Structured Literacy and Typical Literacy Practices

Understanding Differences to Create Instructional Opportunities

Isabelle Rowe is an elementary-level special education teacher who is beginning her second year of teaching. A third grader named Curtis was recently placed on her caseload after being identified with dyslexia at the end of Grade 2. In preparation for working with him, Ms. Rowe read his file. She knew that difficulties with phonemic awareness, decoding, and spelling are central to dyslexia, and as she anticipated, Curtis did have a history of these kinds of problems. As a beginning third grader, Curtis should be able to decode most one-syllable and two-syllable phonetically regular words; he also should be starting to read more complex types of texts, such as chapter books, written at an early-third-grade level. However, assessments in Curtis's file showed that he had difficulty decoding many one-syllable word patterns, such as unfamiliar silent e words (e.g., tame, stripe), but his ability to read common sight words was relatively good. He also had poor spelling skills, and because he often omitted sounds in words or substituted other sounds that did not belong, Ms. Rowe often could not even recognize the intended word in Curtis's misspellings.

Ms. Rowe was not surprised to discover that Curtis had an excellent oral vocabulary and good listening comprehension, because she knew that such strengths are found in many students with dyslexia. However, when she reviewed his history, she was somewhat puzzled to see that Curtis was perceived as doing well in reading as a kindergartner and throughout first grade. He was not identified as needing intervention until the beginning of Grade 2.

Ms. Rowe's school uses a multitieredsystems-of-support model, with
universal screening and tiered
interventions as part of the general
education system. Unfortunately,
although Curtis had received tiered
interventions throughout Grade 2, he
had not made good progress in those
interventions. Because of his
inadequate response to tiered
interventions, he was referred for a
comprehensive evaluation for special
education. He was found eligible for

services as a student with a learning disability in the area of reading. Although Ms. Rowe had had good preservice preparation with considerable exposure to evidence-based instruction for students with reading difficulties, her experience with specific intervention programs for students with dyslexia was limited. Ms. Rowe was determined to find the details of Curtis's previous interventions, so that she could use that information to help design more effective special education instruction. She also did some reading on evidencebased interventions for students with dyslexia. As part of her research, she repeatedly encountered the term structured literacy (SL), so she decided that she needed to find out more about those instructional approaches.

SL approaches are often recommended for students with dyslexia and other poor decoders (e.g., International Dyslexia Association, 2017). These approaches are well supported by research evidence (e.g., Brady, 2011; Fletcher, Lyon, Fuchs, & Barnes, 2007; Foorman et al., 2016; National Reading Panel, 2000). Examples of SL approaches include the Wilson Reading System (Wilson, 1988), Orton-Gillingham (Gillingham & Stillman, 2014), the Lindamood Phoneme Sequencing Program (Lindamood & Lindamood, 1998), and Direct Instruction (e.g., Carnine, Silbert, Kame'enui, & Tarver, 2009). Although these programs vary in some ways, they all share several key features.

Key Features of Structured Literacy Approaches

Key features of SL approaches include (a) explicit, systematic, and sequential teaching of literacy at multiple levels—phonemes, letter–sound relationships, syllable patterns, morphemes, vocabulary, sentence structure, paragraph structure, and text structure; (b) cumulative practice and ongoing review; (c) a high level of student–teacher interaction; (d) the use of carefully chosen examples and nonexamples; (e) decodable text; and (f) prompt, corrective feedback.

Key Features

Explicit means that important skills and concepts are taught clearly and directly by the teacher; students are not expected to infer them simply from exposure or incidental learning (Archer & Hughes, 2011). Systematic and sequential means that skills and concepts are taught in a logical order, with important prerequisite skills taught first (Torgesen, 2006). For example, before teachers expect students to decode two-syllable words, they teach decoding of common onesyllable word patterns as well as how to divide two-syllable words to facilitate decoding them. The sequential nature of SL means that teachers require students to practice only what they have been explicitly taught. Again, before teachers expect students to practice decoding specific phonics word patterns (e.g., shortvowel words with consonant digraphs) in reading text, or to recognize specific irregular words in text, they directly teach those skills in isolation first. SL approaches also build in cumulative practice and ongoing review of previously learned skills, so that students retain these skills and develop automaticity.

An additional feature of SL, and of explicit teaching approaches in general (Archer & Hughes, 2011), is a high degree of teacher-student interaction, with considerable time spent in direct teaching. In these approaches, instruction requires frequent responses from students, and the teacher provides immediate feedback with clear correction as needed. The teacher provides step-by-step demonstrations of skills and leads students in guided practice. Explicit instruction also uses nonexamples as well as examples. For instance, if teachers want students to learn the vowel-r (VR) syllable pattern (words that have a vowel followed by an r, which changes the vowel sound), they present both VR words (e.g., barn, short, urn) and non-VR words (e.g., trip, rag, brush) for students to distinguish from each other. Examples and nonexamples would be carefully chosen to ensure that students learn the concept being taught,

in this case, that the *r* in a VR syllable must come immediately after the vowel, not before it.

In the early stages of instruction, when students' decoding skills are relatively limited, most SL approaches have students read decodable texts, those constrained mostly to the specific phonics patterns that students have been taught (e.g., consonant-vowelconsonant words with a, i, and o). Just as when students read words in isolation, SL teachers would provide prompt corrective feedback to students' decoding errors during oral text reading. Table 1 provides some examples of the kinds of explicit instructional activities that are common in SL programs.

Fit for Students with Dyslexia

SL is especially well suited to students with dyslexia because it directly addresses their core weaknesses in phonological skills, decoding, and spelling (Moats, 2017). Although most students with dyslexia do not have core weaknesses in higher levels of literacy, such as vocabulary, text comprehension, and broad language

an intrinsic learning problem in those areas

Many commercial programs exemplify SL and research has generally focused more on effective features of instruction than on comparing specific commercial programs. For example, Kilpatrick (2015) reviewed evidence suggesting that SL programs that emphasize development of phonemic awareness to an advanced level (e.g., programs that train students to manipulate, delete, and substitute phonemes rather than only to blend and segment phonemes) may be more effective than other SL programs in helping poor decoders attain automatic word recognition. In any case, all SL programs have marked differences from the type of reading instruction that is common in Tier 1 general education instruction and, often, even in tiered interventions (Moats, 2017).

In her readings on SL, Ms. Rowe found studies showing that SL interventions clearly improve the reading achievement of students with dyslexia (e.g., Simos et al., 2002; Torgesen et al., 2001). She also visited a special education class in

aspects of written expression (Fletcher et al., 2007), their weaknesses in phonological skills, decoding, and spelling often have secondary negative effects on these higher-level areas. For example, inaccurate or nonautomatic decoding may affect students' reading comprehension, resulting in poor comprehension of text that students would easily understand if it were read aloud to them. Likewise, poor or effortful spelling can inhibit students' ability to translate a strong knowledge base about a topic into their written expression. Explicit teaching of higher levels of literacy may therefore benefit students with dyslexia (as well as other students) even when they do not have

a neighboring district in which an SL program was being used. Student data showed significant benefits to students' reading skills after implementation of the program. Ms. Rowe's reading, as well as her observations of the class, convinced her that SL differed in fundamental ways from the Tier 1 literacy instruction at her own school. Moreover, even the tiered interventions that Curtis had previously received did not generally use SL activities, such as the ones shown in Table 1 or described in research studies. Although Curtis's tiered interventions had all addressed phonics to some extent, they did so in ways very different from SL. It was evident to Ms. Rowe that continued use

of these types of programs was not likely to benefit Curtis. She went to her school principal, Ms. Watkins, and asked to participate in professional development in an SL approach. Ms. Rowe pointed out that this professional development would enable her to help both Curtis and other students in her class more effectively. Luckily, Ms. Watkins had the funds for Ms. Rowe's professional development and approved the request.

Typical Literacy Practices (TLP)

Just as the SL approaches described previously vary from each other in some ways, so, too, does the TLP commonly used in schools. Examples of these non-SL literacy approaches include Guided Reading (e.g., Burkins & Croft, 2010), Reader's Workshop (e.g., Calkins, 2000), Balanced Literacy, Four Blocks Literacy (Cunningham, Hall, & Sigmon, 1999), Reading Recovery (Clay, 1994), and the Leveled Literacy Intervention (Fountas & Pinnell, 2009). TLP do not include most of the key features of SL. Table 2 summarizes some important differences between SL and the ways that literacy skills are more commonly taught.

TLP for Reading

In TLP for general education, classroom time focused on partner activities and independent reading is often prioritized over classroom time spent in direct interaction with a teacher. Although some phonemic awareness and phonics skills are often taught in TLP, they are not generally emphasized even in kindergarten or Grade 1. For example, in one popular approach to Tier 1 literacy instruction (Cunningham et al., 1999), "word work" is just one of four components of the program; in another popular approach (Fountas & Pinnell, 2017), it is one of eight. Also, in TLP, phonemic awareness and phonics are rarely taught in highly explicit, systematic ways with attention to important prerequisite skills, use of examples and nonexamples, and ongoing review.

In TLP, beginning readers would usually read predictable or leveled texts that do not control for different phonics

Table 1. Examples of SL Activities for Different Levels and Components of Literacy

Literacy area	Specific skill	Sample activity	Some prerequisites
Phonemic awareness	Phoneme blending, words with four to five phonemes (e.g., smash)	 Teacher models how to orally blend four- to five-phoneme words, beginning with easier-to-blend words that have continuous sounds (e.g., /s/, /m/, /f/), rather than harder-to-blend stop consonants (e.g., /g/, /t/, /b/). Teacher provides guided practice with multiple examples of four- to five-phoneme words. Students respond orally and teacher provides immediate corrective feedback and modeling as needed. 	Students can orally blend words of two or three phonemes (e.g., in, fan, mop, tub).
Phonics	Decoding of silent-e (SE) words	 Teacher explains the pattern of these words (they end in a vowel-consonant-e pattern) and that the first vowel is long, with the final e silent. Teacher provides multiple examples of words that contain the SE pattern (stone, tape, shine, use) and that do not contain the SE pattern (tree, noise, prince, beet); teacher is careful to avoid common irregular words (done, have, some). Teacher provides guided practice with a sorting task on additional, unfamiliar words, where students sort SE and not-SE words into two groups. For the SE words only, students give the vowel sound of each word, then decode it. 	Students can recognize and decode short- vowel (closed) syllables; students know long-vowel sounds (i.e., vowel says its name).
Irregular words	Learning to read irregular words that are common in texts that students are reading (e.g., what, of, have)	 Teacher models a multisensory tracing activity with the word what. Students are taught to trace over each letter of the word while saying its name (not its sound); then they say the entire word (e.g., for what, teacher models "w-h-a-t, what"); then students cover the word and try to write it from memory. If students make mistakes, they repeat the tracing process. If they do not make mistakes, they put the word aside for continued review later. 	Students can identify letter names.
Vocabulary	Learning the meanings of unfamiliar words that are important to the literacy curriculum (e.g., beverage)	 Teacher explains the meaning of the word <i>beverage</i> in student-friendly language ("A beverage is a drink"). Teacher provides examples of beverages (<i>milk</i>, <i>soda</i>, <i>juice</i>) and not-beverages (<i>cake</i>, <i>ice cream</i>, <i>gasoline</i>). Teacher asks students to classify whether certain additional items are beverages or not (<i>spaghetti</i>, <i>tea</i>, <i>coffee</i>, <i>shampoo</i>). 	Students understand the meaning of words used in the teacher's explanation and in examples of beverages and not-beverages.
Syntax	Learning to combine short, choppy sentences into longer, grammatically correct sentences	 Teacher presents examples of short "kernel sentences" that can be combined into a longer, grammatically correct sentence (e.g., <i>The car is red. The car sped quickly down the road.</i>). Teacher models good examples of how to combine the sentences (e.g., <i>The red car sped quickly down the road.</i>). Teacher also discusses grammatically incorrect or awkward examples of combinations (e.g., <i>The car is red the car sped quickly down the road</i>). Students do guided practice with additional examples of kernel sentences to combine. Students eventually apply what they have learned in editing their own writing. 	Students can read and write simple sentences; students have sufficient oral language ability to recognize sentences that sound grammatically correct/incorrect (most of the time).
Paragraphs	Learning to recognize "signal words" that tie together the ideas in a paragraph (e.g., therefore, next, for example, in summary)	 Using an appropriate sample paragraph, teacher highlights examples of one class of signal words, those signaling cause and effect (e.g., because, so, as a result, consequently, therefore). Teacher explains how attention to these words can improve students' ability to understand what they are reading, with repeated reference to the sample paragraph. Students are given other paragraphs in which to highlight and explain the signal words, with teacher feedback. Students eventually apply their understanding of signal words to add clarity to their writing as well as improve their reading comprehension. 	Students have the background knowledge, vocabulary, and other comprehension skills to understand the paragraphs being used in the activity.

Table 2. Examples of Some Different Instructional Emphases in SL as Compared to TLP

Structured literacy (SL)	Typical literacy practices (TLP)
Phonics skills are taught explicitly and systematically, with prerequisite skills taught first. For beginning readers, these skills receive considerable initial emphasis.	Phonics skills are usually taught but not emphasized, even for beginners. Teaching is often not highly explicit or systematic. Prerequisite skills may not be taught first.
Phonics approach is synthetic (parts to whole). Students learn sounds for common letters and letter patterns (e.g., <i>sh</i> , <i>-ck</i>) and how to blend them (phoneme blending).	Phonics approach may be synthetic, but is often analytic (whole to parts) or decoding by analogy (e.g., "word families").
Beginning readers usually read decodable texts (texts largely controlled to specific phonics patterns that have been explicitly taught) that facilitate learning to apply phonics skills in reading texts.	Beginning readers usually read leveled and predictable texts (texts in which words are predictable based on sentence structure, repetition, or pictures) that do not easily lend themselves to application of phonics skills.
Oral text reading with a teacher is included in lessons.	Partner reading and independent reading may be emphasized more than oral text reading with a teacher.
When students read text orally, they are encouraged to look carefully at printed words and apply decoding skills to unfamiliar words.	When students read text orally, some errors may be overlooked, especially if they do not greatly alter meaning. Teacher feedback to errors may emphasize sentence context or pictures rather than consistent application of decoding skills.
Spelling skills are taught explicitly and systematically with prerequisite skills taught first and with instruction in common spelling rules (e.g., rules for adding endings). Spelling instruction reinforces and extends what students learn in decoding.	Spelling is often not taught in an explicit or systematic manner. Students may learn word lists in which words exemplify no particular phonics pattern or spelling rule. Spelling program may be completely distinct from decoding program with different words in the two programs.
Higher levels of literacy are explicitly and systematically taught (e.g., sentence structure, paragraphs, discourse), including prerequisite skills.	Some higher levels of literacy may be explicitly taught but usually not systematically and not with strong attention to prerequisite skills.

word patterns and therefore are challenging to decode. These types of texts are common even in interventions (e.g., Clay, 1994; Fountas & Pinnell, 2009). Especially for struggling decoders, such texts often lend

teaching when students cannot decode a word. Rather, the emphasis is frequently on using meaning in conjunction with print cues and having students "problem-solve" with teacher guidance (e.g., Burkins & Croft, 2010).

themselves more to guessing at words based on pictures and sentence context than to application of decoding skills. Teacher feedback to oral reading errors often does not emphasize application of decoding skills and does not include immediate correction and explicit

TLP for Spelling

TLP for spelling also tend to lack the explicit, systematic, sequential approach characteristic of SL programs. Students may learn to spell words from "word walls" that present

high-frequency but structurally varied words with few shared patterns or rules (e.g., Cunningham et al., 1999). For instance, under the letter *f*, a firstgrade word wall might include highfrequency words like for, from, find, food, friend, family, four, and fly, which mixes phonetically irregular words with regular words from a wide range of phonics patterns. Useful spelling generalizations, such as rules for adding endings or when to use *-ck* to spell /k/ (at the end of a onesyllable word, immediately following a short-vowel sound, e.g., back, stick, block), are rarely taught systematically. In fact, rather than integrating spelling and decoding instruction so that each reinforces the other, spelling instruction may use a completely different program and a different set of words than does phonics instruction.

TLP for Higher-level Literacy

Some higher levels of language structure may be sporadically addressed in TLP but seldom in systematic ways with attention to important prerequisite skills (Moats, 2017). Sentence structure (syntax) is one important building block of reading comprehension and written expression that is often overlooked (Nelson, 2013). Yet, if students do not understand syntactically complex sentences or if they do not know how to write individual sentences that are clear and grammatically correct, this will certainly undermine their literacy performance.

Do some students learn to read and write well with TLP? Of course. However, TLP, such as the practices described, are a poor fit for the needs of many students, particularly those with dyslexia. In addition, some of the core principles of TLP may affect not only literacy instruction and intervention but also assessment and early identification of at-risk readers.

Ms. Rowe still was puzzled as to why Curtis's reading difficulties were not identified in kindergarten or Grade 1 because several Tier 1 assessments showed that he had poor phonemic awareness and decoding skills even in these grades. She had a sudden insight about this issue one day when she was asked to help some general education colleagues administer oral reading inventories (ORIs) to students. The ORIs involved a series of graded word lists as well as short graded passages, administered individually, that students read aloud to the teacher. Then students were asked a series of comprehension questions to assess their understanding of the passage. In Ms. Rowe's school, the ORIs were weighted heavily in determining which students should receive intervention. However, students' oral reading in the passages was scored quite differently from the types of standardized tests that Ms. Rowe was accustomed to in special education.

Assessment of Oral Text Reading Accuracy in SL and TLP

ORIs can be useful in providing qualitative information about students'

approach to reading text, such as whether they try to self-correct errors or apply decoding skills. They can also help a teacher estimate an appropriate grade level of text to use for instructional and independent reading (e.g., Morris, 2014). However, there are multiple ways to score both students' oral reading errors and their responses to comprehension questions. These multiple ways of scoring result in differing estimations of students' skill. For students with dyslexia or other types of decoding problems, the scoring of oral reading accuracy in these kinds of assessments is particularly relevant.

Assessing Errors

Table 3 displays examples of some different types of oral reading errors that students may make in reading texts, including mispronouncing a word, substituting a wrong word for the correct word on the page, inserting words that are not on the page, and omitting words. Most testing authorities agree that mispronunciations of words due to articulation difficulties, dialect, or nonnative accent (examples shown in the second and third row of the table) should not count as errors. On most standardized tests of oral reading accuracy, nearly all other deviations from the print that are not selfcorrected count as errors.

In other approaches to scoring students' oral reading, only deviations from the print that significantly change the meaning of a text count as errors. Contextually appropriate substitution errors, such as a for the or this for that, as well as omissions and insertions that do not substantially alter meaning, would not be counted as errors. The use of scoring criteria focused only on meaning-changing errors is a common option in many ORIs (Nilsson, 2008) as well as in TLP generally. This approach to scoring stems from the popularity of "multiple-cuing-systems" models of reading (Farrall, 2012; Morris, 2014) originally associated with the work of authorities in the reading field, such as Ken Goodman (1976). These models

proposed that skilled reading is associated with using a balance of semantic, syntactic, and graphophonemic cues rather than close attention to all of the letters in printed words.

However, research on students' reading development (Foorman et al., 2016; National Reading Panel, 2000) has conclusively disproven the multiple-cuing-systems model. Typical beginning readers, such as those in kindergarten or early Grade 1, may rely on context cues to compensate for limitations in decoding; however, success in reading as students progress through the early grades is strongly associated with the development of accurate, automatic decoding, not with the ability to use multiple cuing systems. (Using context cues to infer what a word means as opposed to guessing at words in decoding is a different matter; see Spear-Swerling, 2015, for further discussion.) For example, in a large study of 1,779 fourth-grade students' oral reading, a subset of those participating in the 2002 National Assessment of Educational Progress, researchers found that students who read with the fewest word-reading errors on a grade-level passage demonstrated greater comprehension (Daane, Campbell, Grigg, Goodman, & Oranje, 2005). Whether or not they were contextually appropriate, oral reading errors were negatively associated with comprehension. Students who read at a proficient level had, on average, word accuracy from 98% to 100%. Students who read grade-level material with less than 90% accuracy read, on average, at a below-basic level. Other research (e.g., Good & Kaminski, 2011) also shows that students who meet gradelevel benchmarks in reading on standardized testing typically read text not only at a high rate but also with a very high degree of accuracy, especially beyond the earliest grades.

Of course, when students are reading text, it is never desirable for them to ignore meaning. If students struggle to decode a word, after they have decoded it, they should also check to make sure that what they

Table 3. Examples of Different Types of Students' Oral Reading Errors in Text

Type of oral reading error	Specific example	Count as mistake in SL assessment?
Self-correction	Text says, <i>Rob ate a big stack of pancakes with butter</i> . Student reads, "Rob ate a big stack of pans with butter," pauses; then, without teacher's help, he rereads, "Rob ate a big stack of pancakes with butter."	Usually no
Mispronunciation clearly due to articulation	Text says, <i>Rob ate a big stack of pancakes with butter</i> . Student known to have difficulties with articulation of /r/ reads, " <i>Wob</i> ate a big stack of pancakes with butter."	Usually no
Mispronunciation clearly due to dialect or non-native speaker of English	Text says, <i>Rob ate a big stack of pancakes with butter.</i> Student who speaks nonstandard dialect of English reads, "Rob ate a big stack of pancakes <i>wif</i> butter."	Usually no
Mispronunciation not due to articulation, dialect, or non-native speaker of English	Text says, Rob ate a big stack of pancakes with butter. Student reads, "Rob ate a big stack of pankas with butter."	Yes
Contextually appropriate substitution	Text says, <i>Rob ate a big stack of pancakes with butter</i> . Student reads, "Rob ate <i>the</i> big stack of pancakes with butter."	Yes
Contextually inappropriate substitution	Text says, <i>Rob ate a big stack of pancakes with butter</i> . Student reads, "Rob ate a big <i>stick</i> of pancakes with butter."	Yes
Insertion	Text says, <i>Rob ate a big stack of pancakes with butter</i> . Student reads, "Rob ate a <i>very</i> big stack of pancakes with butter."	Yes
Omission	Text says, Rob ate a big stack of pancakes with butter. Student reads, "Rob ate a stack of pancakes with butter." (Student omits the word big)	Yes
Teacher-provided word	Text says, <i>Rob ate a big stack of pancakes with butter</i> . Student reads, "Rob ate a big stack of ," then pauses on the word <i>pancakes</i> and cannot come up with a response; after several seconds, teacher tells the child the word.	Yes

have read makes sense in the context of the sentence and fits grammatically. If it does not, they should look at the word carefully and apply decoding skills again. The key point is that students should be encouraged to focus *first* on close attention to all of the letters in a word and on use of decoding skills, not guessing at words based on partial letter cues and context.

Findings such as those of Daane et al. (2005) confirm the importance of students' ability to accurately read the words on a page and suggest that teachers should not ignore

word-reading errors simply because they fit the context. In this approach to scoring errors, shown in the far-right column of Table 3, only a few categories of deviations from print would be ignored, including mispronunciations due to articulation problems, dialect, or non-native accent as well as self-corrections. In conjunction with this approach, qualitative observations of students' errors and attempts at self-corrections can be very useful. For example, students who recognize when they have made errors in word reading and who attempt to correct them are

probably monitoring comprehension when they read, which is very important (National Reading Panel, 2000). However, if the students need to make frequent self-corrections, then their reading is not fluent.

Impact of Scoring Choices

A close look at Curtis's Grade 1 oral reading assessments showed that he made many contextually appropriate errors in reading passages, often substituting small common words, such as *the* for *a*, or words that fit the context or a picture clue but that bore

little resemblance to the actual printed word (e.g., blanket for quilt). Ignoring these kinds of errors in scoring made his text-reading accuracy appear much better than it was. In addition, his good sight word knowledge enabled him to do relatively well on the ORI graded word lists.

Furthermore, despite numerous errors in reading words, Curtis performed surprisingly well on comprehension questions because many of these questions were passage independent and did not require accurate reading of the passage to answer correctly (Keenan, Betjemann, & Olson, 2008). For example, they included vocabulary questions about words whose meanings Curtis already knew and questions tapping common sense or background knowledge. Because Curtis seemed to do well on the ORI, his first-grade teacher thought the difficulties he manifested on other assessments in phonemic awareness and out-of-context decoding of nonsense words were not significant. It was not until he was in Grade 2 and expected to read more difficult texts that his oral reading difficulties became more apparent and he was referred for intervention. The pattern displayed by Curtis is common among students with dyslexia as well as other poor decoders who have good compensatory abilities in areas such as broad language abilities and vocabulary knowledge (Keenan et al., 2008).

Curtis responded much better to the SL intervention that Ms. Rowe used with him than he had to his previous tiered interventions. Progress-monitoring assessments given when he was at the end of Grade 3 showed that he had learned to decode many one-syllable word patterns (short-vowel words with consonant blends; words with silent e, vowel r). Although his progress in spelling lagged a bit behind his decoding progress, he still made good gains in spelling. Unfortunately, however, his progress in oral textreading accuracy was not nearly as strong as were his gains in out-ofcontext word decoding.

Ms. Rowe used decodable texts in oral reading with Curtis, and he read more accurately in these than in the leveled books in the tiered interventions. However, he still tended to rely heavily on context cues when reading texts orally. He continued to make frequent errors on words such as a, the, his, and this, even though Ms. Rowe knew he could certainly read these words correctly in isolation. He also sometimes made errors on other words that he could decode accurately in isolation, if he looked carefully at the word, but that he appeared to guess at when reading in text. Given these data, Ms. Rowe realized that she needed to allocate more time to oral text reading in Curtis's lessons.

She also felt that she needed to find better ways to provide corrective feedback to Curtis when he was reading text. When he misread a word, she tried just telling him the word and having him repeat it, but that did not seem to improve the accuracy of Curtis's text reading. He would get the same word wrong in the very next line of text, or he would repeat the word without really looking at the print. When Ms. Rowe tried asking Curtis questions about letters and letter patterns to help him decode unknown words, it detracted from Curtis's comprehension. She was not sure how to address these problems.

Providing Feedback to Students' Oral Reading Errors in Text

Research reviewed by the National Reading Panel (2000) supported the use of teacher-guided oral reading of strategies (Foorman et al., 2016), because this approach will not work for reading advanced types of texts and because accurate reading is a prerequisite for developing fluency.

In a review of studies on corrective feedback in oral reading, Heubusch and Lloyd (1998) found that some types of teacher feedback were more beneficial than others, including immediate feedback to errors (rather than waiting until the student had finished reading) and feedback that promoted active student participation. Considering the goals of instruction and the characteristics of the learner also appeared important. For example, if the goal is to help students with decoding weaknesses improve their ability to decode unfamiliar words, then feedback focused on phonetic characteristics of words would be most helpful. Heubusch and Lloyd concluded that immediate teacher feedback to word reading errors, especially if brief and concise, did not necessarily interfere with students' comprehension.

When a student struggles with decoding a word during oral reading or reads a word incorrectly, one useful way to scaffold feedback is outlined in Table 4. This approach to feedback incorporates the research findings discussed previously, and it might help Ms. Rowe to improve Curtis's text-reading accuracy. First, the teacher allows a few seconds to see whether the student will recognize the error and attempt to self-correct. Attempts to self-correct using decoding skills suggest that the student is monitoring comprehension

text in reading instruction. However, it is important to expect students to read text accurately during oral reading as well as to provide appropriate feedback when they make errors. Students should not be encouraged to guess at words instead of applying decoding

and attending to the print, and therefore, are a positive sign even if the student needs the teacher's help to decode successfully. If the student does not attempt to self-correct or continues to struggle, the teacher uses a pointing cue, pointing directly to the

Table 4. Sequence of Teacher Feedback to Students' Decoding Errors in Text Reading

- Allow a little bit of wait time to see if the student will try to self-correct the error. Attempts to self-correct are important and should be encouraged even when the student is not successful because they usually indicate that the student is monitoring meaning while reading and is looking carefully at words.
- **Use pointing cues** such as pointing to the part of the word a student has read incorrectly if a student fails to self-correct. Pointing cues focus the student's attention on the print and tend to be less distracting to comprehension than verbal cues.
- **Follow up with verbal cues**. If pointing cues do not enable the student to decode the word then it is fine to follow up with a verbal cue such as "Remember *sh* says /sh/."
- Model decoding the word or tell the student the word if necessary. This should be a last resort unless the word is an unfamiliar irregular word or a regular word that is beyond the student's current decoding skills. Few words should fit these categories if students are placed in appropriate texts for reading instruction.
- Ask the student to re-read the sentence to establish fluency and comprehension.

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word read incorrectly (e.g., the for his) or the part of the word read incorrectly (e.g., the letters dge if a student read badge as bad). If pointing cues do not enable the student to read the word successfully, the teacher should follow up with concise verbal feedback. For instance, if the student in the previous example continued to struggle with reading the word badge even after the teacher's pointing cues, the teacher could follow up with feedback, such as "Remember, dge says /j/." Telling the student the word should be a last resort except for words that are phonetically irregular or well beyond the student's current level of decoding. If a student is placed at an appropriate instructional level, in an appropriate type of text, few words should be in this category. The final step, after the student has successfully decoded the word, is to have the child reread the sentence containing the problematic word to establish fluency and comprehension (Spear-Swerling, 2011).

Match of Text and Student

Another key issue to consider is the use of appropriate texts in oral reading, matched to students' instructional needs and reading levels. For students with dyslexia whose problems center on decoding, the match of the text to their decoding levels is especially important. If there are too many words in a text that a student cannot decode, reading will be frustrating and both fluency and

comprehension will suffer. Instructional criteria for word accuracy in text reading vary somewhat by reading authority, but a minimal criterion for students at beginning stages of reading, kindergarten or Grade 1, is that they should be able to decode words without teacher assistance with at least 90% word accuracy for a text to be appropriate for use in instruction (Morris, 2014). Decodable texts can be especially useful for students whose decoding skills are very limited. All students should read texts that provide ample opportunities for them to apply the decoding skills they have learned.

The Role of Independent Reading in SL and TLP

As shown in Table 2, TLP often emphasize students' silent independent reading as part of classroom instruction, even for students in the earliest grades. There is, in part, a practical reason behind this emphasis in that general educators must teach large groups of students. If one subgroup of students is reading independently, then the teacher can meet with other small groups of students for differentiated instruction. However, the prominence of classroom independent reading also stems from the core principles of TLP, including relatively greater emphasis on comprehension than foundational skills, such as decoding, and lesser emphasis (as compared to SL) on highly explicit, systematic teaching.

In contrast, SL approaches prioritize direct teacher–student interaction because explicit, systematic teaching requires it. Also, for students with dyslexia and other serious decoding problems, it is difficult for the teacher to know during silent independent reading the extent to which students are reading words accurately. Therefore, SL programs do not typically allocate significant *instructional* time to independent reading.

However, research has documented numerous benefits of independent pleasure reading in the development of many literacy-related abilities, including reading fluency, spelling, vocabulary, and background knowledge (Mol & Bus, 2011; Spear-Swerling, Brucker, & Alfano, 2010). A comprehensive review by Mol and Bus (2011) concluded that independent pleasure reading was especially important for low-achieving readers, whose basic reading skills were even more strongly related to print exposure than were those of higher-achieving readers. Similarly, a review by Kilpatrick (2015) concluded that providing ample opportunities for reading connected text was one of the key elements of successful reading interventions. If struggling readers can be motivated to read independently for enjoyment, this can be a powerful mechanism for further reading growth.

Students do not necessarily have to read highly academic books or books at grade level in order to obtain some benefits from independent reading; even reading more basic texts can give students multiple exposures to common words that may enhance both their reading fluency and their spelling. Of course, students who struggle greatly in decoding or who can read only books far below their interest level are not likely to be induced to read for pleasure. However, once their decoding improves to perhaps a second- or third-grade level, more book series become available that are written specifically for struggling older readers. With the help of teachers and parents in finding these books, students with a history of decoding problems can potentially become more interested in reading independently for enjoyment.

Ms. Rowe might find Curtis more receptive to independent pleasure reading as his skills develop. Attempts to foster his out-of-school reading could then be a valuable addition to his SL intervention.

The Value of Incorporating SL Practices in General Education

If schools incorporated the kinds of SL practices outlined in Table 2 as part of Tier 1 general education instruction, many students could benefit, not just those with disabilities. The highly explicit teaching characteristic of SL is effective for students at risk in literacy for a variety of reasons, such as those from low-income backgrounds or English learners (Denton et al., 2010; Rivera, Moughamian, Lesaux, & Francis, 2008). In the primary grades, SL practices involving phonemic

and because most students' reading problems in these grades center on decoding (Catts, Compton, Tomblin, & Bridges, 2012). Well into the elementary grades and middle school, many students would be helped by explicit, systematic teaching of higher levels of literacy, such as sentence structure, text structure, and discourse structure, in writing as well as reading.

To ensure that important prerequisite skills are addressed and that instruction is systematic as well as consistent across teachers within a grade, schools should provide general educators with comprehensive, research-based core literacy curricula. General educators can differentiate instruction for high-achieving students, such as those who master the alphabetic code or basic writing skills quickly and with ease. For example, primary-grade students with strong foundational reading skills would likely profit more from instructional time devoted to independent reading than students with significant decoding difficulties, such as Curtis.

At-risk students also can be identified earlier if oral reading assessments are scored with attention to nearly all word-reading errors, rather than ignoring contextually appropriate errors that reveal a pattern of overreliance on context typically related to weaknesses in decoding. Appropriate teacher feedback to students' oral reading errors would also help ensure that they transfer their developing decoding skills to text reading and have the foundation of accuracy they need to build fluent reading with

awareness, phonics, spelling, and accurate oral reading of text are especially crucial to preventing literacy difficulties because these skills form an essential foundation for reading comprehension (Foorman et al., 2016)

comprehension. Furthermore, the effectiveness of tiered interventions provided as part of the general education system would likely be improved if more interventionists were given the kind of SL training provided to Ms. Rowe.

In sum, SL offers a promising approach for educators interested in more effective ways to teach students with dyslexia. If implemented in Tier 1 instruction and tiered interventions, SL practices may also prevent or ameliorate a wide range of other reading difficulties.

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References

- Archer, A., & Hughes, C. (2011). Explicit instruction: Effective and efficient teaching. New York: Guilford.
- Brady, S. (2011). Efficacy of phonics teaching for reading outcomes: Indications from post-NRP research. In S. Brady, D. Braze, & C. Fowler (Eds.), *Explaining individual differences in reading: Theory and evidence* (pp. 69–96). New York: Psychology Press.
- Burkins, J. M., & Croft, M. M. (2010).

 Preventing misguided reading: New strategies for guided reading teachers.

 Newark, DE: International Reading Association.
- Calkins, L. M. (2000). *The art of teaching reading*. New York: Pearson.
- Carnine, D. W., Silbert, J., Kame'enui, E., & Tarver, S. (2009). *Direct instruction reading* (5th ed.). New York: Pearson.
- Catts, H. W., Compton, D. L., Tomblin, J. B., & Bridges, M. S. (2012). Prevalence and nature of late-emerging poor readers. *Journal of Educational Psychology*, 104, 166–181. doi:10.1037/a0025323
- Clay, M. M. (1994). *Reading recovery: A guidebook for teachers in training*.
 Portsmouth, NH: Heinemann.
- Cunningham, P., Hall, D., & Sigmon, C. (1999). *The teacher's guide to the Four Blocks, Grades 1–3*. Eugene, OR: Carson Dellosa.
- Daane, M. C., Campbell, J. R., Grigg, W. S., Goodman, M. J., & Oranje, A. (2005). Fourth-grade students reading aloud: NAEP 2002 Special Study of Oral Reading (NCES 2006-469). Washington, DC: Government Printing Office.
- Denton, C. A., Nimon, K., Mathes, P. G., Swanson, E. A., Kethley, C., Kurz, T. B., & Shih, M. (2010). Effectiveness of a supplemental early reading intervention scaled up in multiple schools. *Exceptional Children*, *76*, 394–416. doi:10.1177/001440291007600402

- Farrall, M. L. (2012). Reading assessment: Linking language, literacy, and cognition. Hoboken, NJ: Wiley.
- Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2007). Learning disabilities: From identification to intervention. New York: Guilford.
- Foorman, B., Beyler, N., Borradaile, K., Coyne, M., Denton, C. A., Dimino, J., . . . Wissel, S. (2016). Foundational skills to support reading for understanding in kindergarten through 3rd grade (NCEE 2016-4008). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.
- Fountas, I. C., & Pinnell, G. S. (2009).

 The Fountas & Pinnell Leveled Literacy
 Intervention (LLI). Portsmouth, NH:
 Heinemann.
- Fountas, I. C., & Pinnell, G. S. (2017). *The Fountas & Pinnell literacy curriculum:*A tool for assessment, planning, and teaching (Expanded ed.). Portsmouth, NH: Heinemann.
- Gillingham, A., & Stillman, B. (2014). The Gillingham manual: Remedial training for children with specific disability in reading, spelling, and penmanship (8th ed.). Cambridge, MA: Educators Publishing Service.
- Good, R. H., & Kaminski, R. A., with Cummings, K., Dufour-Martel, C., Petersen, K., Powell-Smith, K., Stollar, S., & Wallin, J. (2011). *DIBELS Next* assessment manual. Eugene, OR: Dynamic Measurement Group. Retrieved from https://dibels.org/
- Goodman, K. S. (1976). Reading: A psycholinguistic guessing game. In H. Singer & R. Ruddell (Eds.), *Theoretical models and processes of reading* (pp. 497–508). Newark, DE: International Reading Association.
- Heubusch, J. D., & Lloyd, J. W. (1998). Corrective feedback in oral reading. *Journal of Behavioral Education*, 8, 63–79. doi:10.1023/A:1022864707734
- International Dyslexia Association. (2017).

 Effective reading instruction for students with dyslexia. Retrieved from https:// dyslexiaida.org/effective-reading-instruction/

- Keenan, J. M., Betjemann, R. S., & Olson, R. K. (2008). Reading comprehension tests vary in the skills they assess: Differential dependence on decoding and oral comprehension. *Scientific Studies of Reading*, *12*, 281–300. doi:10.1080/10888430802132279
- Kilpatrick, D. A. (2015). Essentials of assessing, preventing, and overcoming reading difficulties. Hoboken NJ: Wiley.
- Lindamood, P., & Lindamood, P. (1998). The Lindamood Phoneme Sequencing Program for Reading, Spelling, and Speech, Austin, TX: Pro-Ed.
- Meadows Center for Preventing Educational Risk. (2016). *Targeting the 2% Project: Instructional considerations for students with dyslexia*. Austin, TX: Author.
- Moats, L. C. (2017). Can prevailing approaches to reading instruction accomplish the goals of RTI? *Perspectives on Language and Literacy*, 43, 15–22.
- Mol, S. E., & Bus, A. G. (2011). To read or not to read: A meta-analysis of print exposure from infancy to early adulthood. *Psychological Bulletin*, *137*, 267–296. doi:10.1037/a0021890
- Morris, D. (2014). *Diagnosis and correction of reading problems* (2nd ed.). New York, NY: Guilford.
- National Reading Panel. (2000). Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction. Washington, DC: National Institutes of Health.
- Nelson, N. W. (2013). Syntax development in the school-age years: Implications for assessment and instruction. *Perspectives* on Language and Literacy, 39, 9–15.
- Nilsson, N. L. (2008). A critical analysis of eight informal reading inventories. *Reading Teacher*, *61*, 526–536. doi:10.1598/RT.61.7.2
- Rivera, M. O., Moughamian, A. C., Lesaux, N. K., & Francis, D. J. (2008). Language and reading interventions for English language learners and English language learners with disabilities. Portsmouth, NH: RMC Research Corporation, Center on Instruction.
- Simos, P. G., Fletcher, J. M., Bergman, E., Breier, J. I., Foorman, B. R., Castillo, E. M., . . . Papanicolaou, A. C. (2002).

- Dyslexia-specific brain activation profile becomes normal following successful remedial training. *Neurology*, *58*, 1203–1213. doi:10.1212/WNL.58.8.1203
- Spear-Swerling, L. (2011). Phases in reading words and phonics interventions. In R. O'Connor & P. Vadasy (Eds.), *Handbook of reading interventions* (pp. 63–87). New York: Guilford.
- Spear-Swerling, L. (2015). *The power of RTI and reading profiles: A blueprint for solving reading problems*. Baltimore, MD: Brookes.
- Spear-Swerling, L., Brucker, P., & Alfano, M. (2010). Relationships between sixth-graders' reading comprehension and two different measures of print exposure. Reading & Writing: An Interdisciplinary Journal, 23, 73–96. doi:10.1007/s11145-008-9152-8
- Torgesen, J. K. (2006). Recent discoveries from research on remedial interventions for children with dyslexia. In M. Snowling & C. Hulme (Eds.), *The science of reading: A handbook* (pp. 521–537). Oxford, UK: Blackwell.
- Torgesen, J. K., Alexander, A., Wagner, R. K., Rashotte, C., Voeller, K., & Conway, T. (2001). Intensive remedial instruction for children with severe reading disabilities: Immediate and long-term outcomes from two instructional approaches. *Journal of Learning Disabilities*, *34*, 33–58. doi:10.1177/002221940103400104
- Wilson, B. A. (1988). Wilson reading system. Oxford, MA: Wilson Language Training Corporation.

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