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# Effective Phonics and Word Study Instruction

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## Introduction

The ability to read and spell individual words with ease is a prerequisite to reading for meaning. Students who master the basics of phonics and word study can focus on the meaning of text without struggling to decipher the sounds and letters within words. In the early stages of reading development, students learn to discern the individual sounds (i.e., phonemes) within words and match them with the letters that represent these sounds. This letter-sound relationship is often called the “alphabetic principle,” which entails learning how to identify and decode the sounds and letters that make up individual words. Moving beyond this basic alphabetic sound-letter knowledge, students also learn the principles of phonics and word study. This involves learning the conventions of spelling patterns and basic rules for how words are formed and how to read complex multisyllabic words. Most students acquire these foundational reading skills in the early grades through systematic and explicit instruction and then continue to add to their understanding of words. Some students, however, require extra support or reading intervention to build this important foundation for reading.

## What It Is

**Phonics** includes the basic alphabetical skills of learning the sound-letter relationships and the basic rules for decoding words (Adams, 1990; Ehri, 2003; National Reading Panel, 2000; O’Connor, 2014). Phonics includes learning all the letters of the alphabet and the sounds they represent as well as the rules and conventions of decoding words. Decoding involves deciphering the sound for each letter and then stringing sounds together to make a word, such as reading *m-a-t* as *mat*. Students also must learn rules, or conventions. Some letters, such as the letter *c*, make more than one sound, as in the *c* in *carrot* and *city*. Students learn that if the *c* is followed by the letter *e*, *i*, or *y*, it usually makes a soft sound (such as in *celery*, *city*, and *fancy*), but if it is followed by any other letter, it makes the hard sound, similar to the letter *k*, such as in *carrot*. Only through extensive exposure to reading and writing words with these patterns are students able to read text with ease, allowing them to concentrate attention on the meaning.

**Word study** is a broader term that includes phonics and the more advanced skills of reading complex multisyllabic words. Students learn how adding prefixes or suffixes to base words can change the meaning of the base. Word study also includes learning about the derivation of words from Greek and Latin roots and how patterns exist in related words. For example, the Latin root of *port* means “to carry” and the prefix *trans-* means “across.” Putting them together, the word *transport* means “to carry across.” In another example, the suffix *-ful* means “full of,” so the word *helpful* means “full of help,” or bringing help to a situation. However, adding the prefix *un-* to the word negates the meaning—*unhelpful* is the opposite of “full of help.”

## What It Looks Like

In the early stages of reading, students “sound out” a word by saying aloud the sound for each letter and then blending the sounds to make a single word. For example, a student might look at the word *step* and say, “s–t–e–p, *step*.” With more complex spelling patterns, such as the “silent-e rule” that forces a long vowel sound (e.g., *mate*), students must recognize the spelling pattern to assign the correct vowel sound to the word. With practice, students internalize the conventions and are able to discern the correct sounds and apply the various rules without having to sound out each letter or letter combination. Acquiring automaticity with basic phonics skills takes time and practice with reading words in isolation and in the context of texts. Acquiring automaticity with the more complex word study skills, such as analyzing the prefixes and suffixes attached to root words, also takes time and extensive practice with reading words in isolation and in text. Effective phonics and word study instruction involves explicit instruction, teacher modeling, guided practice with feedback, extensive practice, and progressive, sequential skill building over several years.

## Benefits

- With explicit instruction and extensive practice in phonics and word study skills, students develop automaticity with decoding words when reading texts, which then aids comprehension (Adams, 1990; National Reading Panel, 2000; O’Connor, 2014; O’Connor & Padeliadu, 2000).
- Sequential, systematic instruction that builds on prior skills leads to fluent word reading (de Graaff, Bosman, Hasselman, & Verhoeven, 2009; Ehri, Nunes, Stahl, & Willows, 2001; O’Connor, 2014).
- Early success with phonics and word study is predictive of later reading competency and overall academic success (de Graaf et al., 2009; Foorman, Francis, Fletcher, Schatschneider, & Mehta, 1998; Juel, 1988).
- As students move beyond the early grades, it is not possible to memorize every word they encounter. Phonics and word study instruction provides students with strategies for approaching unknown words (Adams, 1990; Ehri, 2003; O’Connor, 2014).

## What the Research Says

- 1. Provide explicit instruction** that includes teacher modeling, guided practice with feedback, and opportunities for practice (Adams, 1990; National Reading Panel, 2000; O’Connor, 2014; Torgesen, 2002; Vaughn & Linan-Thompson, 2007).
- 2. Provide opportunities for students to apply learned spelling patterns and rules** with words in isolation and in the context of text (Lopez, Thompson, & Walker-Dalhouse, 2011; Vaughn & Linan-Thompson, 2007).
- 3. Early phonics instruction helps to prevent later reading difficulty** (Foorman et al., 1998; Torgesen, 2002).
- 4. Follow a logical sequence of skills** that build over time (Adams, 1990; National Reading Panel, 2000; Vaughn & Linan-Thompson, 2007).
- 5. After students learn a few consonants and one or two vowels, begin to teach the sound-blending process** by sounding out words that contain the known sounds and blending them into words (Vaughn & Linan-Thompson, 2007).

## Examples

### Using Letter Tiles

The process of mapping letters onto sounds in words can seem abstract to young children and older students with reading difficulties including dyslexia or learning disabilities. Teachers can make the process more concrete by asking students to manipulate letter tiles to make and change words. Once students know the sounds of a few letters, including one or two vowels, they are ready to form words. Focus on only one phonics skill or word pattern at a time—for example, the consonant-vowel-consonant (CVC) pattern with a short vowel, such as in *cat*, *hid*, and *top*. Choose letters that are not visually similar (e.g., *b*, *d*, and *p*; *m* and *n*; *p* and *q*) or similar in sound (e.g., *f* and *v*, *t* and *d*, *b* and *d*). Once students are able to form simple words, instruction can move on to changing or adding sounds to make additional words. Depending on the focus of instruction, teachers can ask students to change the initial sound at first, later moving to changing ending sounds and vowels. After the short-vowel patterns are mastered, move on to long-vowel patterns, consonant digraphs, diphthongs, and other patterns.

Teach a few common sounds that are easy for students to pronounce and are not easily confused. With five consonant sounds and one vowel, it is possible to form several words. Then, adding another vowel sound and additional consonants as students master them opens up even more possible words (see below).

### Letter Tiles Procedures

Select letter tiles for five known consonant letters and one vowel. At first, choose letters that are not visually similar or similar in sound. Later, you can use similar letters to promote distinguishing between these sounds. Provide each student with the selected letter tiles and gather tiles for teacher demonstration, possibly using a document camera.

Make a list of possible words. For example, with the consonants *c*, *f*, *n*, *s*, and *t* and the vowel *a*, it is possible to make these words:

*at, cat, fat, Nat, sat, an, can, fan, Stan, tan*

Demonstrate two or three words, using the teacher tiles with a projector. Say the word, break it into sounds, and select letter tiles to form the words. Show how the word is segmented into sounds with the letters visually separated and then push them together so they are touching when you blend them.

Ask students to make several words on their own, providing praise and feedback. Follow up by making the words with the teacher tiles to reinforce the process.

When students are able to make these words, change the activity to changing sounds. For example, after students make *cat*, ask them to change one letter to make it *sat*. They could also change the final consonant, turning *cat* into *can*.

Gradually add more letter tiles as students master new letter sounds. By adding two more consonants, *b* and *r*, and one more vowel, *o*, to the set of letters listed above, new words are possible, such as *bat*, *ban*, *rat*, *ran*, and *cab*.

This activity could be modified to focus on letter combinations, such as consonant digraphs (*ch*, *sh*, *th*, *wh*). Have students make the digraphs with tiles and then add the vowel and final sound (e.g., *ch-a-t*).



Say the following:


- We will make the word *cat*. Say it with me, *cat*.
- Watch me put down a letter tile for each sound.
- /k/ is the letter *c*.
- /a/ is the letter *a*.
- /t/ is the letter *t*.
- /k/ /a/ /t/.
- When you blend them together, they say *cat* (push the tiles together).

Finally, dictate several words, asking students to spell them with their own boxes and then write them on a piece of paper or a whiteboard. Students will end up with a list that they can read several times to develop fluency with word reading. Ask students to read their list to a partner while you rotate around to listen in.

### **Elkonin Boxes**

This activity will help students focus on initial, medial, and final letter sounds. Early in the process of building decoding skills, students may have difficulty breaking down a word into its component parts. This activity will also reinforce the phonemic awareness skills of segmenting and blending sounds. Prepare a sheet with three boxes (see below). Using letter tiles, students spell words by putting tiles into the boxes that correspond with beginning, middle, and final sounds. Some teachers find it helpful to color code the boxes, with the vowel (middle) box having a different color than the consonant boxes (beginning and ending).

Word: *bit*

Beginning	Middle	Ending
		

### **Elkonin Boxes Procedures**

Prepare the Elkonin boxes. It is easy to make a worksheet with Elkonin boxes that can be reproduced for the class. Some teachers like to laminate them and, instead of tiles, have students write letters in the boxes with erasable markers.

Prepare a word list of words with appropriate sounds for your students. Select known letter sounds and as many vowel sounds as is appropriate for your students. The following is a sample word list with the CVC spelling pattern and two short vowel sounds.

Short <i>i</i>	Short <i>o</i>
bit	box
dip	cop
fin	dot
hip	fog
kit	got
lip	hop
nip	jog
rip	lot
sit	mop
tin	not
win	pot

Use the explicit instruction process of modeling, guided practice, and independent practice. First model the process with letter tiles and boxes, perhaps using a document reader that projects for all students to see. Say and spell several words, pointing out the beginning, middle, and final sounds. Then, provide guided practice by asking students to spell several words along with you, using their own Elkonin boxes and letter tiles (or erasable markers).

This activity can be expanded to include consonant blends (e.g., *bl*, *cr*, *st*) or consonant digraphs (*ch*, *sh*, *th*, *wh*) in the beginning sound box. For consonant blends, in which the two letters retain their designated sounds (e.g., *s-t*), you might create a new set of Elkonin boxes with four spaces, two for beginning sound and one each for the middle and final. Later, ask students to spell words that have a consonant blend at the end (e.g., *f-a-s-t*).

### **Minimal Pairs**

This activity juxtaposes two words that are identical, except for one sound (O'Connor, 2007). For example, *sit* and *set* have the same beginning and final consonant sounds but differ in only the medial vowel sound. The words *net* and *met* differ in only the initial consonant sound. Minimal pairs activities help teachers to customize decoding work to focus on the sounds that are difficult for students. Minimal pairs instruction is also helpful for English language learners who may confuse particular sounds that are not present in their native language or are difficult to pronounce. For example, many students confuse the short *e* (as in *set*) and short *i* (as in *sit*), particularly native Spanish speakers. Helping students to spell or read words with this minimal pair difference can be helpful in learning to recognize, spell, and pronounce the target sounds.

Error correction plays an important role in this activity. Giving students immediate corrective feedback turns the focus on the specific sound that causes students trouble. Teachers should rotate around the room to give praise and feedback when using this activity in a whole-group setting. This activity is also good in small groups that would allow for individualized feedback. Provide feedback by showing the word the student pronounced above or below the correct word and saying, "The word is *pot*, but you made *pat*. What letter do you change? What's the word?"

## Minimal Pairs Procedures

Prepare a list of minimal pairs words that focus on the target sound. See below for sample word lists.

Say the first word and ask students to write it. You may want to segment it into initial, middle, and final sounds for the first few times or ask the students to say the sounds before they write. For example, “The word is *sit*, /s/-/i/-/t/, *sit*. Write the word *sit* on your whiteboard and hold it up for me to see.” Check for accuracy and give feedback as needed.

Say the next word and ask students to write it directly below the first word. For example, “The next word is *set*, /s/-/e/-/t/, *set*. Write the word *set* below the first word. You will notice that these two words are similar, but one letter is different. Hold up your two words for me to see.” Rotate around and give feedback as needed. You will quickly see which students need extra practice or further instruction.

Sample minimal pairs words:

Focus on Vowel Sounds	
sit	set
cop	cup
bat	bit
fan	fin
man	men
tin	ten
get	got
dig	dog

Focus on Confusing Consonants	
bug	dug
bet	vet
map	nap
met	net
fan	van
fat	vat
get	get
vet	wet

### HINTS

This is a cognitive decoding strategy that provides students with a procedure—a series of five steps (see below)—to help students break down multisyllabic words into smaller chunks and then read the words efficiently. Familiarity with some prefixes and suffixes is essential to using HINTS successfully. Knowing the syllable types will enhance students’ use of a multisyllabic decoding strategy. Teachers often make and display a strategy poster for HINTS to remind students of the steps.

## HINTS Procedures

Prepare a list of several words that have prefixes, suffixes, or both, and a decodable or known base word. Prepare a poster or worksheet that lists the steps of HINTS:

- H HIGHLIGHT** the prefix or suffix in the word
- I IDENTIFY** the consonants and vowels in the base word. Underline the vowel.
- N NAME** the base word. Look for word patterns that you know to figure out how to say the base word.
- T TIE** the parts together. Blend the prefix, base word, and suffix to make a word.
- S SAY** the whole word. Does it sound like a word you know? If not, try again to see whether you can make sense of the word.

With one or two words, demonstrate the use of the strategy on the board or projector and discuss how this strategy will help students to figure out a big word by breaking it down into chunks.

Ask students to work with a partner to use the HINTS strategy to figure out a list of words while you rotate around to give feedback. After students have been through the process two or three times, stop and debrief with them about how the process helped them. You may need to discuss what to do when you use the strategy and cannot figure out whether a word is a real word. Students may have to reread a word, placing emphasis on different syllables, or try the base word with a different vowel sound (long or short). For example, in the word *unbreakable*, students might not recognize the base word *break* as having a long *a* sound rather than long *e*.

Practice using HINTS with isolated words several days in a row. After that, when students encounter a difficult word in the context of reading a passage, remind them to use the HINTS strategy to figure it out.

## Implications for Practice

- Provide explicit instruction routines (modeling, guided practice, extensive practice) and specific feedback regarding students' performance of the skills. Rather than saying "good job" for a word read correctly, tell the student exactly what he or she did correctly (e.g., "You remembered that a silent *e* makes a long vowel.>").
- Ask students to read words with partners to give them ample opportunities to practice learned skills.
- Help students to internalize and become automatic with word-reading skills by fading away manipulatives and prompting. Remind them to try sounding out "in their head" after they have learned word patterns.
- Follow a logical sequence of phonics and word study skills that builds systematically on previously learned skills. Most reading and reading intervention programs have a scope and sequence chart that you can examine before purchasing.

## Conclusion

Students who develop competence with phonics and word study skills in the early grades are more likely to experience literacy and academic success as they get older. Providing a solid foundation of explicit instruction will help students to easily read words and focus on comprehension. Older students who need reading intervention often need explicit phonics and word study instruction to fill in gaps in their reading skills.

## Sources

- Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: MIT Press.
- de Graaff, S., Bosman, A., Hasselman, F., & Verhoeven, L. (2009). Benefits of systematic phonics instruction. *Scientific Studies of Reading, 13*(4), 318–333.
- Ehri, L. C. (2003). *Systematic phonics instruction: Findings of the National Reading Panel*. ERIC Document ED479646.
- Ehri, L., Nunes, S., Stahl, S., & Willows, D. (2001). Systematic phonics instruction helps students learn to read: Evidence from the National Reading Panel's meta-analysis. *Review of Educational Research, 71*(3), 393–447.
- Foorman, B., Francis, D., Fletcher, J., Schatschneider, C., & Mehta, P. (1998). The role of instruction in learning to read: Preventing reading failure in at-risk children. *Journal of Educational Psychology, 90*, 37–55.
- Juel, C. (1988). Learning to read and write: A longitudinal study of 54 children from first through fourth grades. *Journal of Educational Psychology, 80*(4), 437–447.
- Lopez, F. A., Thompson, S. S., & Walker-Dalhouse, D. (2011). Examining the trajectory of differentially skilled first graders' reading fluency of words in isolation and in context. *Reading & Writing Quarterly, 27*(4), 281–305.
- National Reading Panel & National Institute of Child Health and Human Development. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups*. Washington, DC: National Institute of Child Health and Human Development, National Institutes of Health.
- O'Connor, R. E. (2014). *Teaching word recognition: Effective strategies for students with learning difficulties* (2nd ed.). New York, NY: Guilford Press.
- O'Connor, R. E., & Padeliadu, S. (2000). Blending versus whole word approaches in first grade remedial reading: Short-term and delayed effects on reading and spelling words. *Reading and Writing: An Interdisciplinary Journal, 13*(1-2), 159–182.
- Torgesen, J. K. (2002). The prevention of reading difficulties. *Journal of School Psychology, 40*(1), 7–26.
- Vaughn, S., & Linan-Thompson, S. (2007). *Research-based methods of reading instruction for English language learners, grades K–4*. Alexandria, VA: Association for Supervision and Curriculum Development.