sequence for explicit spelling instruction, closely aligned with the phonics scope and sequence	Yes	The spelling scope and sequence follows the phonics scope and sequence. The instructional routine for spelling includes only the letters and sounds previously taught in that lesson and the lessons before it. Spelling instruction for Jailbird words follows a list of high frequency words.
57. Patterns taught for decoding are also practiced in encoding/spelling lessons	Yes	Each Connections lesson is integrated and comprehensive. The new learning in that lesson is always practiced in the application piece: words to read and spell, sentences to read and write, Personalized Reader.
58. (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	Yes	Advanced word study is explicitly and directly taught and practiced until automatic. R-controlled vowels are taught in lessons 23, 24, 25, 26. Vowel teams and variant vowels are taught in lessons 27, 28, 29, 30, 31, 38, 39, 40, 43, 44, 50, 51, 52, 57, and 60. Morphology begins in lesson 4 with direct explicit instruction, teaching the influence of inflected and derived forms in spelling.
Composition		
59. Writing is taught 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	Yes	Sentence structure, paragraph formation, elements of fiction and components of nonfiction are directly, explicitly taught, showing students what well-constructed sentences and paragraphs should look like. The teacher spends time guiding the students in modeling, planning, and brainstorming using graphic organizers.
60. Writing is structured: models and graphic organizers are provided to support composition and promote executive functioning	Yes	Writing is taught in a structured, systematic way, using 3D objects. Students master each piece of the composition, using graphic organizers to record ideas.
61. Conventions of print, grammar, and syntax (i.e., sentence structure) are taught explicitly in the context of writing	Yes	Foam shapes are used for syntax to support parts of speech. Grammar Framework is a 7-step process. Each part of speech is learned and practiced using 3D objects. Sentence structure is taught by building sentences, combining, and deciding the best sequence.
62. Writing instruction includes a variety of text types (e.g., narrative, informational, persuasive)	Yes	Direct instruction in text types along with the use of various text types prepares the student to write using different text types. Personalized Readers have a variety of texts. The Aligned Fiction and Nonfiction read-alouds have a variety of texts along with a variety of genres. Students practice reading narrative and expository texts before they begin creating their own stories and article.

CRITERION Practices Aligned with the Science of Teaching Reading	PRESENT	COMMENTS
Section 5: Assessment		Both formative and summative assessments are used.
63. A school of LEA's suite of assessments provide multiple data points to understand the students' word recognition and language comprehension abilities	Yes	Various assessments and checklists are included, with training in how to use the data collected. There is daily progress monitoring through checkpoints for mastery in each lesson.
64. Assessment data is used to differentiate across tiers of instruction based on student progress	Yes	Blending drill, auditory drill, visual drill, a three period lesson, become the checkpoints for mastery. This information allows the teacher to know what each student has mastered, who needs to be retaught and receive more practice, and who needs to move on to the next lesson.
65. Assessments are standardized, reliable, and valid for intended purposes	Yes	Various assessments are included. Training is provided to read, understand, and use data from the districts' chosen assessments.
66. Assessments include screening, diagnostic, and progress monitoring to inform instruction and prevent future reading difficulties	Yes	Screener materials, screening kits, and training in how to use results to guide teaching and grouping are included. There are multiple checkpoint assessments in each lesson for progress monitoring. There are checklists and benchmarks that provide more data to inform instruction.
67. Foundational skills assessments identify students' instructional needs.	Yes	The screener has several forms and may be given multiple times to determine mastery of foundational skills and inform instruction.
68. Phonics skills are assessed using both real and nonsense words in all syllable types as each has been taught to them	Yes	The screener assesses real and nonsense words. Real and nonsense words in each syllable type, that has already been taught, are assessed within each lesson during the blending drill and the reading and spelling part.
69. Oral Reading Fluency (ORF) assessments are used to assess fluency, usually first grade and beyond	Yes	Sentences for reading and writing part of the lesson is used for assessing fluency. The Personalized Reader is used to assess and record ORF. ORF charts and checklists in the Reference Folder are another way to assess and record progress.
70. A systematic spelling survey/spelling inventory is used to analyze students' applications of phonemes, graphemes, and morphemes	Yes	Analysis of spelling application is done each lesson during the words for reading and spelling part and in the sentences for reading and writing part of the lesson. Fluency sheets, mastery checklists for each lesson, and benchmarks are systematic ways to analyze students' spelling applications.
71. Phonological and phonemic awareness (PA) are assessed in K/1 and for older students who exhibit PA weaknesses as evidenced by appropriate assessment	Yes	The beginning of each lesson includes time to teach and to practice each level of phonological and phonemic awareness using 3D objects, direct, explicit instruction, and a scope and sequence checklist to record progress. The phonological awareness screener can be given multiple times to assess PA.

CRITERION **Practices Aligned with the Science of Teaching Reading**	**PRESENT**	**COMMENTS**
72. Assessments address both word recognition and language comprehension (e.g., vocabulary, syntax, writing, listening comprehension)	Yes	The Checkpoints for Mastery Reference Folder is used to record weakness or progress in word recognition. The Reference Folder also includes graphs and checklists to record the students' language comprehension skills. Assessment and direct feedback in both of these areas occurs throughout the lesson in the drill work, words for reading and spelling part, sentences for reading and writing part, and in the comprehension and vocabulary instructional routines used during the words and sentences part of the lesson as well as the read-aloud and decodable Personalized Reader.
73. Trends in groups of student scores can be used to identify the overall effectiveness of the Multi-Tiered System of Supports (MTSS)	Yes	Checkpoint assessments within each lesson, three period lesson, and spelling and reading parts of the lesson inform teachers if 80% or more of the group has mastered the lesson. This informs the teacher when to begin teaching a new lesson, and when to provide extra practice for those who have yet to master the content. The class may move to the next lesson because all previously learned material will continue to be reviewed and practiced.
74. Multilingual Learners are assessed in their home language when available		The Connections screener is being rewritten in Spanish and will be available soon. The objects in the phonemic awareness kit can be used to assess phonemic awareness skills, when the Spanish name for each object is used. Teachers are also made aware of the The TOPPS (Test of Phonological Processing in Spanish) that was developed as the Spanish version of the Comprehensive Test of Phonological Processing (CTOPP).

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