Word Study Instruction in the K–2 Classroom

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When integrated with a comprehensive literacy program, word study can help support young children’s literacy development.

For the past eight years, my colleagues and I have been investigating the use of word study instruction in kindergarten, first, and second grade, as well as in small-group, Title I literacy programs. I’m a university professor, keenly interested in young children’s reading and writing development, and my coresearchers, Colleen Phillips-Birdsong, Krissy Hufnagel, Diane Hungler, and Ruth Lundstrom, are experienced, highly qualified teachers who are committed to supporting young children’s early literacy learning. These women all have their master’s degrees in literacy education. They are the kind of teachers who engage in ongoing professional development. They read the latest professional books and journal articles and meet at the local bookstore café to discuss what they’ve read. They read research, too, and they actually do research in their classrooms to answer specific questions they have posed about literacy teaching and learning. Over the years, they’ve invited me to help them design and carry out their studies, and, together, we’ve conducted four qualitative investigations of word study instruction (Beckham-Hungler & Williams, 2003; Williams & Hufnagel, 2005; Williams & Lundstrom, 2007; Williams & Phillips-Birdsong, 2006). We’ve learned a lot about how to implement this instructional approach—both what to do and what not to do.

In this article, I synthesize what we’ve learned and share nine tips for implementing a word study program in the K–2 classroom. I begin with a brief description of our understanding of word study instruction, which is grounded in the professional and research literatures we have read and discussed. Then, I explain the theoretical perspectives that framed our work. To provide a context for the recommendations we make, I then briefly describe each of our investigations. Finally, I turn my attention to the ways in which our research has informed our approach to word study instruction. My goal in this article is to offer tips that will support K–2 teachers who want to implement this instructional approach.

A Brief Description of Word Study Instruction

Word study is an approach to spelling instruction that moves away from a focus on memorization. The approach reflects what researchers have discovered about the alphabetic, pattern, and meaning layers of English orthography. Teachers use a variety of hands-on activities, often called word work, to help students actively explore these layers of information. When studying the alphabetic layer, students examine the relationship between letters and sounds. They learn to match single letters and pairs of letters (e.g., ch) to specific sounds and, in doing so, to create words. When students study the pattern layer, they look beyond single or paired letter-sounds to search for larger patterns that guide the grouping of letters (e.g., CVCe). Studying the meaning layer helps students to understand how the English spelling system can directly reflect the semantic relationships across related words. For example, students come to understand that the second vowel in composition is spelled with an o because it is related to compose. Examining each layer
of the orthography helps students to see the regularities, patterns, and derivations in English words—how words work in our writing system. Word study also teaches students how to use this word knowledge strategically to support their spelling attempts during writing activities and to help them decode unfamiliar words while reading (Bear & Templeton, 1998). The primary goal of word study is to support students’ development of a working knowledge of the orthography—knowledge that students can apply as they are reading and writing.

A number of professional books that describe word study are available (e.g., Brand, 2004; Cunningham & Hall, 1996). These texts provide a scope and sequence of instruction, as well as myriad activities, word lists, assessments, and organizational techniques to support word work in the elementary classroom. We used two of those books, Word Matters (Pinnell & Fountas, 1998) and Words Their Way (Bear, Invernizzi, Templeton, & Johnston, 2000), to inform our research. The scope and sequence, weekly schedules, word lists, and assessments in Bear et al. (2000) were particularly useful, as were many of the games. We also used many of the word lists, games, and activities described in Pinnell and Fountas (1998).

Theoretical Framework

We grounded our work in sociocultural theories that view learning as a change in the ways learners participate in specific, socially situated activities. Sociocultural theorists believe that learning is inherently social and claim that children make sense of recurrent school activities through observation, participation, and social interaction (Gee, 2001; Lave & Wenger, 1991). Adults and more experienced peers model and offer instruction and support (Rogoff, 1990). Gradually, through meaningful practice, children come to control specific knowledge and skills, and they assume new roles and responsibilities within particular learning contexts (Cambourne, 1995; Vygotsky, 1978).

Wertsch’s (1998) theory of mediated action was a particularly useful frame. Wertsch argued that people use “mediational means,” or cultural tools, to carry out everyday action as well as mental action. He suggested that the use of mediational means shapes that action in fundamental ways. We viewed word study as a particular cultural tool (more precisely, a set of tools). As a mediational means, word study could provide children certain “affordances” (p. 29)—specific orthographic knowledge and cognitive strategies—that would facilitate spelling during authentic writing activities. Wertsch suggested that the use of such cultural tools results in changes in the learner as well as transformations in the mediated action, in terms of mastery and appropriation. For Wertsch, mastery meant knowing how to use a cultural tool “with facility” (p. 50). Appropriation referred to making a mediational means “one’s own” (p. 53). This framework seemed especially appropriate for our projects, because our goal for the students was to learn to use word study with facility as well as embracing its use for independent writing.

Rogoff’s (1990) theory of cognitive development as an “apprenticeship in thinking” was also a useful frame. Rogoff suggested that learners appropriate the use of cultural tools through apprenticeship—by participating in activities with adults and more experienced peers who scaffold the learner’s understanding of and skill in using specific cultural tools. To provide our students a meaningful apprenticeship in the use of word study as a mediational means, we incorporated interactive writing lessons (McCarrier, Fountas, & Pinnell, 2000) into three of our projects. Interactive writing brings together children of varying abilities, so more experienced peers can help support the apprentice’s growth.

A Brief Description of the Research

In the first investigation (Beckham-Hungler & Williams, 2003), we used the words Title I students frequently misspelled in their journals as the basis for word study instruction. We organized the misspelled words into weekly spelling lists that focused on a specific orthographic feature or principle so that Diane (teacher-researcher) could systematize her instruction and focus students’ attention on the concept to be learned (see Fountas & Pinnell, 1996). For example, students frequently misspelled the words house, about, our, and now, so Diane developed a weekly spelling lesson on these two spellings of the /au/ sound. At the end of our project, we found that when students reused the target words in their journals, they spelled these words correctly 85% of the time. More importantly, we were impressed by the number
of other words the children spelled correctly that contained the same orthographic features as in the target words. For example, after Diane taught the ack rime, Tyler (all children’s names are pseudonyms) wrote wacky in his journal, also using the y spelling for the long e sound, which Diane had previously taught. A few days later both Denise and Karla wrote the word snacks in their journals. After Diane taught the ay spelling for the long a sound, Daniel wrote the word pray and Denise wrote gray. After Diane taught the ow spelling for the long o sound, Austin wrote the word slow and Aaron wrote snowed. Our conclusion was that systematic word study helped the students learn the target words and apply the orthographic features to other words they were writing.

In the second project (Williams & Hufnagel, 2005), we examined the impact of whole-group word study lessons on kindergartners’ journal writing. We ranked the 22 children from highest to lowest based on scores from informal literacy assessments (e.g., Clay, 1997) and then divided this list equally into thirds to identify children with high, middle, and low literacy knowledge and ability. Results of this project demonstrated that all of the students in the study used at least some of the orthographic features and strategies that were taught. Word study was most beneficial, however, for the students with average literacy knowledge and ability. Krissy’s (teacher-researcher) whole-group lessons were too challenging for the students with the least literacy knowledge and too easy for the children with the most literacy knowledge. We concluded that a whole-group approach did not meet the children’s instructional needs, even in kindergarten.

In the third project (Williams & Phillips-Birdsong, 2006), Colleen (teacher-researcher) taught word study to second graders in small developmental groups, and then we investigated the students’ use of specific orthographic features, sample words, and spelling strategies in their journals. Our findings indicated that a small-group approach met the students’ instructional needs. Surprisingly, however, the results also suggested that several students did not appear to understand the connection between word study and extended writing. We concluded that some students may need explicit instruction on how to apply what they learned through word study to the writing process.

In the most recent project (Williams & Lundstrom, 2007), we explicitly linked word study to the writing process through interactive writing. During interactive writing lessons, Ruth (teacher-researcher) prompted Title I first graders to use what they had learned through word study instruction, and she scaffolded their ability to do so as she “shared the pen” with them (see McCarrier et al., 2000). Results demonstrated the impact of word study on the children’s orthographic knowledge as well as the efficacy of interactive writing as a context for scaffolding the children’s use of this knowledge to mediate spelling during extended writing. Our conclusion was that linking word study to writing through interactive writing lessons supports children’s spelling and, ultimately, their writing development.

### Tips for Implementing Word Study

In the sections below, I make nine recommendations for implementing word study in the K–2 classroom. These suggestions are based on the outcomes of the four research projects just described, our subsequent experiences, and what we’ve learned from our professional reading.

#### Tip 1: Assess Students’ Word Knowledge Using Multiple Assessment Tools

Before you can craft a systematic word study program, you must determine what your students know about the alphabetic, pattern, and meaning layers of the orthography. It doesn’t make sense to teach students the r-controlled vowel pattern if they don’t understand the alphabetic principle. Assessment informs you of what your students already know and don’t yet know, which guides your instruction. We found that two kinds of assessments proved most informative: informal spelling inventories and analyses of students’ independent writing.

We used the Primary Spelling Inventory or the Elementary Spelling Inventory (Bear et al., 2000) to assess students’ word knowledge at the beginning, middle, and end of the school year. Not only did these assessments help us to determine what each child knew about the orthography, but also the results were particularly useful in grouping (and regrouping) children homogeneously for small-group instruction. Students needing to study the alphabetic
layer were grouped as either emergent or letter-name alphabetic learners. Students who were ready to explore the pattern layer were grouped as either within word pattern or syllable and affixes learners. At the end of the academic year, a few second graders studied the meaning layer of the orthography; these children were grouped as derivational relations learners (see Bear, Invernizzi, Templeton, & Johnston, 2008).

But periodic assessment isn’t sufficient. With high-quality instruction and lots of reading and writing, students’ word knowledge is continually progressing, and so we used students’ independent writing as an ongoing assessment tool. We knew that students’ invented spellings would show us what they knew about English orthography. Each week, we reviewed the students’ journal writing or writing workshop pieces to document the orthographic features they were spelling correctly or misspelling. Bear et al. (2008) suggest that what students “use but confuse” in their writing should be a target of word study (p. 9).

Interestingly, using these assessments in tandem sometimes created a thorny challenge. In our second-grade project, for example, some students in the letter-name alphabetic group frequently used but misspelled CVCE-patterned words (e.g., mad for made). According to the scope and sequence outlined in Bear et al. (2008), this common long-vowel pattern should be taught at the next developmental level—within word pattern. Similarly, a few students in the within word pattern group frequently failed to double the final consonant when adding -ed to a short-vowel word (e.g., stopped for stoped). Consonant doubling is usually taught at the syllables and affixes level. So what were we to do—follow the scope and sequence or let our assessment of students’ writing inform our instruction? We don’t embrace a “readiness” model of learning, nor do we believe that learners move rigidly through developmental spelling stages (Brown & Ellis, 1994; Goswami & Bryant, 1990; Treiman & Cassar, 1997). So, given how frequently the students were using but confusing these orthographic patterns, we decided to teach them. Despite this challenge, we found that using more than one assessment tool helped to inform our grouping of students and the instruction Colleen prepared for each homogenous group.

**Tip 2: Use a Homogeneous Small-Group Approach to Instruction**

In our kindergarten project, Krissy tried to save time by using a whole-group approach to word study, but, as we mentioned, it didn’t meet the students’ instructional needs. A primary finding of that project was that homogeneous small-group instruction is essential.

There are two approaches to homogenous word study instruction. One approach is to teach word study within the context of guided reading groups (Fountas & Pinnell, 1996; Joseph, 2000; Schulman & Payne, 2000; Snowball & Bolton, 1999). Another approach is separate word study lessons for each developmental spelling level (Bear et al., 2008). We tried both approaches, and we found that integrating word study into guided reading worked well in Title I and first grade but not in second grade. The books that were used for guided reading in second grade did not necessarily include examples of words that reflected the orthographic features and principles Colleen was targeting. Moreover, we found that some of the students’ reading and spelling levels were not closely linked. In several cases, spelling achievement lagged considerably behind reading achievement, which made it difficult to form small groups that were appropriate to both areas of instruction. For example, our assessments indicated that several students needed word study on short-vowel patterns. A majority of these students were in the lowest guided reading group, but a few of them were in the middle group. For a while, we tried flexible grouping (see Invernizzi & Hayes, 2004), but constantly rearranging the students at the end of each guided reading lesson to form the appropriate word study groups was cumbersome and time-consuming. After several months, we separated word study from guided reading and created three homogenous word study groups. Doing so allowed Colleen to target specific orthographic features and principles these students needed to learn. This experience leads us to recommend separate developmental groups for word study in second grade.

Both Pinnell and Fountas (1998) and Bear et al. (2008) recommend an introductory teacher-
data for teachers to talk with students about specific generalizations that can prove useful. For example, teachers can explain that the \textit{ck} spelling pattern only comes at the end of short-vowel words, or that the \textit{oa} pattern almost always signals the long \textit{o} sound, or that words spelled with \textit{ee} usually have the long \textit{e} sound.

The bottom line is this: For a word study program to be successful, the teacher has to invest sufficient time preparing for daily instruction and word work. Carving out preparation time may be one of the biggest challenges you face in implementing a word study program.

\textbf{Tip 4: Teach Word Knowledge, Not Just Words}

In a traditional spelling program, students learn to spell words that are deemed appropriate to their grade level. In a word study program, however, students learn about words. The instruction is unique in that it focuses students’ attention on consistencies within our spelling system. Students learn word knowledge that they can apply generally to a wide range of reading and writing activities. Of course, students learn to spell a great many words through word study lessons and daily word work activities, but the instruction is far more conceptual than that of traditional spelling programs. This is important because what students remember about specific words is related to what they know about English spelling in general (Ehri, 1992). Focus your word study lessons on the way English words work, so that students will form useful generalizations they can apply to words they want to read or spell.

Our experiences also lead us to advocate some instruction on sight words, particularly in kindergarten and first grade (see Fountas & Pinnell, 1996). The words you choose should be highly useful to your students—words they will encounter frequently in their reading as well as words that appear often in students’ own writing (e.g., \textit{because}, \textit{are}, \textit{again}, \textit{said}, \textit{friend}, \textit{were}). You may want to display some of these high-frequency words on the word wall. Because these sight words don’t follow the spelling patterns and generalizations that students will be exploring, help students to learn these words by focusing on how the word looks and how it sounds, and avoid simple memorization (Clay, 2001). Bear et al. (2008) recommend using some high-frequency words as
examples of exceptions to the generalizations you are exploring in your word study lessons.

**Tip 5: Demonstrate How Word Study Can Be Used During Reading and Writing**

Word study undoubtedly supports students’ spelling achievement. It has the potential to support students’ reading and writing development as well—if students understand and exploit the relationship between these literate processes. Our research helped us to see that some students don’t necessarily make this link. As mentioned above, several students in our second-grade project didn’t appear to recognize the ways in which word study is related to writing. This was true for both low-ability as well as high-ability students. While we were trying to make sense of this finding, we realized that in our second-grade project we did not have a guided practice component to our word study program. That is, we did not demonstrate for these students how they could use word study to support extended reading and writing activities. We assumed that students would transfer word study to other literacy events, but we were wrong.

In all of our other projects, we used interactive writing (McCarrier, Fountas, & Pinnell, 2000) as a context for guided practice in applying word study to authentic writing events. As students “shared the pen” to solve the spelling of words in the messages they were writing, myriad opportunities emerged for them to apply the orthographic features and principles they’d been taught during word study instruction. And, if they needed help, their teacher could easily scaffold their attempts. In our kindergarten study, for example, the students were trying to write the word *thank* (as in *thank you*) during an interactive writing lesson. The child at the chart wasn’t sure how to begin, so Krissy reminded the class of an important orthographic principle she had taught earlier in the year: “Sometimes the sounds in words are represented by more than one letter.” Then she said, “The word *thank* is like that. The first sound in *thank* has two letters. What two letters can stand for /th/?” The child writing on the chart easily spelled the first phoneme in the word. These kinds of minilessons in the midst of interactive writing events clearly demonstrated for students how they could use word study to support extended writing. And the demonstrations paid off: We observed many kindergartners and first-grade students using word study to support their independent writing endeavors—including the children who struggled with literacy learning.

But interactive writing is best used as a transition tool to support children’s growth from emergent to conventional writing. Most second graders understand what it means to write and how to go about it, so interactive writing isn’t necessary or appropriate for the majority of second graders, except for those who struggle. Yet, our research helped us to see that guided practice in using word study during writing activities is essential, so we are now searching the professional and research literatures for examples of what a guided practice component might look like in second grade.

**Tip 6: Teach Strategies That Support Students’ Use of Word Study Instruction**

In addition to guided practice, our research also highlighted the need for explicit *strategy instruction*. If we want students to use word study independently and strategically when they are reading and writing, then we must teach them how to do so (Dudley-Marling, 1997). Along with the orthographic features and principles you teach, we recommend that you integrate strategy instruction into your word study lessons.

We think of strategies as tools that help students actively use what they’ve learned. Sometimes the tools are physical, like dictionaries or the word wall. Other times, the tools are cognitive—in the mind—like listening for sounds or thinking of a word that rhymes with the word you’re trying to spell. We encourage you to teach both kinds of tools to help students learn to use word study strategically. Figure 1 lists the 10 strategies we taught most often across our projects. Diane and Ruth are Reading Recovery trained teachers, and we culled most of these strategies from their training. A key focus of Reading Recovery instruction is the development of cognitive and strategic processing systems that integrate meaning, visual, and sound cues (Clay, 2001).

Throughout our work, we observed students using the strategies that had been taught. Interestingly, in two of our projects, we found that strategy instruction was more salient for struggling students than other aspects of word study instruction. When we analyzed these students’ independent writing, we saw little evidence of the orthographic features that
Figure 1

Strategies That Support Students’ Use of Word Study

1. Say the word slowly and listen for the sounds you hear (initial sound, middle sound, final sound)
2. Say the word slowly and listen for any parts you know (br in brought)
3. Clap the syllables and write letters for each part you hear
4. Use words you know (fun and silly → funny)
5. Use names you know (William → will)
6. Use a rhyming word (rain → train)
7. Use word families to spell related words
8. Think about different spelling patterns that can spell the sound you hear (out vs. down)
9. Try it on a practice page and see if it looks right
10. Use a resource in the classroom (chart, word wall, book, dictionary, calendar, words you’ve already written)

had been taught, but when we observed the students during writing time, we saw and heard them using specific strategies they had learned.

We also recommend that teachers model the use of these strategies during interactive writing activities. This was best illustrated in our first-grade Title I project, where Ruth introduced the strategies and gave children opportunities to practice using them during daily word study lessons. Then, during interactive writing events, she continually prompted the students to use the strategies she had taught. For example, during an interactive writing lesson in mid-November, Ben was trying to write the word dog in the story the class was composing. Ruth prompted him to “say the word slowly and listen for the sounds” he could hear. He did so and spelled the word correctly. In late April, Andrew was trying to write the word street. He said the word slowly, demonstrating that he had appropriated the use of this important strategy. Then he wrote street in the story. Ruth praised him for using a spelling strategy, and then she prompted, “The /e/ in street is spelled like the word wall word see.” Andrew knew immediately what he needed to do. Ruth covered the et with correction tape and Andrew wrote eet in its place. Ruth’s prompting was essential to Andrew’s success. There were numerous examples like these across our research projects. The teacher’s prompting targeted the child’s zone of proximal development (Vygotsky, 1978), which allowed the child to be successful as he or she wrote at the chart.

It is clear to us now that applying orthographic features and principles while composing extended text is far more cognitively demanding for students than using word knowledge to spell sample words during word study lessons and word work activities. Our research has helped us to see that if word study is to move beyond spelling instruction and become an approach to supporting young children’s writing development, then most students will need explicit demonstrations on how they can use word study strategically during authentic writing activities. They will also need frequent opportunities to practice doing so in the context of their teacher’s scaffolding and guidance.

Tip 7: Make Your Word Wall Work

A word wall is a special section of a classroom wall designated for the exploration and study of words (see Cunningham, 1995). If you have a word wall in your classroom, be sure it is more than a simple display of words—make it work for you and your students. The word wall should be clearly visible and accessible. Use the word wall frequently as a teaching tool and help students learn to use it as a resource for their writing. We recommend placing words on the word wall that not only illustrate the orthographic feature or principle you are teaching but also can be used in generative ways to spell other words. For example, the high-frequency word see can be used to teach students the double ee spelling of the long e vowel, and it is generative in the sense that students can use it to help spell a host of words with -ee, -eed, -eek, -eet, -eem, -een, -eep, -eet, and -eeze endings (e.g., tree, feed, week, wheel, seem, green, sheep, beet, sneeze). Discuss the orthographic feature(s) you are teaching before placing the exemplar word on the word wall. Then show students how they can use these exemplar words to spell other words. The word wall should be a dynamic tool—change it often. Remove words that students know how to spell and replace them with exemplar words for new concepts you are teaching.

In our research, we found mixed results with regard to students’ use of the word wall. Some students used the word wall frequently while they were writing; other students rarely used it—and this was
Tip 9: Engage Students in Extensive “Real” Reading and Writing

Finally, we recommend daily extended, authentic reading and writing activities where children are encouraged to read and to compose texts on topics of their choosing. In each of our studies, the teacher engaged students in extensive, “real” reading and writing events. For example, one morning when Diane’s first graders were excitedly talking about the Bengals “finally winning a football game,” Diane encouraged her students to write about the winning touchdown in their journals. We watched as the children used the strategies they had learned to spell the football players’ names. When Derek announced that he was going to “sound out Houshmandzadeh,” Emily said, “No way!” and began to look for the name in print around the room. Brad suggested that “a newspaper would have it!” and Diane agreed that students could read the paper that evening with their parents or look online. The writing activities provided us a context for examining students’ use of word study instruction, but that was not our primary goal. We wanted to give students plenty of opportunities to use what they had learned. We also knew that meaningful, sustained reading and writing experiences support spelling development (Hughes & Searle, 1997) and that, in turn, spelling knowledge supports reading and writing development (Richgels, 1995). Children draw on their orthographic knowledge to accomplish all three aspects of literacy (Templeton, 2003).

Learning From Our Teaching and Our Research

Over the last few years, we’ve come a long way in our conceptual understanding of word study and how it can be implemented in the K–2 classroom. We advocate this approach because our classroom-based research confirms for us what we’ve read and studied in the professional and research literatures. We have found word study to be a teacher-directed yet student-centered approach to spelling instruction, and when integrated into a comprehensive literacy program it can help support young children’s literacy development. Through small-group word study lessons we can explicitly teach students what they need to know about the English spelling system, and we can keep them engaged and motivated through hands-on word work activities that promote inquiry and critical learning.
thinking. By integrating strategy instruction into our word study lessons and engaging students in guided practice in using what they have learned, we can go a long way in supporting students’ early literacy learning. We hope the recommendations made here will be useful to early childhood educators who share our interest in young children’s literacy development.

References


Beckham-Hungler, D., & Williams, C. (2003). Teaching words that interest in young children’s literacy development. We hope the recommendations made here will be useful to early childhood educators who share our interest in young children’s literacy development.

References


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