



## Spelling Instruction In The Middle Years

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### ABSTRACT

This article advocates continued attention to spelling in the middle years. Students need systematic spelling instruction from grades one through eight that is appropriate to the developmental stages of learning to spell. Teachers are encouraged to include both spelling patterns and spelling strategies in their spelling curriculum and provide links between the formal study of spelling and its application in writing contexts across the curriculum.

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There has been a growing consensus that children in the early years of schooling benefit from systematic instruction in spelling, particularly at the level of sound/symbol correspondences (Cramer, 1998; Gentry, 1993; Fountas & Pinnell, 1999). Word study activities, whether they are conducted through the use of a published spelling program or designed by teachers, stress the skills of examining sound patterns in spelling and building words from simple elements such as onset units and rimes.

Developmental research on stages of spelling growth also focuses much attention on the early years. Teachers are trained to distinguish among non-phonetic, semi-phonetic, and phonetic attempts at spelling words, and to watch for milestones in spelling development such as the movement from a purely sound-based approach (*jump* for *jumped*) to a strategy that incorporates morphemic elements such as past tense markers (*jumped*).

Regrettably, the same attention to spelling development has not always been present in the middle years, especially as students approach the high school level. Too often, the same advice is given to students year after year. They are told to sound out words that are unfamiliar or to use a set range of techniques to memorize difficult words. There is often the assumption that students will inevitably learn to spell by repeated exposure to the same high-frequency words, and when they do not, they and their teachers often conclude they are simply not born to be good spellers.

Such conclusions, however, may not be justified. Cognitive developmental research in spelling has shown that children explore different aspects of the spelling system after the early years and continue to need systematic, sequenced instruction to support their growth (Cramer, 1998; Henderson, 1990). Teachers should introduce more sophisticated spelling principles in the middle years and encourage students to broaden the range of spelling strategies they use for words that do not follow predictable patterns.

This paper addresses the stages of spelling development linked with early adolescence and advocates a number of teaching strategies most pertinent to this age group. Effective spelling instruction in the middle years should be tailored to the cognitive abilities of students in this age range and to the levels of the spelling system that early adolescents are able to investigate.



Cramer (2001) maintains that “children need consistent spelling instruction starting in first or second grade and continuing through grade eight. Many students would benefit from continued instruction throughout high school” (p. 316). This advice suggests that there should be continuity from one grade to the next so that children can build on what they learned in previous years. Cramer adds that by grade eight, children should be able to automatically spell the vast majority of words likely to be used in writing or encountered in reading.

## Stages of Spelling Development

In order to make appropriate decisions related to spelling instruction, teachers should be aware of the spelling stages associated with the middle years. These stages have been described by cognitive developmental researchers such as Henderson (1990), Gentry (1993), and Cramer (1998). By grade 4, most children have moved through the Pre-phonetic and Phonetic stages of spelling growth. Their spelling attempts, if incorrect, are at least phonetically plausible. Students at this point need practice in consolidating their knowledge of basic vowel and consonant patterns, and encouragement to explore more complex patterns within words.

**Patterns Within Words.** Children can be described as being in the “Patterns Within Words stage” when they begin to realize there is often more than one way to spell a given sound, and are experimenting with patterns of letters to represent sounds. These patterns include the use of consonant blends and digraphs (*splash*), vowel combinations (*boat*, *boil*), unusual consonant clusters (*light*), and the silent e marker for long vowels.

**Syllable Juncture.** When children have a basic spelling vocabulary and an understanding of many long and short vowel patterns, they gradually move to the “Syllable Juncture” stage. This stage focuses on the place within words where syllables meet. The patterns at this stage are at a deeper linguistic level than in the sound-based stages and require the juggling of more variables.

For example, when *-ed* or *-ing* are added to the ending of a verb, it sometimes requires a change to the spelling of the base word. In the case of *hope - hoping*, the final *e* is dropped; in *apply-applied*, the final *y* changes to *i*; in *drum-drumming*, the final consonant is doubled. Although the doubling of the consonant in a single-syllable word such as *drum* is relatively straightforward, when the base has more than one syllable (*commit-committed*, *commitment*), the pattern is considerably more complex and requires a sensitivity to stress patterns. Many students are not able to handle the cognitive load of this pattern until grade six or later. Other rules related to the syllable juncture stage govern the formation of plurals, possessives, and contractions.

**Meaning-Derivation.** An important understanding children acquire in the “Meaning-Derivation” stage is that in written English, meaning is more important than sound. Words that are related in meaning or have a common root are usually spelled alike even if they are pronounced differently.

For example, the silent *c* in *muscle* can be remembered if it is associated with *muscular*. Both words are related in meaning, and since meaning takes precedence over sound, the *c* in *muscle* remains even though it is silent. People who point to silent letters as evidence of the irrational nature of English spelling neglect the fact that by keeping *muscle* spelled this way rather than a phonetic rendition such as *mussel* or *mussle*, a reader can distinguish between the mollusk *mussel* and the organ *muscle*. Furthermore, if a reader has not previously encountered the word *muscular*, he or she can relate the word to its base and make a good guess as to its meaning.

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The meaning-derivation connection is particularly suited to older students. Since the vocabulary they use in their writing is more complex than that of younger children, they are more likely to use derived forms. They will encounter words such as *definition*, *opposition*, and *competition*. In each of these words there is a schwa vowel in the middle that is not articulated clearly. Therefore, sounding the word out is not helpful. If, however, students are taught to go back to the base form (*define*, *oppose*, *compete*), they can quickly apply the “meaning principle” and spell the schwa vowel accurately.

Children in the Meaning-Derivation Stage also show an ability to spell roots, prefixes, and suffixes of Greek and Latin origin. The suffix *-tion*, for example, is no longer spelled phonetically as *shun*. Furthermore, children in the later grades display an increasing ability to deal with homophones. They have sorted out the meaning connections between pairs such as *its/it's* rather than relying on sounding out for spelling. Cramer and Cipielewski (1995), nevertheless, found that homophones were the most common error category in grades seven and eight and the second most common in grades four to six.

The spelling patterns described above that relate to the Syllable Juncture and Meaning-Derivation stages should be covered in spelling programs for middle years students. The more sophisticated vocabulary used by this age group in everyday writing requires a knowledge of how multi-syllabic words are constructed and how many words are related in meaning. These understandings are often beyond the cognitive capacity of younger children. To restrict formal spelling instruction to the level of phonics would, therefore, deprive older students of crucial insights into the English spelling system.

## Spelling Strategies

The stages described above refer to the patterned nature of spelling. They do not take into account the large number of English words that seem irregular and must somehow be memorized. Mature spellers have both an understanding of what makes sense about the spelling system and a repertoire of strategies to deal with its irregular features (McQuirter Scott & Siamon, 2004; Hughes & Searle, 1997).

While middle school students need to deal with the more complex spelling patterns previously mentioned, they also need to develop a wider range of spelling strategies as they grow older. Their maturing vocabulary contains longer words, and this guarantees an increase in schwa vowels, the bane of every speller's existence. Schwa vowels, or vowels in unstressed syllables, are not usually articulated clearly in speech. The speller asks, “Is it *helmut* or *helmet*? *animals* or *anamals*?” Sounding the words out will not provide the answers.

Older students also face the challenge of more sophisticated words in content area subjects. These words are often borrowed from other languages or have Greek and Latin origins. Neither rote memorization nor sounding out is likely to lead to accurate spelling of these words.

Mature spellers are able to use a wide variety of spelling strategies to fit the nature of the word to be learned. If sounding the word out does not work, they may try a visual strategy such as color-coding the letters to be remembered. Sometimes a simple mnemonic or memory trick works, as in the case of saying *strawberry shortcake* to remember the double *s* in *dessert*.

Skilled spellers also understand how long words are constructed. Rather than trying to memorize the word *multinational*, they break the word into its component parts: the base word *nation*, the prefix *multi*, and the suffix *al*.

Turbill (2000) points to the development of a “spelling conscience” as a further mark of a mature speller. Such individuals take responsibility for proofreading their drafts and use a systematic approach to editing their work. They are able to identify the misspelled words and use a range of strategies for changing these words so that they are spelled conventionally.



It is the skillful application of spelling patterns and spelling strategies that marks a good speller. Although spelling is a lifelong challenge, the skilled speller is able to approach new words with a knowledge base and repertoire of strategies that makes almost any word manageable. These qualities require years of development, and cannot be assumed to be in place by the time a child reaches early adolescence. Therefore, teachers need to provide instruction that is suited to the specific needs of these learners.

## Spelling Instruction

When teachers understand how complex the skill of spelling is, they often marvel that anyone becomes a competent speller. They also wonder how they can support their students without sacrificing precious time from other aspects of a crowded curriculum. These are reasonable questions, and the answers will vary with each classroom context. There are, however, some general principles and approaches to spelling instruction that are particularly pertinent to the middle years:

1. Cover spelling concepts that are appropriate to the developmental level of the students. As described earlier in this paper, students in the middle years need to consolidate previous learnings and move on to more sophisticated spelling patterns. Teachers can determine suitable concepts to address in a number of ways:
  - a. Consult a reputable published spelling program for the grade. Be sure that it is based on developmental research in the field of spelling. If, for example, the program for grades four through eight is strongly oriented to phonics, it is unlikely to be suitable for most students in the middle grades. Whether used as a primary source or as a reference, a text can be a valuable tool in decision-making. (see Figure 1 for some stating pointers.) (Bear & Templeton, 1998; Henderson, 1990; McQuirter Scott & Siamon, 2004; Scott & Siamon 1998).
  - b. Use student writing to assess specific spelling needs and common concerns in the class. Although it is useful to record frequently misspelled words and for students to use these in personal spelling lists, more significant assessment information can be gleaned from student writing. Notice what spelling concepts the students are familiar with and what inaccurate conclusions they may have reached about the spelling system. For example, a student who continues to spell the *-tion* suffix as *-shun* is likely still using a sounding-out approach to spelling rather than recognizing common suffixes.
  - c. Use teacher-student editing and proofreading conferences to gain insight into student needs. Let the students talk about why they spelled a word in a certain way or what strategies they typically use to spell unfamiliar words. Not only does this approach provide significant assessment information, it also encourages students to reflect on their own spelling and to take some responsibility for their progress. Although this strategy is relevant to all grades, students in the middle grades have had a number of years to reflect on their spelling development and can often provide keen insights into their preferred learning styles. Furthermore, young adolescents need to be weaned from a reliance on their teachers for spelling support and to come up with their own strategies for making progress in spelling.



**Figure 1. Typical spelling concepts by grade**

<b>Grade 1</b>	<b>Grade 2</b>	<b>Grade 3</b>	<b>Grade 4</b>
Prephonetic –[arrow] Phonetic Stages (letter-name)	Phonetic (letter-name) – Patterns within Words Stages	Patterns within Words Stage	Patterns within Words – Syllable Juncture Stages
<ul style="list-style-type: none"> <li>• readiness activities</li> <li>• awareness of individual sounds and sequences of sounds</li> <li>• printing</li> <li>• holding pencil</li> <li>• letter sounds</li> <li>• short vowel patterns</li> <li>• onset/rime (e.g. at, ug, est)</li> <li>• one or two long vowel patterns (to contrast with short)</li> <li>• consonant digraphs</li> <li>• consonant blends</li> <li>• high frequency, irregular words</li> </ul>	<ul style="list-style-type: none"> <li>• review of short vowel patterns</li> <li>• common long vowel patterns</li> <li>• r-influenced patterns (e.g. art, ore)</li> <li>• review of digraphs (th, ch)</li> <li>• double consonant patterns (hill, puff)</li> <li>• compound words</li> <li>• homophones</li> <li>• inflected endings (-s, -ed, -ing)</li> <li>• concept of base word and endings</li> <li>• vowel sound /ow/</li> <li>• high frequency, irregular words</li> </ul>	<ul style="list-style-type: none"> <li>• review of short and long vowel patterns</li> <li>• homophones</li> <li>• compound words</li> <li>• r-influenced vowels (er, ir, ur)</li> <li>• two-syllable words</li> <li>• syllable juncture (button, batted)</li> <li>• base words</li> <li>• e-drop and consonant doubling principles; y to i</li> <li>• common prefixes and suffixes</li> <li>• unstressed syllables (er, le)</li> <li>• contractions</li> <li>• possessives (singular)</li> <li>• plurals (regular)</li> <li>• high frequency, irregular words</li> </ul>	<ul style="list-style-type: none"> <li>• review of basic vowel patterns</li> <li>• r-influenced vowels</li> <li>• silent consonants</li> <li>• syllables and stress</li> <li>• schwa vowels</li> <li>• plurals (irregular)</li> <li>• possessives</li> <li>• contractions</li> <li>• homophones</li> <li>• compound words</li> <li>• simple prefixes and suffixes</li> <li>• e-drop, y to i, and consonant doubling principles (reviewed)</li> <li>• unstressed syllables</li> <li>• unusual spellings</li> <li>• borrowed words</li> <li>• new words in English</li> <li>• high frequency, irregular words</li> </ul>



Figure 1. Typical spelling concepts by grade (continued)

Grade 5	Grade 6	Grade 7	Grade 8
Syllable Juncture – Meaning-Derivation Stages	Syllable Juncture – Meaning-Derivational Stages	Meaning-Derivational Stage	Meaning-Derivational Stage
<ul style="list-style-type: none"> <li>• similar to grade 4</li> <li>• review of basic spelling principles</li> <li>• pace more rapid</li> <li>• syllable juncture in both 2 and 3 syllable words (happening; occurred)</li> <li>• irregular plurals</li> <li>• homophones</li> <li>• compound words</li> <li>• possessives (singular and plural)</li> <li>• related words (sign/signature)</li> <li>• broader range of prefixes and suffixes</li> <li>• schwa vowels</li> <li>• high frequency, irregular words</li> </ul>	<ul style="list-style-type: none"> <li>• reinforce previous concepts using more sophisticated vocabulary</li> <li>• schwa vowels</li> <li>• final, unstressed syllables</li> <li>• common Latin prefixes and suffixes</li> <li>• irregular plurals</li> <li>• homophones</li> <li>• compound words</li> <li>• possessives (singular and plural)</li> <li>• contractions</li> <li>• syllable juncture in longer words (doubling, e-drop, y to i)</li> <li>• related words (muscle/muscular)</li> <li>• irregular past tense verbs (e.g. brought)</li> <li>• unusual spellings</li> <li>• high frequency, irregular words</li> </ul>	<ul style="list-style-type: none"> <li>• review of basic spelling principles</li> <li>• application to adult vocabulary</li> <li>• roots and meaning relations among derived forms (e.g. divine, divinity)</li> <li>• schwa vowels</li> <li>• use meaning principle to spell schwa vowels (compose – composition)</li> <li>• easily confused word pairs (angle, angel)</li> <li>• borrowed words</li> <li>• new words in English</li> <li>• homophones</li> <li>• high frequency, irregular words</li> </ul>	<ul style="list-style-type: none"> <li>• same as grade 7, using increasingly sophisticated vocabulary</li> <li>• roots and meaning relations among derived forms (e.g. column/columnist)</li> <li>• schwa vowels</li> <li>• use meaning principle to spell schwa vowels (compose – composition)</li> <li>• easily confused word pairs (affect, effect)</li> <li>• borrowed words</li> <li>• new words in English</li> <li>• homophones</li> <li>• high frequency, irregular words</li> </ul>

d. Work with colleagues to provide coverage of important spelling principles and continuity in instruction from one grade to the next. If teachers are not using a common published spelling program, they should agree upon an overall scope and sequence of spelling concepts for their school and a common philosophy regarding the teaching of spelling.

2. Present spelling as a problem-solving activity. Struggling spellers tend to see spelling purely as a memorization task (Scott, 1991). As their vocabulary increases and they encounter longer words in their reading, such students find the rote memorization of words increasingly difficult and inefficient. Many students have been reasonably effective spellers in the early grades because they were able to memorize the short words used in their writing. The same students, however, often struggle beyond fourth grade when the words required for writing in content areas and their own personal work are more complex and cannot simply be memorized.



Teachers can help students look for patterns in spelling through the use of word sorts. These are banks of words that represent a specific spelling rule or generalization. Word sorts enable students to elaborate concepts underlying words they already know, and to make important distinctions among concepts and words (Bear, Invernizzi, Johnston, & Templeton, 2000).

At the level of sound, a word sort might contain twenty words with the long *o* sound. Students would then sort the words into four patterns for spelling long *o*: *oa*, *ow*, *o-consonant-e*, *ough*.

At a structural level, which relates to the syllable-juncture stage of spelling development, students could learn the rules for doubling final consonants when adding *ed* or *ing*. Half of the words would appear in pairs such as *dump-dumping*; *catch-catching*; *splash-splashed*. Each of these base words ends in a consonant-consonant pattern. The other half of the word sort would be comprised of pairs such as the following: *drum-drummed*; *grip-gripping*; *chat-chatting*. These base words end in a short vowel and single consonant. Students could then be asked to decide what rule governs the doubling of the final consonant when *ed* or *ing* is added. Only after they have generated the rule themselves would a formal version be given: When adding *-ed* or *-ing* to single syllable verbs ending in a short vowel + consonant, double the consonant. The students could then apply this rule to other words that follow the pattern.

3. Help students to see the logic behind the spelling of most long words. Word building activities are vital in helping students understand that most multi-syllabic words are simply base words to which affixes have been added. If a student does not approach words systematically, learning to spell *irreplaceable* would be a major undertaking. With the number of vowels and the double *r*, this word would place a significant load on memory.

On the other hand, if the same student deconstructed the word *irreplaceable*, and saw it in terms of a base word (*place*) to which prefixes (*ir-*; *re-*) and a suffix (*-able*) have been added, it is not a difficult word. Represented as an equation, it could be described as *ir + re + place + able*. Teachers can help their students see these relationships even more clearly by color-coding the prefixes, base, and suffix differently.

4. Model and practice the use of a wide range of spelling strategies. It is not enough to present students with a list of spelling strategies and hope they will utilize them when learning to spell irregular words. These approaches must be introduced, discussed, modeled, and practiced on a regular basis. These activities can take place as a whole class when a commonly misspelled word is encountered, in individual study sessions, and in small group settings where students brainstorm strategies and reflect on their own spelling difficulties. Teachers can provide excellent modeling by admitting there are words they find tricky and then discussing with the class approaches to remembering the spelling of these words.
5. Explore the origins of words and the continuing evolution of our language. Johnston (2001) encourages teachers to look past the apparent irregularities in English spelling and to share with students interesting facts about the history of the language. For example, the word *breakfast*, the first meal of the day, comes from an old phrase “to break one’s fast.” If students think of this when spelling *breakfast*, it will be easier to remember the *ea* in the first syllable and the *a* for the final schwa vowel. Students in the middle and later grades find word origins particularly interesting.



Students should also realize that our language continues to evolve, with new words being added at a rapid rate. Resources such as the *Oxford Dictionary of New Words* (1997) not only catalogue and define new terms in English, but also cite the first recorded use of each entry. For example, this dictionary states that the computer term *reboot* was first used in *Computer Shopper* in July, 1993.

Delving into the history of English and being aware of new developments in the language can add excitement to the study of English and help students understand why English spelling can be so challenging.

6. Give students a reason for spelling accurately. A rich and meaningful writing program should be at the heart of any approach to spelling. Otherwise, learning to spell is just a mechanical exercise that has little relevance to the real world. When students are engaged in writing about topics of interest, they are more likely to develop a “spelling conscience,” and see correct spelling as a courtesy to their readers.

Writing portfolios are also an excellent source of information about specific student needs in spelling. Teachers should be cautious, however, about basing their entire spelling program on words students misspell in everyday writing. Unless the teacher has a solid background in linguistics and is willing to track each student’s needs, there is the risk of having a scattered spelling program that does not provide coverage of major spelling principles (Cramer, 1998; McQuirter Scott & Siamon, 2004). Nevertheless, when spelling is addressed in the context of writing, spelling strategies and patterns that have been presented formally can be reinforced in a meaningful setting.

7. Teach the skills of proofreading so that students can assume more responsibility for their spelling. Turbill (2000) warns that proofreading skills do not come naturally to many students: “Proofreading is a special kind of reading that needs to be explicitly taught, so that students, in turn, can understand how it differs from other kinds of reading, such as reading for meaning, skim reading, and critical reading” (p.209).

Many students rely on computer spell checks for proofreading. While such programs do provide valuable assistance, students should realize the limitations of spell checks for spotting errors in homophones, word substitutions, incorrect endings to words, and so forth. They need to see the spell check as another tool in their arsenal of proofreading devices, but that ultimately it is their own responsibility to detect spelling errors in their writing.

8. Foster links between the formal study of spelling and its use throughout the curriculum. As the typical middle school curriculum becomes increasingly crowded, it is important to integrate learning whenever possible. Many spelling principles can be addressed within the context of content area subjects. When students encounter difficult spelling words in these subject areas, it is an ideal time to brainstorm useful spelling strategies. The word *hypothesis*, for example, could be recalled by exaggerating the sounds and saying *thesis*. The long *e* in *thesis* will be a reminder of how to spell the schwa vowel in *hypothesis*. Furthermore, the word building techniques described earlier with *irreplaceable*, can be used for content area terms such as *multinational* and can facilitate fluent reading as well as spelling. Finally, students will see that careful attention to spelling is important throughout the day rather than restricting it to specified “Language” times in the curriculum.



## Conclusion

Effective spelling instruction for the middle years requires teachers to be knowledgeable about the spelling system and how children learn to spell. Both the content and approaches used for the middle grades should reflect the needs and learning styles of students in this age range. In order for students to progress toward mature spelling, they need formal instruction in spelling patterns and strategies as well as ample opportunities to apply this knowledge throughout the school day.

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