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# Success with Reading and Spelling

## Students Internalize Words Through Structured Lessons

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Thirteen years ago, when I first started teaching in the Cleveland Public Schools, I was assigned a junior high reading class for students with learning disabilities and inadvertently discovered that many of my students with learning dis-

abilities couldn't rhyme words. What triggered my discovery was deciding to use *language experience story-writing* and *compare/contrast decoding* as a basis of my reading program until my textbooks arrived. After several weeks, students were progressing with the language experience, but they were having severe difficulties with the compare/contrast decoding. At its core, compare/contrast requires students who can't decode a word in their text to find a word that has a similar ending from their "word bank," and then use this known word as an onset-rime hint to help to decode the unknown word. My students were having trouble with the whole concept—they couldn't decode the unknown word even if I supplied the "known" word and told them how to pronounce it.

One day, I got so frustrated that I started writing *cat, bat, fat, hat . . .* on a flipchart and was completely horrified to find that all the students could read *cat*, but many couldn't read the entire list. And when I covered the chart and asked these students to give me some words that rhymed with *cat*, they couldn't do it.

Other educational researchers of the same era began documenting this phenomenon in educational journals as "phonological processing deficits." The mainstream press has even begun to report on the field—*Newsweek* (Begley, 1994) reported that most students with learning disabilities need phonological remediation, and *Science News* (Travis, 1996) documented a remediation methodology based on playing games on computers.

Over the intervening years, I have developed a *structured internalization spelling method*. The strategy uses a series of small graduated steps to systematically teach students to transcribe phonological sounds (phonemes) onto paper as alphabetic letters

### Research in Early Reading Skills

Increasingly, researchers have begun to document the need for phonemic awareness training and phonological/orthographical training (Griffith & Olson, 1992; Haskell, Foorman, & Swank, 1992; Helfgott, 1976; Wylie & Durrell, 1970). In a recent issue of the *Journal of Learning Disabilities*, Torgesen, Wagner, and Rashotte (1994, p. 236) declared that the emerging consensus about the importance of phonological processing abilities in the acquisition of early reading skills is one of the most exciting developments in reading research.

Other researchers described techniques for developing phonemic awareness (Griffith & Olson, 1992; Yopp, 1992). These authors gave several lesson plans and several principles for developing lesson plans, but did not develop a comprehensive system. Cunningham & Cunningham (1992) presented an inventive spelling system that can be used throughout the year but did not specify when individual phonemes and onset-rimes should be introduced. Similarly, in her response to Torgesen et al. (1994), Benita A. Blachman (1994) described some methods that she found significantly improved the phonemological awareness of inner-city children. She concluded, however, that more research must be done to learn about the optimal length, intensity, and timing of phonological treatment, as well as the best combination of instructional components. Structured internalization and the accompanying scope and sequence chart should answer some of Blachman's concerns.

**Students devise a spelling list on onset-rime words.**

(graphemes). This process enables students to grasp the patterns in which words are spoken and written. (Figure 1 provides a glossary of these and other terms; also, see box “Research in Early Reading Skills.”)

## Learning How to Rhyme

When I was reassigned to an elementary school and started teaching in a combined resource/self-contained classroom for students with learning disabilities, I became intent on helping students learn how to rhyme so they could become better decoders, better readers, and better spellers. I built on what I learned with my junior high students by modifying two decoding techniques found in “Classroom Reading Instruction” (Cunningham, Arthur, & Cunningham, 1977). One is the previously mentioned “compare and contrast” method, and the

### Figure 1

#### Glossary of Terms

*Onset-rime:* Words that have different initial consonants, consonant blends, or consonant digraphs, but have the same vowel sound *and* same final consonant, consonant blend, or consonant digraph (e.g., *cat*, *bat*, *flat*, and *scat* are all onset-rimes of each other).

*Phoneme:* The sound units that make up words (e.g., the word *cat* has three phonemes, whereas *eight* has two).

*Phonological Processing Deficit:* Difficulty with distinguishing between different phonemes.

*Phonemic Awareness Training:* Training students to recognize that words are composed of different phonemes and to differentiate between phonemes.

*Grapheme:* The letter configuration used to represent a given phoneme (e.g., the long *a* phoneme can be represented by several graphemes, such as *ay*, *ai*, *a\_e*).

*Orthography:* How graphemes are put together to form a word.

*Phonologic/Orthographic Training:* Teaching students that each word is not a hieroglyph of random letters, but that in English (and other alphabetical languages), orthographic spelling patterns are based on the sounds in words. Students are taught to distinguish between different phonemes, to associate each phoneme with its corresponding grapheme, to put these graphemes together into words, and to read the words.

*Structured Internalization:* Phonological/orthographic training is structured so that students must actively internalize which phonemes are associated with which graphemes. In contrast, many current “phonics” programs allow students to passively watch chalkboard lectures and to mindlessly circle answers on multiple-choice worksheets.

other is the “words-on-the-wall method,” in which flashcards of vocabulary words are hung on the wall by the teacher and orally read by students.

From these words, I developed a daily written spelling test that helps students internalize the relationship between a word’s phonology and its orthography, and gives the teacher a written record of student progress and mental involvement. By writing answers onto paper, students are forced to internalize rules and use them to spell words; they cannot just repeat after the teacher, parrot one student who happens to know the answer, or half-heartedly circle a choice. This daily spelling test is a three-part process:

1. Students help create the list of onset-riming words that they end up spelling.
2. They individually spell the words on their own papers.
3. Students individually read aloud all the words on the list from the chalkboard. Figure 2 provides a sample “Daily Lesson Plan” for the spelling process.

## Forming Spelling Groups

I begin the year by giving all students the same 20-word test of average short vowel consonant-vowel-consonant (cvc) words. I try to form as few spelling groups as possible by analyzing error patterns for clusters of phonemes and graphemes certain students know and do not know. Some students miss everything, many will at least know beginning consonants, a few may know all their initial and final consonants but miss particular vowel sounds, while others will score over 80% and on subsequent days need to be given more in-depth tests focusing on Magic “e” long vowels and initial and final consonant blends and digraphs.

## Closed- and Open-Book Tests

On 4 days of the week, Monday through Thursday, I give each group its own open-book test that serves six functions:

1. Coming up with an onset-rime word enables each student to hear the phonemic similarities between words and to learn how to rhyme.
2. Spelling the word on paper enables each student to start internalizing how spoken phonemes are translated into written graphemes.
3. The student who spells the word orally while the teacher writes it on the chalkboard gets to practice the names of letters and the left-to-right flow of written words and text.
4. Each student must judge the spelling of the word on the board and on his or her paper, and then each must make sure that mistakes are corrected. Loomer and Fitzsimmons (1989) cited self-correction as the best learning activity for teaching spelling to all students.
5. When a teacher repeats a word that most students missed early in the test, students are given a chance to internalize the correct spelling.
6. By orally reading the words from the chalkboard as “words on the wall,” students practice translating written graphemes into spoken phonemes.

Every Friday, I give a standard 20-word, closed-book spelling

## Figure 2

### Daily Lesson Plan

#### Monday through Thursday—Open Book Spelling

**Step A.** Students devise a spelling list of onset-rime words.

1. Teacher tells spelling group a model word such as *cat*.
2. Each individual in the class is asked to state a word that rhymes with the model. For example, *bat, fat, mat, rat, sat* (words with blends and digraphs, such as *flat* or *chat*, or words that are spelled differently, such as *Matt*, should be praised, but the teacher should explain that those words won't be spelled until some future test.)
3. If after 10 seconds a student can't come up with an original word, the teacher should move on to another student, and then later come back to ask the student to repeat three words that have already been given by other students. On Monday, the teacher will usually have to supply at least some onset-rime words that rhyme with the model but that students have not thought of. For severely phonologically impaired students, the teacher might end up giving the whole list. Nevertheless, each student should still be expected to repeat back three words from the list the teacher recites. Further, by Thursday, all the students should be able to give at least one word from the list without prompting.

**Step B.** Teacher gives a 13-word open-book spelling test.

4. Teacher tells all students to spell a word from the list, such as *rat*.
5. Students write word onto a numbered piece of paper.
6. Teacher circulates to get general sense of how students are doing.
7. One student is called on to spell the word orally as the teacher writes it on the board.
8. Students are asked if the word is spelled correctly; if it isn't, the teacher should make appropriate corrections to word on the board.
9. Students are asked to correct any misspelling of the word on their paper.
10. Repeat Steps 4 through 9 until 13-word list is complete.
  - a. Words that are missed by most students should be repeated one or more times.
  - b. Words from previous lists should be mixed in on Tuesday through Thursday to ensure that students are mentally comparing and contrasting the phonological and orthographic differences.

**Step C.** Students orally recite the spelling list from the board.

Reading may be done as a class in chorus or as individuals. The teacher is strongly advised to take each individual aside to read the list at least once a week. And students having difficulty with this portion should be given a list to read as homework.

11. Students read list from top to bottom and are given assistance until they can read list smoothly.
12. Student should then read list as the teacher points to all the words in a random fashion.

#### Friday—Closed-Book Spelling Test for the Grade Book

**Step A.** Teacher gives student a 20-word closed-book spelling test composed of a mixture of current week's and previous week's spelling lists.

**Step B.** If a class is small enough, many students like to watch the teacher grade their paper.

**Step C.** Teacher should have individuals read the list orally—possibly for the grade book.

**Students learn to spell and pronounce words during this lesson plan.**

test. This test provides a score to put into the grade book and a chance to determine if students should move on or should study the same phonological/orthographic pattern for another week. For the first few weeks, the test will be shorter than 20 words; but after the *rat* family of onset-rimes, I mix in review words to fill out a 20-word test. I take off half-credit for an incorrect initial grapheme, half-credit for an incorrect onset-rime, one-quarter credit for inversions such as *b* for *d*, and one-quarter credit for using similar-sounding graphemes such as *g* for *j*, *d* for *t*, or *c* for *k*. Then I expect the student *with the lowest skills* in a group to get at least 80% correct before I proceed to the next onset-rime list. If a student is consistently holding his or her groupmates back, then I place that student into a different group.

### Troubleshooting—Individualization

To reduce the stress some students experience when they read orally in front of the entire class, I often create a notebook paper list that students can read at my desk. Also, it is important to remember that a particular student's proficiency on any portion of this process doesn't guarantee his or her proficiency on all portions. Some students might have difficulty coming up with rhyming words; others might have difficulty coming up with the letter-sound spelling of the words; and still others might have difficulty reading the list. If you fail to notice students' difficulty with rhyming or reading the list orally, students who do well on the 20-word test may easily be moved on too quickly.

### Scope and Sequence—From Short to Long

Since developing structured internalization for junior high students with learning disabilities, I have spent 10 years refining

**Figure 3**

#### Sample Scope and Sequence Chart

- A. Common cvc onset-rimes with short “a”.  
Weeks 1 and 2  
bat, cat, fat, hat, mat, pat, rat, sat  
Week 3  
bam, dam, ham, jam, Pam, ram, Sam  
Week 4  
cap, gap, lap, map, nap, rap, tap, zap  
Weeks 5, 6, and 7  
“bag”, “bad”, “ban” families
- B. Common cvc onset-rimes with short “i”, “u”, and “o”.  
Each vowel with the same week and final consonant order as in A.
- C. Final “ck” consonant ending with mix of all short vowels.
- D. Compare/contrast short “a” to Magic “e”/long “a” words.
- E. Compare/contrast short “i”, “u”, and “o” words with their respective Magic “e” / long vowel counterparts.
- F. Initial “s” blends—st, sl, sm, sp, sn, sk, sw.
- G. Initial “r” blends—tr, br, cr, fr, dr, gr, pr.
- H. Initial “l” blends—sl, bl, cl, fl, gl, pl.
- I. Initial digraphs of “ch”, “sh”, and “th”.
- J. Three letter words that end with “y” (i.e., shy, try, cry).
- K. Four letter words that end with “ay” (i.e., pray, gray).
- L. Final blends and digraphs (i.e., flash, much, cloth).
- M. Three letter blends and digraphs—spr, str, spl, and thr.
- N. Doubled final consonant by adding “er” and “ing”.
- O. Dropped final “e” when adding “er” and “ing”.
- P. Compare/contrast other long vowel patterns.

*Note:* For a complete scope and sequence chart, please contact the author via writing or Internet. (Internet users will receive best formatted copy if you verify that you can accept MS WORD formatted files as attachments.)

the technique and developing a scope-and-sequence chart for elementary school students (see Figure 3 for part of this chart). Most who start the chart at a pre-primer level complete it in less than 2 years. This timeframe fits into Stahl's (1992) recommendations for good phonics instruction.

The scope-and-sequence chart varies little from the timing found in many first-grade phonics charts—moving from short vowels to long vowels to consonant blends and digraphs. The major modification is the postponement of all short *e* words and all irregular consonant and vowel blends and digraphs until much later. Other researchers (Cunningham & Cunningham, 1992; Stahl, 1992) have made similar suggestions. As a result, this chart focuses on the short vowels of *a*, *i*, *o*, *u* and their Magic “*e*” long vowel counterparts, and moves on to consonant blends and digraphs, *before* tackling other onset-rime patterns such as *ball* that are consistent but don't have pure short vowel sounds. Consequently, students can concentrate on the similarities among words and firmly grasp the phonological and orthographic patterns that do exist in English, as opposed to giving up in frustration when *have* does not rhyme with *gave* and spouting off some totally unrelated word such as *brown*.

## Benefits of Structured Internalization

Using structured lesson plans, spelling tests, oral reading, student self-correction, and other aspects of the structured internalization program can benefit students in many ways:

- By concentrating on words that follow strict rules, students are less likely to seem to know a word today only to have forgotten it by tomorrow. Also, they are less apt to treat the words as Egyptian hieroglyphs by sight reading *Sam*, *am*, and *ram*—without understanding their phonological/orthographical relationship—and being unable to decode *jam* and *ham*.
- The lesson format can be carried forward to teach more complicated spelling rules, such as doubling the final consonant in short-vowel words and dropping the final *e* in long-vowel words.
- Students not only learn how to *spell* words; they also learn how to *pronounce* them. During the 1993-94 academic year, one of my students with a speech disability pronounced all words that rhymed with *rat* as *tat*. Amazingly, within a month, the student had learned how to spell these words. Several weeks later, the child had mastered their pronunciation, and his general education teacher mentioned his transformation.
- Many teachers complain that students with learning disabilities don't transfer isolated skills back to their comprehensive reading or their story writing. Structured internalization spelling can alleviate much of this transference problem, because all students can be encouraged during reading group to use the compare-and-contrast method (Cunningham et al., 1977) to decode new words. Students who know about comparing onset-rimes but who haven't yet learned final blends or irregular vowel sounds can still be shown a guide word such as *arm*, and when told the pronunciation, be able to decode *harm* or *charm*.

- Structured internalization can make open houses and parent conferences more meaningful, because a teacher can show parents their child's September pretest and then show parents their child's weekly closed-book spelling tests to demonstrate progress.
- Most important *students* know they are making progress, which fosters self-esteem based on achievement instead of mere encouragement.

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