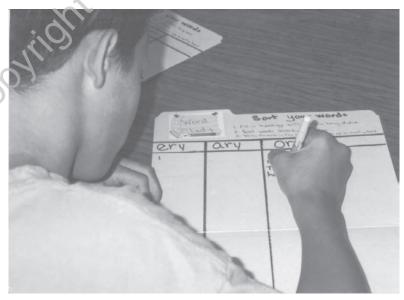
CHAPTER 2

A Developmental Perspective





Chapter at a Glance

Stages of Spelling Development
Emergent
Letter Name
Within Word Pattern
Syllable Juncture
Derivational Constancy

ecause this book focuses on using children's spellings as windows to their knowledge of how our English spelling system works in order to design appropriate instruction, this chapter provides an overview of the stages of spelling development outlined by Henderson (1990) and still commonly used today, though sometimes with slightly modified labels. Henderson's model encompassed the preschool years through adulthood. He divided the spectrum into five phases, or stages, each with a name describing students' spelling behavior at that particular time—preliterate (now called emergent), letter name, within word pattern, syllable juncture, and derivational constancy. The stage that best characterizes a child's spelling is known as the child's stage of development. This differs from child to child, even within the same class, because children progress at different rates. As they advance, they learn to negotiate increasingly more abstract spelling relationships, beginning with individual letter-sound associations and moving on to the greater complexities of pattern and meaning connections. To highlight the literacy development of students at each stage, I have included student snapshots that show their reading, writing in context, and dictated inventory spellings. Stages designated for reading are based on those used by Gillet, Temple, Temple, and Crawford (2012): emergent literacy, beginning readers, fledgling readers, developing readers, and mature readers. Discussion of the last four stages also includes a descriptive listing of the specific orthographic features targeted by the DSA. These features, as well as others, are described in detail in the instructional sections of Part II.

Emergent Spelling

This first stage of spelling development is a time of emerging literacy, not only in spelling but also in writing, reading, language, and the world of books. There is so much for young learners to discover and learn, from the pleasure of a newly learned word to the enchantment of a picture book read aloud to the excitement of learning to write one's name. Emergent spelling is a stage of development that typifies children from preschool to kindergarten. It includes the writing attempts of children who are not yet reading. It is a period of emergent literacy and a time during which children's understandings about writing vary considerably (see Figure 2.1). Some may pretend-write with scribbles or random marks, and some may reveal greater understanding through more linear and wavelike writing. As children see others writing,

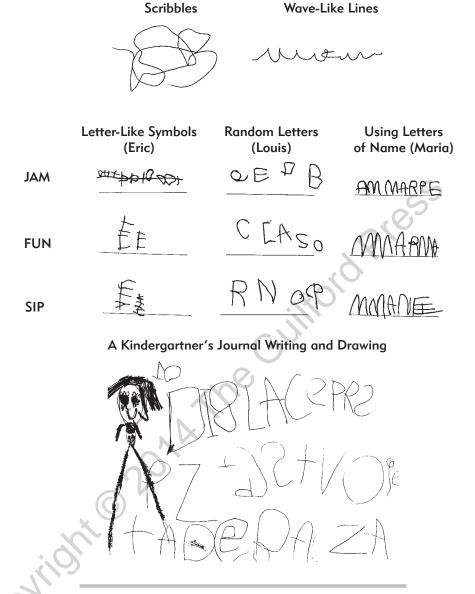


FIGURE 2.1. Snapshots of emergent spellers: Prephonetic writing.

start to notice print around them, and begin to write letters themselves (often those of their names), their pretend writing takes on a more conventional appearance. Words are rendered with strings of letters and letter-like symbols. Although this writing has the look of real writing, there is no relationship between the letters used and the sounds represented. This type of writing is sometimes called *prephonetic*.

In order to begin to understand the *alphabetic principle*, the concept that letters stand for speech sounds, children not only must have some knowledge of the alphabet but also must be phonemically aware. Many simple, enjoyable activities have been devised to help children develop phonemic awareness (see, e.g., Adams, Foorman, Lundberg, & Beeler, 1997; Yopp &

Stapleton, 2008; Yopp & Yopp, 2000, 2009—the latter Yopp and Yopp and the Yopp and Stapleton works include recommended books in English and in Spanish). Reading aloud to children and engaging them in rhyming and alliteration games and other types of sound play are activities that can easily be used by teachers and parents (see, e.g., Andreassen & Smith, 2008; http://phonologicalawareness.org; http://phonologicalawareness.org; http://phonologicalawareness.org; http://www.readingrockets.org/article/28757). Because phonological awareness tasks vary in difficulty, teachers should take into account their students' levels of understanding when planning activities to develop children's phonological awareness. The National Reading Panel (2000) describes the following progression of difficulty (ordered from easiest to most challenging):

- Counting syllables and recognizing rhyming
- Matching first sounds by comparing the names of pictures
- Blending onset-rime units into words
- Blending phonemes into words
- Deleting a phoneme and saying the word that remains
- Segmenting words into phonemes
- Blending phonemes into nonwords

(Retrieved from www.nichd.nih.gov/publications/pubs/nrp/documents/ch2-i.pdf)

As children acquire the alphabetic principle, they learn to use their letter-sound knowledge to match spoken words with words in print and develop a concept of word (Morris, 1980). Teachers often foster this understanding by pointing to words as they read aloud big books, dictated experience stories, and nursery rhymes, such as those in Bruce Lansky's The New Adventures of Mother Goose (1993). Repeated readings of a favorite text enable children to memorize it. They then use their memory of the text and understandings gained from the teacher's repeated modeling of finger-point matching to track the text themselves. By observing how children read and track the text, teachers can discover much about their print knowledge. For example, consider the rhyme Jack be nimble; Jack be quick. . . . Children who have not acquired the alphabetic principle may show directionality by sweeping their fingers as they recite but will not be able to accurately point to individual words. By contrast, a child who associates letters with sounds will use this understanding to guide her finger, knowing that if she's saying be, her finger needs to point to a group of letters that starts with b, not with J or n. Even as a child begins to develop a concept of word, words such as nimble cause confusion, because syllables tend to be mistaken for words, and with each new syllable he moves his finger along. Greater print experience helps children realize that, even though it makes sense to point to *nimble* when saying *nim*, it does not make sense to point to *Jack* when saying *ble*, and they learn to self-correct the mismatches.

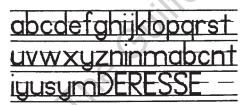
Along with their increased knowledge of print come advances in children's writing. Attention to sound is apparent. At first, only the most prominent sound in a word may be perceived and recorded, and this may or may not be the initial one; K for *come* and D for *dog*, but T for *cut*. As children become more conscious of word boundaries in their tracking of text, their spelling reflects this. Both the initial and final consonant sounds are recorded (RN for *run* and

LT for *elephant*). Writing at this time often lacks spacing between words; at first glance it may even appear to be a random string of letters (see Figure 2.2). However, because these spellers do include certain of the words' sounds, closer scrutiny usually discloses an interpretable message. Not surprisingly, this type of writing is called *semiphonetic* writing.

Teachers of emergent writers often develop cross-grade "buddy" partnerships with intermediate-grade students, who record the stories of preschoolers and kindergarteners that the young children are not yet able to capture on paper due to limited knowledge of the orthographic system. Buddy writing of this sort allows even the most novice writers to express complex ideas. Such partnerships can also foster students' understanding of others and of writing across the grades; teachers beyond the pre-K years also use buddy writing with letter name

No Word Boundaries

DeResse's story—completed independently on the computer—reveals his knowledge of the alphabet and his rudimentary ability to use the alphabet to communicate through writing "... now <u>i</u> know <u>my abc's next time</u> (<u>y</u>)won't yo<u>u sing</u> (<u>y</u>)with <u>me</u>."



Captioned Picture with No Word Boundaries
"My sister played with me."

Misrrdye



Late Emergent/Early Letter Name Spellings

UM

JAM

FUN

SIP

FIGURE 2.2. Snapshots of emergent spellers: Semiphonetic writing.

spellers and others for whom encoding of words is a challenge. Figure 2.3 shows a page from a collaborative book written by kindergarteners and their fifth-grade buddy writers. Just before Thanksgiving, the kindergarteners dictated their thoughts on "how to cook a turkey" or "how to make a pumpkin pie" to their buddies, who scribed, edited, and typed up the information before the pairs jointly added their illustrations. Copies of the books were read by all with much delight!

Developing children's oral language should be an important aim for teachers of emergent spellers. As discussed in Chapter 1, reading involves turning print into speech, and writing is turning speech into print. Therefore, the ease or challenge of making this happen will relate to the child's grasp of oral language: use of its vocabulary, syntax, and decontextualized language, that is, the language outside of current experience, such as the language of book reading or of a recounting of a prior experience. Emergent learners come to school with varied backgrounds of experience and with varied vocabulary knowledge. Some children have been read to perhaps 2,000 hours or more before starting school (Adams, 2000) and thus have been exposed to much decontextualized language and lots of vocabulary; others may not have been read to and may have had limited exposure to vocabulary, even through talk. Studies have revealed gaps in vocabulary size before children enter school and on across the school years (see Beck et al., 2013).



- 1. Shoot the turkey.
- 2. Cook it in a pretty hot oven for four minutes.
- 3. Take it out of the oven.
- 4. Let it cool off.
- 5. Put on the secret stuff.
- 6. Then eat it.
- 7. Take out the bones.

Robbie's Secret Sauce

- 1. Put 5 tomatoes in a mixing bowl.
- 2. Add 1 cup of barbecue sauce.
- 3. Add 8 cups of tomato sauce.
- 4. And add 1 cup chili powder.
- 5. Put 1 salmon on.
- 6. Boil for 1,000 seconds.
- 7. Set out. Enjoy!

You cut a hole in the top of the pumpkin. Take all the seeds and gunk out. Throw the seeds away. Put the pumpkin in a pan, cut the skin off; put it in the oven for 10 minutes at 20 degrees. You take it out of the oven; it's all done. Then you cut it, eat it, and it goes in your tummy!

FIGURE 2.3. Kindergarten and fifth-grade buddy writing.

Given the importance of vocabulary for reading comprehension, attention to promoting young children's vocabulary development is of critical importance. Interactive read-alouds afford opportunities to engage children in meaningful talk about the language and vocabulary used in the books. Providing opportunities for emergent learners to retell stories with puppets or cutouts and to listen to and recount their own stories about weekend events that are outside the here and now are other ways to encourage vocabulary growth. Teachers can "recycle" words through classroom talk to provide students with multiple exposures and different contexts. As a means of remembering to look for opportunities to recycle words, teachers sometimes post words in critical places—such as on a wall or another space opposite an area where they commonly talk to the class, meet for small-group instruction, or monitor center activities. Near the door is another good place, as children are often queued up for several minutes waiting to go home or to lunch or a special activity, affording a prime opportunity to filter in a word from earlier in the day or even a previous day. As children start to use the vocabulary, teachers sometimes connect it to home by inserting the word into a conference-type lanyard and letting the child wear it home. What an invitation for further talk and use of the word this can be when the child arrives home!

Letter Name Spelling

Students in the letter name stage tend to be beginning readers. Although most beginning readers are first graders, letter name spellers are common in first grade and the first half of second grade, and in some cases, in kindergarten. Older students who are having difficulty with reading and spelling can exhibit characteristics similar to those discussed here, even in the middle and high school years. Likewise, some preschool and kindergarten children may be ready to figure out how short vowels work and may already know a number of words by sight. As at the emergent stage, there should be deliberate attention to furthering students' oral language and vocabulary knowledge through avenues such as read-alouds and word study small-group discussion.

Typical letter name spellers have only recently achieved a concept of word and begun to read. Because the beginning reader's sight vocabulary and orthographic knowledge are limited, reading and writing are slow processes, punctuated by many pauses. Reading out loud buys time for the novice reader to figure out unknown words, and predictable text and picture clues lend much-needed support. Predictable text has repetition, rhyme, rhythm, an obvious sequence (often cumulative), or a combination of these patterns that enable beginning readers to anticipate words. Among children's many favorites are *Time for Bed* by Mem Fox, *Is Your Mama a Llama?* by Deborah Guarino, *Polar Bear, Polar Bear, What Do You Hear?* by Bill Martin Jr., *Jump Frog, Jump* by Robert Kalan, and *Pete the Cat: I Love My White Shoes* and others by James Dean. *Choral reading* and *echo reading* also support beginning readers. During choral reading, the teacher and students read out loud together; in echo reading, the teacher reads a line or short page and then the students read the same text.

Writing, too, is labor intensive at this stage. Words are formed deliberately and with determination in a sound-by-sound fashion. To ease the task of writing, teachers sometimes have students write part of a story and dictate the rest or encourage buddy writing with a friend or

an older student. They also give students opportunities to create personal versions of favorite patterned books and read-alouds, such as *Brown Bear, Brown Bear, What Do You See?* by Bill Martin Jr. and *The Very Hungry Caterpillar*, by Eric Carle. Supplied with a copy of portions of the text, students complete the sentences with their own innovations, as

In classrooms where beginning readers and writers predominate, students who demonstrate more advanced understandings are often sought out by their peers for assistance during reading and writing workshops.

Letter name spellers (Read, 1975) rely on the names of letters to spell words. Approaching each word one sound at a time, they seek out the letter name that most closely matches the sound they are trying to reproduce. Some sounds have a more direct match than others. Consider, for example, the word bake. The "buh"—b, "aye"—a, and "kuh"—k are much more straightforward for these young spellers than are the sounds in drip. In the latter word, there is no direct letter name match for either the "jr" sound of the dr or for the short i vowel sound. When this happens, children choose the letter name with the closest feel (place of articulation) to the sound they are trying to represent. This approach frequently leads to an unconventional spelling, as in the case of drip. Here, either j or g may be used for the beginning element, as both letter names result in a "juh" sound—"jay" and "gee." The letter name h is even a possibility, because "aich" also comes close to the desired sound. The short vowel in drip presents another problem. Because there is no letter named "ih," the letter name chosen by the child is the one that feels most like the short i sound. In this instance, the closest match is not the correct letter i, which causes the jaw to drop when pronounced and is formed farther back in the mouth, but the letter e.

An experiment with a partner or a mirror will illustrate how this letter naming strategy works. While making the short *i* sound, notice the outside shape of your mouth, as well as the inside feel. Then compare this feel and look to each of the vowel letter names—*a, e, i, o,* and *u*. Almost no change occurs when you shift from the short *i* sound to naming the letter *e*, which is why letter name spellers commonly substitute *e* for *i* in short-vowel words. Although spellings like JREP, JEP, GEP, HEP (or even JP, GP, or HP at the beginning of this stage) for *drip* are certainly nonstandard, they are well-reasoned attempts by novice writers seeking to make sense out of our English spelling system. Because children at this stage represent most of the sounds in their words and because the names of alphabetic letters serve as their guide, letter name spellings are also known as *phonetic* or *alphabetic* spellings.

Letter name features include the following:

- *Initial and final consonants* are usually the first features with which the letter name speller becomes competent. However, a few consonant confusions often persist during this stage (KAT = cat, CAD = sad, and YAT = wet).
- *Initial consonant blends and digraphs* are made up of two consonants. In a consonant blend, the sound of each consonant is maintained (*bl* and *st*), whereas the two consonants in a

digraph produce a single, simple sound (ch and sh). A good mnemonic for keeping blends and digraphs straight is to remember that the word blend starts and ends with blends and that the word digraph ends with a digraph. Letter name spellers' representations of initial consonant blends and digraphs are often incomplete (GAB = grab and TAT = that).

- *Short vowels* are written with many substitutions. These tend to be predictable and to appear as follows: BAK = back (no change), PAT = pet, FET = fit, GIT = got, and MOD = mud.
- Affricate refers to the speech sound heard when the beginning of job or chop is pronounced. As revealed preceding in the discussion of drip, several letters and combinations of letters can produce an affricate. including the sounds associated with j, ch, dr, tr, and sometimes g (gym), as well as the names of g, j, and even h. Because writers at this stage tend to depend on the sounds of letter names and how they are formed in the mouth to spell words, they often substitute one letter or letter combination for another when an affricate is involved (JROM = drum, GOB = job, HRE = tree, and CHRAP = trap). The choice of substitution varies and reflects what the child knows. For example, a child named Charlie is likely to rely on ch.
- Final consonant blends and digraphs, like their initial counterparts, are often incomplete (DIS = dish). Frequently, the incompleteness stems from an omitted m or n preceding the final consonant (BOP = bump or LAD = land). The nasal quality of /m/ and /n/ causes these sounds to be overshadowed by the consonant that follows, making it easy for the sound-conscious letter name speller to overlook them. Inclusion of the $preconsonantal\ nasal$ is an accomplishment that typically marks the end of the letter name stage.

Although they do not warrant instructional attention at this stage, two additional characteristics of the letter name speller should be highlighted—their omissions of silent long-vowel markers (BOT = boat and SHAD = shade) and of vowels in unstressed syllables (PAPR = paper and TMATO = tomato). The absence of these letters is not surprising given the letter name speller's reliance on sound. The student snapshot in Figure 2.4 is an in-depth look at a letter name speller.

Within Word Pattern Spelling

Students in the within word pattern stage (most third graders as well as many second and fourth graders) are likely to start out as fledgling readers, but, by the latter part of the stage and as they further their understandings about text, they are developing readers who can use reading as a tool for learning. Fledgling readers have acquired sight-word vocabularies that enable them to read without the support of patterned or familiar text. If they haven't developed the ability to automatically recognize a considerable number of words by early in second grade, "they will not fully experience the spurt in reading rate and fluency that we associate with this period" (Gillet et al., 2012, p. 14). Word recognition is further aided by a growing knowledge of the orthographic system. Rather than relying on letter-by-letter and sound-by-sound processing, learners at this stage are able to chunk parts of words and process them in a more automatic fashion. The resulting increased fluency is evidenced in children's phrase-by-phrase reading, which replaces their former word-by-word approach, and in their greater expression. As reading becomes faster, out-loud reading changes to silent reading. For both reading and

Thomas entered second grade as a beginning reader. Although his sight vocabulary was limited to just a few words, he was able to finger-point to memorized text and selfcorrect mistakes. He was eager to learn, full of energy, and put his all into reading and writing. Although partner reading was always an option during DEAR (drop everything and read) time, one day Thomas chose to sit near me and "reread" a patterned story that he and several other children had choral and echo read that morning. He knew they would be working with the story again the next day and obviously wanted to be on top of the situation. I could hear him flipping pages and whisper-reading the text over and over. Finally, he turned to me and proudly announced, "I'm getting to be such a good reader I don't even have to look at the words!" As amusing as this story is, it strikes a crucial note for literacy learning and teaching. Although beginning readers need the support of familiar text, as teachers we must be sure we help them progress beyond a dependence on context and picture clues for word reading so that they truly do increase their sight vocabularies and their understanding of letter–sound associations. This can be done by moving from story to sentence strips to individual words. Without our conscious attention to developing such word knowledge, beginning readers may be able to read familiar texts with ease but have little transfer to different contexts.

The following spellings, from the DSA letter name feature list given in September, reveal Thomas's strong understanding of initial and final consonants—only b/p, c/k, and w/y were confused. His more limited knowledge of short vowels, affricates, blends, and digraphs is also evident. Thomas correctly spelled map, bet, rub, grab, slid, and fast.

GAT	went	YATH
YNH	cap	KAP
FAD	hop	HAP
ROP	fit	FAT
SEPH	jet	JAT
PAND	drum	JUM
TATH	much	MUH
BUP (chop	TAP
YET	trip	RAT
BCH		
	YNH FAD ROP SEPH PAND TATH BUP YET	YNH cap FAD hop ROP fit SEPH jet PAND drum TATH much BUP chop YET trip

By the middle of January, Thomas's word knowledge had progressed considerably. He relied less on picture clues and memory for the story and more on his growing sight vocabulary and knowledge of letters and sounds. Cumulative stories held a special interest. Although longer and more challenging, they still provided support through repetition and often rhyme. Thomas and a friend were delighted when they discovered Bill Grossman's wonderful variation of the "I know an old lady who swallowed a fly" tale—My Little Sister Ate One Hare—and decided to present it to the class. With serious determination (and many giggles), they practiced reading the story, which tells of a little girl who gobbles down everything from one hare to nine lizards "and their gizzards" but can't handle the ten peas on her dinner plate. Needless to say, the reading rated a 10 with all but the squeamish.

On the January DSA reassessment, Thomas spelled 19 of the letter name words

(cont.)

correctly. Problems persisted with digraphs and affricates (SIP for *ship*, THOP for *chop*, MUTH for *much*, JRUM for *drum*); with consonant w (YITH for *with*); and with short e (WINT for *went*). Although Thomas's instructional needs were clearly still at the letter name stage, a few of his spellings on the within word pattern list showed that he was beginning to discover that there is more to spelling words than sound— CUOT for *cute*, MIET for *might*, CYIET for *quite*, and POEINTE for *point*.

Weekend News writing became an anticipated part of our Monday morning routine soon after it was tried. It gave the children another occasion for meaningful writing (and purposeful reading and sharing) and afforded me time to work with small groups of children on word study. Thomas's weekend news from the time of his January inventory assessment illustrates his confusion with the digraph th and short e, his ability to spell some of his sight words correctly (have and good), his use of classroom environmental print (Saturday and weekend news), and the absence of experimentation with long-vowel markers.

weekend News On saturday me and sistruit slar rodeg tin	beb I had a Fun Weelhend.
wint to have	
sum hot koko.	
it was good not	
kokatin I had	
to go hom tin	
I had to goto	
I have to go to	

FIGURE 2.4 (cont.)

writing, greater efficiency means that students have more attention available for constructing meaning. Chapter books become accessible and capture students' interests. These are simple at first and include such stories as Arnold Lobel's *Frog and Toad Together* and Cynthia Rylant's *Henry and Mudge*. In time, longer chapter books with more complex plots supplant these. School and family situations are popular topics, as are mysteries. Popular series include *Diary of a Wimpy Kid* by Jeff Kinney, *Judy Moody* by Megan McDonald, *Magic Tree House* by Mary

Pope Osborne, *Time Warp Trio* by Jon Sczieska, and *The 39 Clues* by various authors. Informational books also hook and hold students' interest. Favorite authors include Greg Tang, known for his riddle-like math books (*Math-terpieces: The Art of Problem-Solving* and *The Grapes of Math*) and Gail Gibbons (e.g., *Owls* and *Bats*), as well as series such as the DK's Eyewitness Readers: Beginning to Read Alone (*Eruption! The Story of Volcanoes* or *Starry Sky*) and Reading Alone (*Titanic: The Disaster that Shocked the World* and *Plants Bite Back!*), the National Geographic Readers for Kids (*Tigers* and *Sea Turtles* or *Titanic*), and the ever-popular *Magic School Bus* series by Joanna Cole, which combines amazing adventures of a wacky teacher and her class with factual information.

Advances in word knowledge affect students' writing, too, making it easier and more fluent. A noticeable result of this is longer pieces. Children at this stage consider their audience more, and, unlike beginning writers, who often assume that readers and listeners know more than they actually do, take care to include plenty of details. *And, then,* and *next* can get quite a workout as writers strive to tell the *whole* story.

Their greater experience with print leads children at this stage to a heightened awareness of how words work and, consequently, to more conventional spelling. The once-logical letter name spellings of BAK for *bake* and RAN for *rain* are not confirmed by the within word pattern speller's ever-increasing sight vocabulary—such spellings just don't look right. Short-vowel substitutions gradually disappear at this stage, and long-vowel markers appear. Pattern mastery, especially the marking of long vowels, is at the heart of this stage of development. The many ways of representing long-vowel sounds in English can make this a confusing process and cause within word pattern spellers to ponder *Which pattern*, *and when?* For example, although the *a-consonant-e* pattern is correct in *wave*, it is not correct in *train*, *play*, *eight*, *they*, and *great*. Furthermore, finding that a pattern works one time with a particular pronunciation is no guarantee that it will work with another—for example, *I liked the <u>tale</u> about the gingerbread man*, but *My dog's tail is very long*. In their efforts to come to terms with these complexities, children often overgeneralize and misapply their understandings (MAIK = *make* or HIDE = *hid*).

Within word pattern features include the following:

- *Vowel-consonant-e* patterns are frequent. Despite early confusions (BAIK = *bake*), these patterns are usually the first to be used with confidence by within word pattern spellers.
- r-Controlled vowel patterns, those in which r follows a vowel or a team of vowels, are often substituted for each other (HERT = hurt, FEER = fear). Reversed letter order is also common (GRIL = girl, BRID = bird).
- Other common long vowels include vowel teams such as ai, ay, ee, ea, oa, and ui, as well as igh, i-consonant-consonant (find and wild), and o-consonant-consonant (cold and post). That a child is using features but confusing them is apparent in spellings like BOET for boat and POAK for poke, or TITE for tight and SPIGHT for spite.
- Complex consonant patterns (Venezky, 1970) include the following types: (1) three-consonant clusters (*scr, thr, tch*), (2) two-consonant units that result in the sound of a single letter (*ck, kn*), and (3) consonant and vowel units (*dge, qu*). Errors such as SKRAP and SCAP for *scrap*, QWEEN for *queen*, BRIGDE for *bridge*, and BICKE for *bike* are common.
 - *Abstract vowels* are vowel patterns that are neither long nor short nor *r*-controlled. Most

of the patterns consist of two vowels that form a *diphthong*, a speech sound that begins with one vowel and glides into the next, as in the following words: <u>pout</u>, <u>cow</u>, <u>few</u>, <u>boil</u>, <u>toy</u>. Other patterns include the vowel teams of <u>oo</u> (<u>foot</u> and <u>boot</u>) and <u>au</u> and <u>aw</u> (<u>caught</u> and <u>paw</u>). Spelling difficulties often result from confusion of the patterns, like COWCH for <u>couch</u> and POYNT for <u>point</u>.

In addition to increasing their knowledge of patterns, within word pattern spellers need opportunities to explore meaning connections. A study of *homophones* (words that sound alike but are spelled differently and have different meanings) is not only fun for students but can also clear up many writing confusions. Students also benefit from understanding that in English, actions that happened in the past are usually recorded with *ed*, regardless of how the ending is pronounced. Overreliance on sound when writing words of this type leads students to such spellings as BATID/*batted*, RIPT/*ripped*, and PEND/*penned*. The fact that *ed* endings sometimes require the dropping of a final *e* or the doubling of a final consonant is not an instructional issue until the next stage.

Despite the pattern complexities at this stage, as students read and examine words and exercise their understandings in their writing, they gradually sort out the correct use of patterns in single-syllable words. Their developing knowledge of pattern, sound, and meaning relationships, coupled with a steady acquisition of sight vocabulary, continues to strengthen their fluency in reading and writing. Although many students move into the within word pattern stage during second grade (see Figure 2.5), others who have difficulty with reading and writing may not reach it until much later (see Figure 2.6). As with the earlier stages, continued development of vocabulary knowledge should be an aim of within word pattern word study instruction, as well as during other parts of the day, with increasing attention to academic vocabulary being a part of this.

Syllable Juncture Spelling

By the time they reach the syllable juncture stage (often in the intermediate grades), most students have become proficient in their reading, and they process print with considerable efficiency. Many are mature readers, though still with much to learn about reading critically, as well as appreciating an author's craft. By the upper elementary and middle school years, the span of differences in reading ability has further widened. "The best readers in an elementary school are probably mature readers while only in fourth or fifth grade, whereas the poorest readers in those grades are likely beginning readers" (Gillet et al., 2012, p. 16). Reading and writing to learn assume a greater emphasis as students explore new genres and expand their purposes. Content areas, such as social studies and science, present students with increasingly difficult informational text, exposing them to more sophisticated vocabulary and to more complex spelling patterns. Content studies often pique students' interests in historical fiction and biographies for recreational reading. Favorite authors also drive student choice in reading material. In fact, it is not uncommon to find students at the syllable juncture stage scouring the library for just one more book by a favorite author, including Judy Blume, Kate DiCamillo, Matt Christopher, Lois Lowry, Jerry Spinelli, Roald Dahl, Lloyd Alexander, Lemony Snicket, Gary Paulsen, Brian Selznick, J. K. Rowling, and Seymour Simon.

Jason began second grade as a late letter name speller who was making the transition from beginning reading to more independent reading. He spelled 19 words correctly on this stage of the DSA given in September. His spellings indicated short *i* and short e confusions. Jason used short *i* correctly in just one word—WIN. In all but one of the other words (TRP for *trip*), he consistently substituted e (SHEP, WETH, SLED, FET, DESH). A few of his spellings at the within word pattern stage reveal a beginning awareness of long-vowel marking—GAPE for *grape*, FERE for *fear*, STEPE for *steep*. Jason's sight vocabulary was increasing, and it wasn't long after the year started that he was reading easy chapter books, such as those from the *Frog and Toad* and *I Can Read* series, with peer or teacher support. Although he occasionally whisper-read, more and more of his reading was done silently.

By January, Jason was ready to deal with patterns within words. On the spelling reassessment, he demonstrated a firm grasp of the vowel—consonant—e pattern and showed experimentation with other vowel patterns: GLAIR for *glare*, HERT for *hurt*, FEER for *fear*, FROUN for *frown*, STUED for *stood*, and PONTE for *point*. Jason spelled 14 words correctly on the within word pattern feature list.

His progress from relying on sound when spelling words to considering patterns is apparent in a comparison of his September spelling of *bridge* (BREJ) with that in January (BIREG).

As Jason's word knowledge increased, writing became easier and more fluent, as evidenced by his weekend news at the time of the spelling reassessment. It took up four and a half journal pages! His spellings are indicative of a growing understanding of English spelling. Typical of children at this stage and age, his account provides a play-by-play description of what happened.

Pittsbrag!

On friday rode an airplane to my dad's house alone. Onese we got home we blu up my Super Bowle in flateubul chair. My dad blu up most of [watched] it. After that we wated Sliders. Than I went to bed. The next morning I woke up erly. At 3:00 we went to a Penguin game. Penguins vs New York Raneger. New York wun 7 to 4. Than we went home and my dad made dunkin hines brownys. It tuck him 15 min. I ate one. I said "Yum!"!!! The next day we wached the Super bowle. Green Bay Patkers 35 to 21. I had a fun Weekend!

FIGURE 2.5. Snapshot of a within word pattern speller: Jason.

Sara also reached the within word pattern stage, but as a fifth grader. Although her DSA assessment revealed strong understandings of features at the letter name stage (all 25 words were correct), her demonstrated knowledge of sound–pattern relationships on the within word pattern list was considerably weaker (just 10 words were correct). Like Jason, Sara had little difficulty in spelling words with vowel–consonant–e (just BROCK for *broke*, and as learners often do, she overgeneralized her grasp of this feature to other words (MITE for *might*, FRANE for *frown*, STUDE for *stood*, and MADE for *mad*). Her experimentation with other patterns was limited to two words (STEAP for *steep* and GLAER for *glare*).

Finding a satisfying book was not an easy task for Sara—"too difficult" and "not interesting" choices left her sitting and gazing, rather than engaged. However, when she found or was introduced to a book she liked and felt comfortable with, it was difficult to draw her attention away. Fruit Flies, Fish, and Fortune Cookies by Anne Le Mieux was one such book. After reading for some time one day, Sara wrote the following entry in her dialogue journal:

Dear Mrs. G.

I am reading <u>Fruit Flies</u>, <u>Fish</u>, <u>and Fortune Cookies</u>. It is a very good book. What happed was that Mary Ellen bracks her mom's mirow and her friend said that she would have bad luck for 1 years. So she said that she does not belive in that stuff.

So the next day she finds out that her best friend is moveing to pares for 2 years so that is the frist thing. She thinks she will not tell her mom that she brock her mirow but she tells her that but her mom is not made that was one good thing. But when she was on her way to walk home she got sprayed by a skunk.

I thank that this book is very good for me. I like when she thinks abot bad luck and then it comes. I think that you will like thime to.

Your friend and all ways will be,

Sara

Sara's ability to spell numerous sight words is apparent from her writing—WOULD, SAID, HAVE, GOOD, FRIEND. Although she used patterns correctly in many single-syllable words (for example, out, home, spray, luck), she misused them in others (such as MADE for mad, BROCK for broke, BRACKS for breaks, FRIST for first). The understandings she develops at the within word pattern stage will serve as the basis for later learning at the syllable juncture stage when she will deal with issues such as those in MOVEING and MIROW.

FIGURE 2.6. Snapshot of a within word pattern speller: Sara.

Much of students' writing at this stage is done in response to what they are learning. They write to persuade, explain, describe, summarize, and question, using such forms as letters, essays, and various types of response logs to convey their ideas. Their writing voice becomes more distinctive, more personal, than earlier. The use of *dialogue journals* (Atwell, 1998) can be especially enjoyable at this time because the letters about books exchanged between teacher and student or pairs of students are often truly conversational.

Syllable juncture spellers use most vowel patterns in single-syllable words correctly. Polysyllabic words and the issues accompanying them become the instructional focus. Students must learn to apply their pattern knowledge within the syllables of these longer words and across their syllable boundaries. A primary question is whether to double the final consonant of a syllable in order to maintain the vowel sound—*hopping* and *dotted*, not HOPING and DOTED, and *butter* and *motel*, not BUTER and MOTTEL.

Syllable stress also needs to be taken into account at this stage. In polysyllabic words, syllables differ in the amount of stress, or accent, placed on them when they are pronounced. When syllables are stressed, the vowel sound is obvious. This simplifies the process of selecting the right pattern. However, unstressed syllables do not clearly identify the vowel and therefore are a source of numerous spelling errors. Compare the second syllable in *contain*, which is stressed, to the second syllable in *villain*, which is not. Both have the same pattern, yet the second example is far more troublesome to spell (and read) than the first. The *schwa*, which is what aathis unstressed vowel sound is called, is designated by the symbol and is pronounced "uh." It creates confusion for the syllable juncture speller because it can be represented by any of the five vowels (*again*, *agent*, *pencil*, *complete*, *focus*), as well as by various combinations of them. The student snapshots in Figures 2.7 and 2.8 illustrate the characteristics of learners at this stage.

Syllable juncture features include the following:

- Doubling and <u>e</u>-drop with ed and ing endings requires a firm understanding of how patterns work. For example, in order to correctly spell *baking*, a learner must first know that *bake* is spelled BAKE and not BACK or even BAIK. Then attention must be given to preserving the vowel sound by dropping the final *e*, by doubling the final consonant, or by simply adding the ending, as with *taping*, *tapping*, or *tracking*.
- Other doubling at the syllable juncture also depends on pattern knowledge. In syllables that end with a long vowel sound, the quality of the vowel is maintained by not doubling the consonant (silent, not SILLENT). In contrast, a syllable that ends in a consonant and contains a short vowel retains its vowel sound through consonant doubling (matter, not MATER, and cabbage, not CABAGE). The latter syllable principle holds true for many words. However, because English includes numerous words borrowed from other languages that have undergone pronunciation changes, this rule has many exceptions (rabbit, but habit).
- Long-vowel patterns in the stressed syllable present opportunities for the syllable juncture speller to apply pattern knowledge learned at the within word stage to words of more than one syllable—complaint, not COMPLANTE. Perhaps the strong relationship between this feature and those mastered at the previous stage accounts for the fact that it is often the first syllable juncture feature to be used with confidence.

In second grade, Abigail demonstrated a sophisticated command of language. She was very verbal and took pleasure in both reading and writing. Her reading tastes varied from Laura Ingalls Wilder's *Little House* series to Mary James's *Shoebag*, the story of a cockroach that changes into a human. Abigail read with fluency, expression, and in-depth understanding, often adding an insightful remark to a book discussion. Writing was a favorite pastime that received much of her attention throughout the year. Free moments usually found her several pages deep in a new story, collaborating on a play, or playing with words for a poem, like the first line of this poem about rain: *Drip drop tiddle top*, *I woke up in the morning*. . . .

Abigail was already a syllable juncture speller in September. Her spelling assessment revealed a strong knowledge of patterns in single-syllable words and showed that she was negotiating spelling issues in longer words. Although she correctly spelled *trotted*, she had trouble with the doubling in *clapped* (CLAPED) and *swimming* (SWIMING). Other doubling confusions were also evident. She spelled *tennis* right but missed *pilot* (PILLITE) and *minnow* (MINO). Vowel patterns also caused her difficulty—complaint (COMPLANT), disturb (DISTERBE), and trample (TRAMPUL). Nonetheless, Abigail accurately spelled 12 of the 25 words, performance more typical of a fourth or fifth grader.

By January, Abigail had sorted out many of the doubling and pattern questions and when reassessed spelled 20 of the words correctly. *r*-Controlled vowel patterns and vowel patterns in unstressed syllables were still troublesome (SOLUTE for *salute* and BERDEN for *burden*). Abigail's weekend news at this time illustrates her proficiency in writing and spelling and, like Jason, she recounts the sleepover with a play-by-play description. She made only three spelling errors—FIANALLY, SLEDED, and SATERDAY. Interestingly, the last is a word that appeared on the classroom calendar. Unlike Thomas, Abigail may have felt confident enough about her spelling to write the word without checking.

Robyn's Sleepover

On Saterday I went to Robyn's house. We ran upstairs. And went to Jessica (Robyn's sister's) room, to play computer. After that we fixed a fort, in her room. Then we had macaroni and cheese, and hot dogs. Then we ran upstairs, and got ready for bed. It was 9:00. We told ghost stories. With the light off. Nothing scared us until "Ahhhhh" Robyn's mom came in the room. We turned on the light. And played with her stuffed animals. Then I hour later, we found out that Robyn had some M&M's in her room. We each had 9 M&M's. Then we went to bed.

The next morning at 7:30, Robyn and I went downstairs and made oatmeal. (It turned into watery-oatmeal-mush) I had a poptart instead. Then we went outside. I made a snowman, Robyn made a snowman. Caline, Robyn's dog took my mitten. We chased and chased after her. Fianally, we got it. After that we sleded down the hill. Then we had hot cocoa. I had to go home then. I had fun.

FIGURE 2.7. Snapshot of a syllable juncture speller: Abigail.

Like many of her peers in fifth grade, Gina was dealing with syllable juncture issues in her spelling. Her performance on the spelling assessment at the beginning of the year was strong at the within word pattern stage—the only word she missed was bridge (BRIGDE). Gina spelled 12 of the syllable juncture words correctly. Her strength was with vowel patterns in the stressed syllable. She missed just two r-controlled patterns (FERNESS for furnace and BIRDEN for burden) and only one long-vowel pattern (COMPLANT for complaint). As the rest of her spelling reveal, her understanding of the other features at this stage was just developing. Her need to sort out spelling issues in polysyllabic words is also apparent in her journal entry.

e-Drop and doubling Other doubling		Unstressed syllable	
SWIMMING	TENNIS	TRAMPLE	
MAKING	PILET pilot	MAYOR	
TROTED trotted	SOBBER sober	POLER polar	
CLAPED clapped	BAGIGE baggage	FOUNTEN fountain	
PILEING piling	MINOW minnow	SULLUTE salute	

Gina was a fluent reader and enjoyed different genres—The Great Gilly Hopkins; Black Star, Bright Dawn; Tuck Everlasting. She knew what she liked in a book and readily and clearly expressed her ideas and reactions to her reading in her journal letters, as in the following entry:

Dear Mrs. Ganske,

I was reading a book called <u>Starring Sally J. Freedman as Herself</u>. I droped it on page 34. There wasn't enouf action, exitement, and laughs. It didn't have enouf to it. It was just about her. I dragged myself to read it. It was sort of like standding and waiting for the ball to come when you play soccer with the boys, but it never comes.

But there is a good side. I started a book that I think I am relly going to like. It's called A Little Princess by Frances Hodgson Burnett. It makes me wonder and be ciours. It looks so very intresting. I can't tell you much cauce I've only read 3 pages. So far I know the main charcter in this story is a rich girl named Sarah Crewe. I also know that Sarah is being sent away to "The Place" in Indianna from England. Judgeing by the back cover I think it's the boarding school their talking about. They make it sound like theire up on a hill on a dirty road in a carrige with fields sorounding them looking down on a cloud of mist and in the distane they see The Place." More next Wedsenday.

Gina

FIGURE 2.8. Snapshot of a syllable juncture speller: Gina.

- \underline{r} -Controlled vowels in the stressed syllable provide further opportunities for students to apply and extend their within word pattern knowledge (DISTERB = disturb).
- Vowel patterns in the unstressed syllable have a schwa sound (trample and solar) that lead to spelling confusions (TRAMPUL and SOLER). An examination of similar words (sample, dimple, simple, temple) can be of considerable help, as can meaning (polar, similar, popular, regular are all adjectives).

Common prefixes and suffixes, also known as *affixes*, are other issues faced by the syllable juncture speller. Students need to learn that prefixes and suffixes are separate meaning units and therefore remain unchanged when added to a base word (*misspelled*, not MISPELLED, and *really*, not REALY). Knowledge of prefixes and suffixes also helps in decoding and understanding unfamiliar words.

Derivational Constancy Spelling

This is the last stage of spelling development and one that continues through adulthood. By seventh and eighth grade the majority of students are derivational constancy spellers and mature readers. Most of the words they encounter in their reading and many they use in their writing are of relatively low frequency and primarily of Greek and Latin origin. Although some students reach the derivational constancy stage by fourth grade, the majority are likely to be in seventh or eighth grade before they attain it (Ganske, 1999). Occasionally, students exhibit word knowledge characteristic of this period early in their school years; in fact, a kindergarten teacher shared the spellings of one such "expert" with me! However, just the fact that they demonstrate a sophisticated understanding of words does not mean that these young learners are ready for word study with derivational constancy features. They typically lack the necessary reading and writing connections. The texts they choose to read reflect characters, happenings, and vocabulary that are more closely aligned with their age-related interests than with their word power. Similarly, although these young experts can spell low-frequency words when called upon to do so, they do not use them in their writing. By contrast, more mature derivational constancy spellers are confronting the orthographic features described in this section in their reading and are attempting to use them in their writing. They, like the fifth grader highlighted in Figure 2.9, are ready to address these issues through word study.

Unlike words studied at earlier stages, many of the words at this stage are related and derive from the same *root*. Roots, like prefixes and suffixes, carry meaning. They cannot be made any smaller without losing the meaning, and they are known as *morphemes*. Some roots (often called *root words*) are intact words, as in *rereading*. However, most of the Greek and Latin roots that form the backdrop for word study at this stage are not: *transfer*, *audible*, *dictate*. Learning to preserve the meaning units of derivationally related words is the key issue confronting spellers at this stage. For example, in each of the following pairs of words, notice the consistency of the spelling–meaning connection, despite the pronunciation changes that are evident in the underlined letters: *condemn/condemnation*, *discuss/discussion*, *music/musician*, *compose/composition*. An awareness of this relationship can greatly facilitate spelling knowledge and enhance vocabulary acquisition.

Lance started fifth grade as a solid syllable juncture speller. By midyear, he had progressed to the derivational constancy stage, spelling 14 of these words and all but one word on the syllable juncture list correctly. Lance's spellings show that he is beginning to make connections between spellings and meanings but has much refining to do, as his invention for *inedible* reveals.

Silent/sour	nded	Consonant alternations		Vowel alternations	
DESIGN		EXPRESSION		DISPOSITIO	N
PROHIBIT	ION	CONSUMPTION		INSPIRATIO	Ν
SOLEMN		DISRUPTION		STABILITY	
HEISON	hasten	PURSSUATION	persuasion	PROCLAMA	TION
MUCSLE	muscle	POLITITION	politician	DEFINATE	definite

Latin-derived s	in-derived suttixes Assimilated pretixes		S
SUBMISSIVE		ACCUMULATE	
ETERNITY		SURPRESS	suppress
ASSURANCE		COLIDE	collide
INEATABLE	inedible	ERRESPONSIBLE	irresponsible
PERSISTANT	persistent	IMMOBAL	immobile

Lance was an excellent reader and read widely from the classroom and school libraries, as well as from outside sources. He particularly enjoyed action and adventure. This interest led him to nonfiction books like Jean Fritz's Stonewall, but also to the fantasy works of James Howe. During the course of the year, Lance devoured all of the Howe books he could find. The following entry from his dialogue journal in January shows his taste in reading material and illustrates his proficiency as a speller, writer, and critical reader.

Dear Mrs. Ganske.

I am reading Howliday Inn by James Howe.

What's happening in this story is while Chester and Harold are out looking for clues concerning Louise's dissapearence, they spy on Max and Georgette (also a dog). While discussing what they had heard Max, Lyle, Taxi (dog), and Georgette surround them and start saying accusations like "you don't really think Louise was murdered." The next day Harold awakes to find Chester missing. Jill and Harrison (the caretakers) say they don't see how Chester could have been poisened!

My thoughts are the following. I like this book because of its non-stop action and suspense. For example I thought "oh my gosh" when Chester dissapeared. I like the characters because Harold thinks logic and Chester is a crazy thinker. I predict that Chester is not dead because of my background knowledge, I know that Chester is a main character and usually main character's don't die. I like how James Howe forms his characters. I think the combination of a logical thinker and an illogical thinker is great. I can't wait to find out what happens next.

Sincerely,

Lance

Derivational constancy features include the following:

- Silent and sounded consonants occur in word pairs such as hasten and haste. Although the latter word is seldom misspelled at this stage, the former frequently is (HASEN). Being mindful of the meaning connection between these two words can help ensure that students include the silent t.
- Consonant changes (or alternations) involve a predictable change in a consonant's sound or its sound and spelling. In the examples that follow, notice the changes that occur in the underlined portions of the words. Then note the types of misspellings that may result when students are not aware that words related in meaning are often related in spelling as well. Even when spelling changes occur, as in the last two examples, these tend to be predictable when considered by families of words (consume/consumption, resume/resumption, and conclude/conclusion, include/inclusion, allude/allusion).

$confess \rightarrow confession (sound)$	CONFESION
$presu\underline{me} \rightarrow presu\underline{mpti}$ on (spelling/sound)	PRESUMTION
$exclude \rightarrow exclusion (spelling/sound)$	EXCLUTION

• *Vowel changes* (or alternations) most often involve a change in the vowel's sound. Vowel sounds may shift from long to short, long to schwa, short to schwa, and schwa to short in the related form. The most common and probably most often misspelled words of this type are those that alter to a schwa. Changes from long to short give the speller the advantage of being able to use sound as a cue (*volcano* → volcanic); those altering to a schwa do not.

Again, the underlined letters of each of the following examples point out the change. Notice how much more obvious the vowel sound is in the first word than in the second. By thinking of a related word in which the vowel sound is clear, students make the task of spelling words such as *composition* and *democratic* much easier.

$comp\underline{o}se \rightarrow comp\underline{o}sition$ (long to schwa)	COMPESITION
$dem_{\underline{o}cracy} \rightarrow dem_{\underline{o}cratic}$ (short to schwa)	DEMICRATIC

Vowel alternations occasionally require a spelling change as well. However, as with consonant alternations, these are usually predictable if considered by families (*explain/explanation*, *proclaim/proclamation*, and *exclaim/exclamation*).

• Latin-derived suffixes often have sound-alike counterparts, and this leads to confusion.

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invisible, not INVISABLE, and respectable, not RESPECTIBLE conference, not CONFERANCE, and abundant, not ABUNDENT.
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• Assimilated prefixes (also known as absorbed prefixes) are characterized by double consonants. However, unlike syllable juncture doubling, this doubling results from the fact that over time the final consonants of some prefixes have been absorbed or assimilated into the

accompanying base word or root (in + literate = illiterate, sub + press = suppress, and in + merse = immerse). Most spelling errors related to this feature are due to a lack of doubling (ILITERATE, SUPRESS, and IMERSE).

Greek and Latin roots provide further areas for study at the derivational constancy stage. By realizing that spelling can signal a common root, students are able to make meaning connections among related words and thereby expand their vocabularies. For example, knowing that the root *rupt* means "to break" provides a clue to the meaning of other words with this same word part—*abrupt*, *bankrupt*, *eruption*, *interrupt*—especially if the reader has a working understanding of prefixes.

Through increasing experiences with reading and writing and through guided explorations of words, mature writers and readers discover how the sound, pattern, and meaning principles of English spelling interact. As the discussions in this chapter have shown, acquiring such knowledge is a developmental process (see Figure 2.10). To aid students' progress, teachers need to know what orthographic understandings students already have. The DSA described in Chapter 3 reveals this information.

Before moving on to the next chapter, you may want to check your understanding of

	Emergent		Within word		Syllable	Derivational
	Prephonetic	Semiphonetic	Letter name	pattern	juncture	constancy
Ages:	1 to 5		4 to 9	6 to 12	8 to 12	10+
Grades:	pre-K		1 to 2	2 to 4	3 to 8	5 to 8+
	B∃IGT	N	PAN	PAN	PAN	PAN
	132TB	CM	SAM	STEM	STEM	STEM
	ERL88I	к 🤍	BIK	BIEK	BIKE	BIKE
	ABGE	HT	CRT	CHRAT	CHART	CHART
	ESAE	DD	DITD	DOTID	DOTED	DOTTED
	IABTT	Z	JREZL	DRIZUL	DRIZZEL	DRIZZLE
	BBEGBA	K	CRETSIZ	CRITUSIZE	CRITASIZE	CRITISIZE
	8BGRE	M	MGRT	MUJORTEA	MEJORATY	MEJORITY

Note: Grade-level ranges indicate grades at which a third or more students may be at that stage of development (Ganske, 1999). As the Common Core State Standards are implemented and as teachers continue to support the development of students' orthographic knowledge, the ranges may shift. They may also differ, depending on the particular student population. Emergent Stage: This is a stage of emergent understandings. Children progress from prephonetic writing with no letter–sound association (B∃IGT for pan) to semiphonetic, "part sound," spelling (N for pan or CM for stem). Letter Name Stage: Students spell by sound, often matching the names of alphabetic letters to the sounds they wish to write (JREZL for drizzle). They learn to associate letters with their appropriate sounds (drip, not JREP). Within Word Pattern Stage: Students learn to use patterns to spell single-syllable words (bike, not BIEK, and chart, not CHRAT). Syllable Juncture Stage: Because words of more than one syllable are the focus at this stage, students are confronted with new spelling issues that result from the juncture or joining of syllables, such as consonant doubling, dropping the final e before ing, and syllable stress (dotted, not DOTED). Derivational Constancy Stage: Students learn that related words—those with the same derivation, or origin—often share the same spelling pattern; the spelling pattern tends to remain constant despite changes in pronunciation (critic/criticize and major/majority).

FIGURE 2.10. Examples of students' spelling inventions by stage.

stage-related features. To do so, try sorting the word cards with student misspellings that are included in Appendix 2 into the appropriate categories. Begin by placing the five stage-name cards as column headers. Then place each error card under the stage that characterizes the spelling. To see if you're correct, return to the feature descriptions earlier in this chapter. The spellings have been selected from examples that were discussed. An answer key appears as Figure 9.2 at the end of Chapter 9.

as while the control of the survey This is also a good time to assess your understanding of features while taking the Linguistic Terminology Survey located in Appendix 2. An answer key for the survey follows immedi-