

Why a Structured Phonics Program Is Effective

David Liben (April, 2016)

Structured phonics programs have long been shown to be highly effective in teaching the foundational skills necessary (though not sufficient) for reading comprehension (<https://www.nichd.nih.gov/research/supported/Pages/nrp.aspx>), so let's start by clarifying what exactly a structured phonics program entails. **Such a program directly teaches the spelling-sound patterns of English in a clear sequence** (e.g., beginning with consonant sounds then moving to short vowel sounds, long vowel sounds, consonant blends...).

There are many structured phonics programs, and the sequence is much the same in all. Students are taught each of the spelling-sound patterns in the sequence and then given an opportunity to apply the sequences as they read and spell words both in and out of context. In other words, students read the words in connected texts and also engage in a variety of activities (such as games, puzzles, and flashcards) outside of the texts they read. Research has shown the need for both of these approaches (Landi et al. 2006).

In most of these programs, the words in the texts are restricted to the spelling-sound patterns that have been taught. For example, if short vowel sounds had been taught but long vowel sounds had not been taught, then only short vowel sounds would appear in the texts students read. Similarly, if specific consonant blends (e.g., bl, cr, tr...) had been taught, these would appear in the texts, whereas blends that had not yet been taught would not. These texts are often called “phonetically controlled readers” or “decodables” because the majority of the words forming the text conform to the letter-sound or phonetic patterns that have been taught up to that point in the program. Phonetic or letter/sound patterns not yet taught do not appear, or appear far less often, hence the term “phonetically controlled.”

Programs that do not use phonetically controlled readers also use texts that are controlled — essentially by every *other* feature of the text: repetition, context, illustrations, shorter sentences, shorter paragraphs, and larger font. Such texts are usually called “leveled readers” or “leveled texts” (since they are placed into complexity levels by this array of text features) or “predictable texts” (since the array of supports makes what happens very predictable and students use this to help read the words). Typically, guided reading programs use these types of texts.

Another essential feature of structured phonics programs is that they **ensure that beginners acquire the foundational skills necessary to move into reading**. These programs make sure that children learn letters and learn to segment words into their smallest sounds. Learning letters and segmenting words are the two most important contributors in helping children learn to read words during kindergarten and first grade. Letter knowledge and sound awareness enable children to interpret letters as representing the separate sounds in individual words and as a result to remember how to read and spell the words.¹ Structured phonics programs usually include “phonemic awareness,” the idea that a word is made up of a series of sounds. These often begin with teaching rhymes followed by letter sounds and parts of words such as syllables. Learning that a word is made up of separate sounds helps set the stage for learning spelling-sound patterns of the language and how they combine to make words. Phonemic awareness includes nearly all games (see Adams 1998), and some programs that are not structured phonics do this as well.

In my work with Student Achievement Partners (www.achievethecore.org) and in schools in Harlem and elsewhere (http://www.educationalleader.com/subtopicintro/read/ASCD/ASCD_288_1.pdf), I have seen the power of a structured phonics program. And hundreds of studies have shown the benefit of these programs. The report of the National Reading Panel <https://www.nichd.nih.gov/publications/pubs/nrp/documents/report.pdf> reviewed the best of these studies. The research is so strong and so consistent that the IES (Institute for Educational Science, the research wing of the Education Department) has decided that the case is closed: There is no further need to review what the evidence shows about the effectiveness of structured phonics programs.²

Below, I focus on the types of texts used in structured phonics programs compared to other programs, why a structured phonics approach works so well (hence the overwhelming research), some potential pitfalls in using these programs, how these pitfalls can be avoided, and different approaches that some structured phonics programs have adopted to do this.

¹ Sound awareness is a necessary prerequisite to segmenting words. You can't break up or segment “nest” into four sounds unless you are aware in general that a word is made up of a sequence of sounds and that the sounds themselves do not provide the meaning. The sound that “n” makes has nothing to do with the meaning of “nest.”

² See also <http://www.readingrockets.org/article/findings-national-reading-panel>.

Texts in Structured Phonics Programs Compared to Texts in Other Foundational Skills Programs

When contrasting the texts students read in structured phonics programs with the texts used in other programs, we find that the key differences are the nature of the text and the different processes students would use to read that text. As noted earlier, leveled readers depend on context, pictures, short sentences, clear patterns, and repetition. They include texts that sometimes are referred to as “predictable texts.” Take, for example, “Mrs. Wishy Washy”:

Mrs. Wishy Washy has a mop. [with accompanying picture of a mop]

Mrs. Wishy Washy has a broom. [with picture of a broom]

And so on...

This is an example of an early first-grade reader or leveled or “predictable” text. Students first read this text with the teacher. Then they reread independently or in pairs. Yet unlike with a text that is controlled for spelling-sound patterns, here students can simply have memorized the words and sentences because of the repetition and predicted words thanks to the pictures and the context. In other words, students can use the pictures, the context, the patterns, or any combination of these to read the words in the text. They do not *have* to focus on the spelling-sound patterns of each or most of the words. This does *not* mean that teachers cannot call attention to spelling-sound patterns within these words, only that most leveled reading programs do not call for this and it is not essential to reading the text.

This type of approach works well for something called “concepts of print”: the idea that words and sentences are read from left to right, books are read from left to right, and books have titles and pictures. However, as texts get more complex (even in these early grades), it becomes progressively more difficult for students to read the words by using this combination of contextual clues. (Note, though, that as students are taught to use their knowledge of spelling-sound patterns to read words, they of course also should be taught to employ context when they read a word and it doesn’t sound right. In other words, context is an important backup, but not the primary process used to read words or learn to read words.)

By contrast, a phonetically controlled or “decodable” reader would have less repetition, few pictures, and be less predictable. Consider the example below (an early first-grade phonetically controlled reader):

I am Beth. I am ten. I am at camp. Camp is fun.

Mom and Dad went on a trip to the camp. All of us were at the camp

This phonetically controlled example is from the beginning of the book. It has no pictures. The student must focus exclusively on the spelling-sound patterns of the words, words made from the spelling-sound patterns that were taught. In this case, the vowel sounds are all short vowels, and there are no consonant blends. The other words — “is” and “went” — are high frequency words (sometimes called “Dolch” words, named after the creator of a list of these types of words), which are taught as whole words that students commit to memory usually without focusing on the letter/sound pattern (high frequency words often are also called “sight words,” “snap words,” “irregular words,” “tricky words”... different programs use different labels).

In sum, the major difference between teaching children to learn to read with leveled texts (or “predictables”) vs. phonetically controlled readers concerns what we are asking students to do. **With leveled readers, we are asking students to predominately use context to learn to read; in phonetically controlled readers, we are asking students to first and foremost use the spelling-sound patterns of the English language.**

Some schools now combine a structured phonics program (e.g., Foundations, Reading Mastery — there are a number of these) with predictable or leveled texts. This is clearly better than no structured phonics at all, yet there are two potential pitfalls. Time spent on the predictable or leveled readers often means less time attending to spelling-sound patterns. If little or no attention is paid to spelling-sound patterns when students work with the predictable or leveled texts, they could lose the habit of using the spelling-sound knowledge they have acquired. And it is difficult (though not impossible) to attend to spelling-sound patterns in these texts, since the texts are not aligned with the patterns students have learned. In addition, a student may need more work with a specific pattern, but this pattern might not appear in the predictable text being read.

In order to read with comprehension, students need to read with fluency. Fluency is defined as reading accurately, at a rate appropriate to the text, and with proper expression (Rasinski 2004). The first step in fluent reading is to accurately and effortlessly recognize the words in the text. A proficient reader reads a word in about .23 seconds. (<https://www.microsoft.com/typography/ctfonts/WordRecognition.aspx>) Students who stumble or hesitate in recognizing too many words are prevented from reading a text fluently. A structured phonics program by continually assessing and addressing students’ progress in mastering spelling-sound patterns assures that all students going through the program can decode with automaticity, without which fluent reading is not possible.

To decode with automaticity, students need to learn letters and combinations of letters that represent the 44 different sounds of the English language in written words. Unfortunately, unlike other languages whose writing systems are far more straightforward since the letters have a one-to-one correspondence to the sounds (e.g., Spanish,

Finnish, and Hebrew), in English the same letters can make different sounds: *a* as in bat, date, and all; *ch* as in school and check; *oo* as in look, tool, and poor. And to make it worse, the same sounds can be represented by different letters or combinations of letters: the short *e* sound in bet and bread; the *f* sound spelled *gh* in laugh, *ph* in phone, or just *f* in fickle (which English is)... you get the picture. Ultimately any word made up of any of these spelling-sound patterns needs to be read accurately and immediately, in roughly .23 seconds, and to be spelled accurately as well. (In case you've been wondering, you now know why spelling bees are a uniquely English language event.)

In the K-8 school my wife and I started in Harlem, we used to tell the children in K and 1, "English is a crazy language!" So why would a structured phonics program work so well in such a *fickle* language? It would seem that there are too many combinations and not enough consistent patterns.

What a Structured Phonics Program Does to Support Emerging Readers

First, a structured phonics program introduces students to spelling-sound relations separately and explicitly. It does *not* (as in the predictable text "Mrs. Wishy Washy" described above) expect students to infer spelling-sound patterns by seeing them in words that they read in context (although contextual exposure can and *should be done* to supplement learning spelling-sound relations individually).

In "Mrs. Wishy Washy," as children see the picture of the broom and the word "broom," the expectation is they would infer that "oo" makes a similar sound when they see "soon," "spoon," etc. Of course, this does *not* mean that teachers cannot call out this pattern to students. But it does mean that a leveled reading program does not necessarily *require* teachers to call out letter sound patterns. (Nor, with "Mrs. Wishy Washy," can one be sure that the same pattern will appear in the rest of the book, or in any number of books students read after this text.)

Note, too, that students who come from language-rich homes (where they are frequently asked questions or encouraged to look for patterns in language and elsewhere) would be more likely to make these inferences in the early grades. This puts students who do not come from such a background at a disadvantage in these vital early years. The famous "30 Million Word Gap" study, which showed how young children from less educated households hear 30 million fewer words than their peers, attests to this. Students who are spoken to so much more not only know more words but also become comfortable with more syntactical forms and of course acquire more knowledge. All of this produces a greater comfort with language that is more likely to encourage and inculcate an inferential

learning style that would support the more inferential requirements of the leveled or predictable approach.

By contrast, a structured phonics program directly teaches the concept of what a spelling sound pattern is and what it does, thus supporting students who might not have the advantages of students from more educated families. This type of metacognitive awareness has long been shown to support all learning. Teaching it can begin, for example, by asking students what a letter is and explaining that it is a picture of a sound. In other words, teaching the concepts of the alphabetic principle and spelling-sound patterns initially and directly helps make students aware of language in general and avoids the risk of losing the forest for the trees. It also lessens the disadvantage that students coming from less language-rich environments might have in these essential early years.

Second, by introducing spelling sound patterns in a sequence, one at a time, teachers can more easily tell which students have mastered which patterns. This, in turn, makes it easier to provide more support for those who need it. If you don't introduce, teach, and reinforce the patterns in a clear sequence, then the only alternative is to address problems reactively as they become apparent in whatever texts students are reading. If these texts are like "Mrs. Wishy Washy" — written with no specific spelling sound patterns in mind — then addressing problems becomes far more difficult to do. It also makes it far more difficult (but not impossible) for the teacher to know which patterns specific students have learned, which students need more support, and how to provide activities to support these students. All this assessment and differentiation would be specified in a structured phonics program. Through frequent and regular check-ins and informative assessment of spelling-sound pattern mastery, teachers *and students* would be aware of which spelling-sound patterns have been learned and which need more work. This is significantly more difficult (though, again, not impossible) with predictable or leveled texts where students — even those at the same ability or reading level — are reading a variety of books with none chosen for the inclusion of specific spelling-sound patterns.

It is important to note here that as students learn an increasingly greater number of spelling sound patterns, they increase their ability to learn not only words containing these patterns but also irregular words or words with spelling-sound patterns they may not have yet been taught. This occurs because of increased comfort and enjoyment with reading in general and because the words they know help provide contextual support for those they don't. This context effect will grow as students learn more spelling-sound patterns. To whatever degree spelling-sound patterns are learned, the context effect grows in strength; conversely, the failure to master spelling-sound patterns diminishes the context effect. Marilyn Adams' hugely influential *Beginning to Read* lays out the

abundant elegant cognitive science research behind this process. Keith Stanovich and Anne Cunningham's work (Cunningham and Stanovich 1998, Stanovich 1986) illustrates how the failure of this process to move in the right direction explains the "Mathew Effect" in education: Students who start out well move increasingly farther and faster each year relative to those who start out poorly.

Third, we understand that proficient readers know more than just the meaning of a word. This insight comes from a body of work called the "Lexical Quality Hypothesis" (Perfetti, Lexical Quality, 2007). Proficient readers know a word's phonology (how to pronounce it), its orthography (how to spell it), and its morphology (what prefixes, roots, and suffixes make it up). A structured phonics program teaches students to apply all of this knowledge to decode and spell words. When learners do this a few times, the spellings of individual words become glued in memory to their pronunciations and meanings. This enables them to read the words more quickly from memory the next time they see them, and to remember how to write the words. The application of decoding skill to retain individual written words in memory supports the development of proficient readers with automatic word reading skill (Adams 1990).

In other words, after a student first reads "splashing," hears its correct pronunciation, recognizes and reads correctly the "-ing" suffix, absorbs its meaning in the specific context, and spells it correctly, she then begins the process of placing this word in her long-term memory. After a few repetitions, the word is recognized and read with automaticity. It is essential to note that students will vary in how many repetitions they need: Some will need *far* more than others. Thus, a good structured phonics program provides abundant materials so that teachers can support students who need this greater time and attention.

Finally, since the teacher knows exactly which spelling-sound patterns are being taught and which already have been taught, **she can select the most appropriate texts for her students to read: those that contain the spelling-sound patterns being taught and those already learned.** For example, if a student needs more support with consonant blends such as "bl, cr, dr," then working in a book that has these can provide this support. If books are chosen on some other basis (think "Mrs. Wishy Washy"), then this becomes far more difficult.

There is, however, a problem with most structured phonics programs.

My point in the paragraph above is both virtue and vice. Ultimately, the way students reinforce and commit to memory the large and myriad array of spelling sound patterns is not by simply memorizing rules; rather, it is by seeing the patterns in words and learning to read and spell the words. This is a great virtue of structured phonics programs.

However, many structured phonics programs have limited the texts that students read to those that contain only the spelling sound patterns already taught. As many teachers recognize, these highly controlled texts can be quite stilted: hence the vice and the reason many people do not use structured phonics programs. Of course, no matter how dull the text, the act of learning to read any text successfully can feel exciting to students. But it would be *far better* for students also to be genuinely engaged with the content of the first texts they read. It's a "both and" situation. (Incidentally, we need lots more "both and's" in education. By a fabulous non-coincidence my wife, Meredith, and I have written a paper of this name that can be found by searching at www.achievethecore.org).

A note on special education and Response to Intervention (RTI) legislation

Part of the reason for this legislation was findings that many students referred to special education, especially from less affluent families, were in fact students who could not decode with automaticity and invariably were not taught in a foundational skills program employing systematic phonics. Thus another benefit of a systematic phonics program is to avoid the need for placements that might unnecessarily take students out of the classroom often during read-alouds, research, or other activities that grow the vocabulary and knowledge these students need.

The most effective structured phonics programs provide this "both and": *both a structured phonics program and engaging content-rich texts with instruction that calls attention to and provides repetition of known spelling-sound patterns.*

Unfortunately, not many programs like this exist. Examining programs that combine these ingredients in different ways is illuminating.

Examining Three Specific Structured Phonics Programs

American Reading Company (ARC)

American Reading Company's Independent Reading Level Assessment (IRLA) and Foundational Skills Toolkit combine a number of powerful features.

- A huge number of words that students learn to read as wholes — far more than traditional structured phonics programs provide. Students are gradually directed to pay attention to the spelling-sound patterns within these words as they come up in the sequence. These are high frequency words that appear in many texts (e.g., "on," "live," "there," "little," "house," "family," "mother," "come," "go," "said"...). This is far more words than the traditional Dolch list mentioned above. ARC calls these "power words." Committing so many words to memory when combined with words representing the spelling-sound patterns learned allows students to work with more engaging texts as they continue to learn more spelling-sound patterns.

- A clear, well-structured, teacher-friendly protocol allowing teachers to assess students' mastery of spelling sound patterns, vocabulary, and comprehension.
- Highly engaging texts, many of which are the type of nonfiction informational texts students find fascinating (sharks, insects, spiders, monsters, sports, motorcycles...). This also meets the call in the new standards for more informational text in these grades. Thus, the texts that students read are clearly engaging, and they contain many words (though not all) with the spelling sound patterns students have learned. This is done in parallel with structured phonics lessons as well as clear and detailed formative assessments to determine what support is needed for each student. Each part of the program reinforces the other.
- Another very strong component is the use of a number of books on the same or similar topics. This helps provide a context that enables decoding of new words that might not be in students' vocabulary.

Core Knowledge Language Arts (CKLA)

The foundational skills component of Core Knowledge Language Arts (CKLA) takes a different and also powerful approach.

- Though texts are phonetically controlled, they are completely engaging for students of this age: stories about families traveling around the world; grandmothers who fly hang gliders; children who discover new fossils...
- These texts are a series of short stories packaged together as a book, giving even kindergarten students the sense of reading a "real book."
- Teachers are given an "Assessment and Remediation Guide" that provides hundreds of activities to reinforce spelling-sound patterns. This gives teachers easy access to materials to give to students who need more time and attention to master spelling-sound patterns.
- Here, as in the ARC program, students have the opportunity to reinforce spelling sound patterns, both in lessons and activities growing out of a structured phonics program as well as in the texts they read; each component mutually reinforces the other.

EL Education

EL Education has the following powerful features (and in one case a possibly unique one).

- EL Education's structured phonics program solves the engagement problem by using two parallel texts focused on the same topic: a simplified phonetically controlled text for students to read, and a *far* more complex "engagement" text for reading aloud (whose words are not phonetically controlled and whose content and language is far richer). At certain points during the read-aloud of the engagement text, the teacher stops reading and students read the same information, but a simplified version in the phonetically controlled text. Thus the

read-aloud provides background knowledge and vocabulary and brings in far more engagement than the decodable texts could do on their own. This feature makes even the earliest and hence simplest decodables more engaging for students.

- In the EL structured phonics program, students have the benefit of lessons that introduce and reinforce spelling sound patterns; these spelling-sound patterns are then reinforced in the decodable texts that students read.
- EL puts great emphasis on students setting their own goals based on regular assessments of spelling-sounds. This enhances a deeper understating of spelling sound patterns as well as students' sense of their own efficacy: a nifty one-two punch.
- In a separate part of EL's comprehensive curriculum (called the Integrated Literacy block), students read texts on a specific topic over a number of weeks. Though these texts are not phonetically controlled, support is provided by teachers, pictures, and repetition. That students are reading about a single topic across multiple weeks provides further support, since students are more likely to recognize words directly and indirectly connected to the topic.

Each of these programs has many other positive components not detailed here. What they all have in common, however, and what is most important (in terms of why, despite extensive research, not enough schools include a structured phonics program) is the **combination of strong lessons teaching the spelling-sound patterns of the English language, and the opportunity for students to regularly read engaging texts that support these lessons and the essential learning of spelling-sound patterns.**

A foundational skills program that blends a strong structured phonics program with meaningful and engaging texts as these do can go a long way toward addressing the needs of those students we need to help the most — and a long way toward addressing the negative consequences of the Mathew Effect. Sadly, this has not been the norm in American education and is a large part of the reason that achievement gaps persist. Students who fail to decode with automaticity will fail to read with fluency; students who fail to read with fluency will fail to comprehend the rich, complex text needed to succeed in college, work, and life. Tragically, the vast majority of these students are those who depend on us the most, and those whom we most need to help.