



Spelling: The Connection to Reading Skills

“The written norm is a system unto itself and not simply an adjunct to speech. English orthography is not a faded phonetic transcription system, invented out of madness or perversity. Instead it is a more complex system that preserves bits of history, facilitates understanding, and also translates into sound. An ostrich, viewed as an imperfect horse, also leaves much to be desired. Among two-toed flightless ratite birds, however, it ranks at the top of its class. Similarly, English orthography suffers abuse and scorn from those who see it for what it is not and probably was never intended to be.”

Richard Venezky, The American Way of Spelling

My spelling is Wobbly. It's good spelling, but it Wobbles, and the letters get in the wrong places.

Winnie-the-Pooh/A.A. Milne

A Quick History of Our Much-Maligned Orthography

Written English is, at first glance, **a kind of** torture device. What else can you call a written system that gives you ‘tough,’ ‘through’ ‘thorough,’ ‘bough,’ ‘cough,’ and ‘hiccough’?

Well, you can call it morphophonemic. Each English word shows some relationship between its spelling and its pronunciation; in addition, there is often a relationship between spelling and its meaning. Thus word spellings respect both their phonemes—their sound units—and their morphemes their meaning units. ‘Nation’ is a good example; instead of being spelled “nashun”, as it sounds (or ‘nacioun’, as it was spelled until the 14th century), ‘nation’ reveals its relation to native—the constituent of a nation—through their shared ‘nati’ spelling.

If you only had a thorough understanding of the phonetic rules, you would be able to correctly spell about half the words in the English language. Understanding both phonetic rules and word origins and relationships allows you to spell most words—close to all—correctly.

English Spelling: A Creative Mix

English spelling is such a mixture because of several factors:

1. The English language has borrowed a huge number of words from all over the world, and continues to do so. And so we have ‘chemical’ from Greek, ‘chalet’ from French, ‘tchotchkes’ from Russian, ‘gnocchi’ from Italian—all importing their own twists on the pronunciation of ‘ch’ and the spelling of /k/ or /sh/ or /ch/.
2. Starting in the 14th century, words were spelled as they were originally upon import in order to preserve their origins. Before that time, though, everyone spelled English words every which way—sometimes within their own writing—until scribes got caught up in the 14th century enthusiasm for things neoclassical and started to trace words to their origins and respell them to fit. Thus ‘nacioun’ became ‘nation’. While they were at it, the scribes also set some constraints on legal letter combinations. Thus ‘gg’, for instance, is not used to denote a /jh/ sound at the end of a word—which is why we use ‘dg’ for this purpose instead.
3. Some of the different spellings we have for the same sound exist because originally the sounds were pronounced differently. For instance, ‘ee’ and ‘ea’ had different pronunciations until the end of the 17th century. But by that time, the spellings of the words containing this newly unified sound had stabilized, so the dual spellings persevered.
4. The Great Vowel Shift. Mostly in the 15th century, but really spanning several centuries around that time, the long vowels shifted from their continental pronunciations (more like Spanish or French) to their current pronunciations. Thus we have vowels that have at least two pronunciations, depending on whether they’re short (such as ‘limb’) or long (such as

‘lime’). The letter ‘o’ alone is responsible for at least 9 different sounds (‘tot’, ‘vote’, ‘toot’, ‘book’, ‘ton’, ‘town’, ‘boy’, ‘pour’, ‘lesson’).

The good news is that despite these factors, there are some overarching regularities that have very few exceptions:

- For the most part, English orthography respects the order in which the phonemes of a word are pronounced. So there is a one-to-one mapping of letters and letter combinations onto sounds. (There are few exceptions, among them the -le and -re in words like ‘able’ and ‘ogre’.)
- In the majority of cases, all the letters in an English word have a function. If a letter isn’t pronounced, it either informs the sound of another letter, such as the silent ‘e’ in ‘cute’, or the ‘i’ in ‘-tion’, or it preserves a word’s derivation or meaning and is often pronounced when a prefix or suffix is added; for instance: autumn/autumnal. Thus the same meaningful word part (the morpheme) is spelled the same though pronunciation changes across derivations. (As always, there are exceptions in which letter function is muddled, such as ‘eighth’.)

The English writing system, by striking a compromise between representing sound and meaning, facilitates word recognition for the fluent English speaker. In doing so, written English becomes something more than written speech; it is a map of the jungle of words and of their history. Thus written material is sometimes easier for the fluent reader to understand than is the spoken language it transcribes.

Why Spelling Is Crucial for Reading

From the English-orthography-in-a-nutshell description above, it is clear that not only is good spelling essential for recognizing words, good spelling is critical for decoding meaning from the plethora of English words that don’t adhere to strict phonetic rules. Students who work at increasing their familiarity with spelling patterns are well on their way to developing automatic word recognition.

Good spelling and word recognition skills then combine to allow the skilled reader to recognize new words based on their morphemes—the smallest word element that changes a word’s meaning—which is the primary way the student expands his or her vocabulary in 3rd grade and beyond. And in fact, the quality and accuracy of a student’s spelling in kindergarten and 1st grade is a predictor of later reading ability. To see why spelling is so important, let’s look at where it falls in the progression of reading skills.

Once the student has mastered phonemic awareness, that student must learn not only the basic letter-sound correspondences, but also must begin to map the variety of spellings onto their sounds and vice versa. When the student reaches the point where he or she is practicing word recognition skills, that student must be able to spell reliably in order to work toward automatic word recognition. And, of course, only good spelling will allow the student to start recognizing morphemes—which will, in turn, allow the student to grasp the connections between words and thus decode even more words. A student who can recognize the spelling of ‘nation’ in ‘national’ will realize that the words are related and will more easily make the connection between the related meanings. As the student progresses, the ability to spell and recognize derivations will allow him or her to make complex associations, such as between words like ‘viable’ and ‘vivacious.’

Once students can automatically recognize enough words, they can advance to the next step: reading sentences and paragraphs fluently, which allows them to hone their skills in defining and interpreting written words and then using reasoning and other strategies to comprehend written text. As students read and increase their vocabulary, they will understand more and more of the complexities of the English spelling and writing system, which then allows them to increase their vocabulary even more, which encourages even more reading, which exposes them to more complexities...

Thus spelling is an important step on the way to automatic word recognition and, ultimately, comprehension. If the student does not work at good spelling and letter-sound correspondence skills, that student will have trouble recognizing words quickly enough to completely comprehend the text.

How Students Learn to Spell: The Progressive Sequence

How can we most effectively teach students how to spell? Luckily we can depend on decades of research into students' cognitive development, which has demonstrated that students learn to spell in a predictable sequence of steps, each new step building on the last.

Thus we can introduce a progressive sequence of letter-sound associations that allows students to systematically master English spellings little by little. At the very earliest stages of learning to spell, once very young students are familiar with letters and letter names or sounds, they begin to spell inventively by using a few consonants to represent a word. Their spellings at this point resemble license plates: "cn u rd". When reading the young student recognizes and remembers initial letters more easily than end consonants and middle vowels.

When the student starts to spell correctly, he or she must learn that:

- Every syllable has a vowel letter
- Many sounds are represented with letter combinations
- How we spell a sound depends on its position in a word
- Only certain letters are doubled
- Meaningful word parts are often spelled consistently

As the student continues on in his or her spelling career, that student learns to connect letters to sounds, then syllables, and then finally—usually after 4th grade—to meaning. At this point, the student knows that morphemes are spelled consistently. As the student develops spelling skills throughout high school, that student relies more and more on analogy strategies based on this morphemic consistency.

According to the English-Language Arts Content Standards, the spelling curriculum should progress as follows:

- **1st to 2nd grade:** One-syllable words of Anglo-Saxon origin
- **2nd to 3rd grade:** Multi-syllabic words that have common syllable patterns
- **4th grade and up:** Words with Latin- and Greek-derived morpheme structures

In addition, students should first be taught to spell words with a high degree of regularity those with spelling patterns that can be generalized to many other words. With a good grounding in reliable and generalized spellings, the student will be better able not only to recognize greater numbers of new words, but also to more easily recognize and integrate exception words.

This progression entails explicit teaching of spelling patterns in the following sequence: In addition, simple prefixes and suffixes should be taught starting in 4th grade; each successive grade introduces more complex affixes until, by 8th grade, spelling instruction concentrates on prefixes and suffixes and the changes they make to words.

The following is a general guide only:

First Grade	<p>Single beginning and middle consonants from <i>b</i> to <i>z</i>, including the <i>c</i> in <i>cat</i> and the <i>g</i> in <i>gone</i></p> <p>Single ending consonants such as <i>b</i> and</p> <p>Short vowels such as the <i>a</i> in <i>hat</i></p>
Second Grade	<p>Ending consonants such as <i>x</i> and <i>ll</i></p> <p>Beginning and middle blends such as <i>bl</i> Ending blends such as <i>nd</i></p> <p>Digraphs such as <i>ch</i></p> <p>Long vowels such as the first <i>e</i> in <i>scene</i></p> <p>Vowel digraphs such as the <i>oa</i> in <i>boat</i></p>
Third Grade	<p>Beginning consonants such as <i>qu</i></p> <p>Beginning blends such as <i>scr</i></p> <p>Middle blends such as <i>nt</i></p> <p>Digraphs such as <i>wh</i></p> <p>Silent letters such as the <i>fin</i> <i>talk</i></p> <p>Vowels such as the <i>y</i> in <i>sky</i> and the <i>oo</i> in <i>boot</i></p> <p>Diphthongs such as <i>oy</i></p> <p>R-controlled vowels such as the <i>ar</i> in <i>car</i></p>
Fourth Grade	<p>Beginning consonants such as the <i>c</i> in <i>cent</i> and the <i>gin</i> <i>gent</i></p> <p>Beginning blends such as <i>shr</i></p> <p>Digraphs such as <i>ch</i></p> <p>Silent letters such as the <i>w</i> in <i>write</i> and the <i>c</i> in <i>blackberry</i></p> <p>Double consonants that spell one phoneme, such as the <i>cc</i> in <i>occupy</i></p> <p>Vowels such as the <i>y</i> in <i>happy</i> and the <i>oo</i> in <i>foot</i></p>
Fifth Grade	<p>Ending consonant spellings such as <i>dge</i></p> <p>Digraphs such as <i>tch</i></p> <p>Silent letters such as the <i>gn</i> in <i>gnu</i></p>
Sixth Grade	<p>Beginning blends such as <i>sch</i></p> <p>Digraphs such as the <i>ch</i> in <i>ache</i></p> <p>Vowels such as the schwa (the <i>a</i> in <i>about</i>, the <i>o</i> in <i>lesson</i>, the <i>e</i> in <i>arithmetic</i>)</p>
Seventh Grade	<p>Vowel spellings such as <i>eigh</i> and the <i>y</i> in <i>system</i></p>