

Getting Started

THE ASSESSMENT OF ORTHOGRAPHIC
DEVELOPMENT



PDToolkit is an online tool that accompanies this core text, and it was designed to help you implement word study in an engaging and interactive way. Resources for this chapter include:

- **Qualitative spelling inventories** to determine each student's approximate stage of spelling development. Word study groups can also be created based on inventory results.

Effective teaching cannot begin until you understand what students already know about words and what they are ready to learn. Likewise, you cannot make changes to improve instruction until you evaluate the results of your teaching. This chapter presents an informal assessment process that will enable you to:

- Informally observe and interpret orthographic knowledge in writing and reading. (page 47)
- Select and administer a qualitative spelling inventory. (page 49)
- Score and analyse the inventory to identify features that students need to study as well as their developmental stage of word knowledge. (page 53)
- Group students for differentiated instruction. (page 60)
- Monitor students' progress and set realistic goals for their growth in orthographic knowledge over time. (page 67)
- Interpret the orthographic knowledge of your English learners. (page 69)

Informal Observations to Assess Orthographic Knowledge

There is synchrony in the development of reading, writing and spelling. Because of this synchrony, informal observations of what students do when they read and write provides information for planning word study instruction.

Observe and Interpret Students' Writing

Daily observations of student writing reveal what students understand about words. The following example appears to be a menu, but Sarah posted it on the wall the way she had seen reviews posted in restaurants.

What Sarah Wrote

1. CRS KAM SAS
2. CRS FESH
3. CRS SAGATE
4. CRS POSH POPS

How Sarah Read What She Wrote

- First course, clam sauce
Second course, fish
Third course, spaghetti
Fourth course, Push Pops

This writing tells us a lot about Sarah: She sees a practical use for writing and she enjoys displaying her work. She has a good grasp of how to compose a list and she is even beginning to understand menu planning! When we look for what Sarah knows about spelling, we see that she represents many consonant sounds and some digraphs (the /sh/ in *fish* and *push*), but blends are incomplete (using only K to spell the *cl* in *clam* or S for the *sp* in *spaghetti*). She is using vowels consistently (except in CRS for *course*); however, in spelling *fish* as FESH, Sarah confuses *e* and *i*. According to the sequence of development presented in Chapter 1, Sarah is considered a letter name–alphabetic speller who would benefit from instruction emphasising short vowel sounds and blends.

FIGURE 2.1 Jake's Writing Sample

My Accident

Last year I scrapped my chian. I was shacking and my mum was too. My Dad met us at the docters offises. And I had to have stiches. Then my Dad bout me an ice crem cone. And we went home. I didn't go to school the nexs day. I was to tird.

LOOK FOR WHAT STUDENTS KNOW AND WHAT THEY USE BUT CONFUSE.

In Figure 2.1, we see a writing sample from Jake, an older student. The writing is readable because many words are spelled correctly and the others are close approximations. When we look for what Jake knows, we see that he has mastered most consonant relationships—even the three-letter blend in *SCRAPPED*—but not the complex *tch* unit in *STICHES*. Most long and short vowels are spelled correctly, as in *bad*, *have*, *went*, *cone*, *home* and *day*. When we look for what Jake uses but confuses, we see that he confuses the *-ck* and *-ke* ending in *SHACKING* for *shaking*. He inserts an unnecessary extra vowel when he spells *chin* as *CHIAN* but omits some silent vowel markers where they are needed, as with *CREM* for *cream*. Based on the vowel errors, Jake is considered a within word pattern speller who would benefit from the study of vowel patterns. We will take another look at Jake's word knowledge when we examine his spelling inventory later in this chapter.

Student writing, especially unedited rough drafts, are a goldmine of information about their orthographic knowledge. Many teachers keep a variety of student writing samples to document students' needs and growth over time. The Qualitative Spelling Checklist in Appendix A provides a systematic way to analyse your students' writing samples for specific orthographic features. However, over time as you become familiar with spelling features and stages, you will become more adept at analysing your students' writing samples "on the fly."

THE LIMITATIONS OF WRITING SAMPLES. Relying entirely on writing samples does have some drawbacks. Some students are anxious about the accuracy of their spelling and will only use words they know how to spell. Others will get help from resources in the room, such as word walls, dictionaries and the person sitting nearby, and thus their writing may overestimate what they really know. On the other hand, when students concentrate on getting their ideas on paper, they may not pay attention to spelling and make excessive errors. Some students write freely with little concern about accuracy and need to be reminded to use what they know. Daily observations will help you to determine not only students' orthographic knowledge but also their habits and dispositions.



Assessing student's reading performance

Observe Students' Reading

Important insights into orthographic knowledge can also be made when we observe students' reading. Reading and spelling are related but not mirror images because the processes differ slightly. In reading, words can be recognised with many types of textual supports, so the ability to read words correctly lies a little ahead of students' spelling accuracy (Bear & Templeton, 2000; Templeton & Bear, 2011). For example, within word pattern spellers, who are also transitional readers, read many two-syllable words like *shopping* and *bottle* correctly but may spell those same words as *SHOPING* and *BOTEL*.

Spelling is a conservative measure of what students know about words in general, so if students can spell a word, then we know they can read the word. It seldom works the other way around except in the emergent and early letter name stages, in which students might generate spellings they don't know how to read (Invernizzi & Hayes, 2010; Rayner, Foorman, Perfetti,

Pesetsky & Seidenburg, 2001). When students consult reference materials such as a spell checker or dictionary, the spelling task becomes a reading task; we all know the phenomenon of being able to recognise the correct spelling if we just see it.

RESPONDING TO READING ERRORS. Like spelling errors, reading errors show us what students are using but confusing when they read, and certain errors can be expected of students in different stages. Teachers who understand students' developmental word knowledge will be in a good position to interpret students' reading errors and to make decisions about the appropriate prompt to use in reading with students (Brown, 2003). A student who substitutes *bunny* for *rabbit* in the sentence "The farmer saw a rabbit" is probably a very beginning reader and an early letter name–alphabetic speller. The student uses the picture rather than knowledge about sound–symbol correspondences to generate a logical response. For students in the partial alphabetic phase (Ehri, 2014), drawing attention to the beginning sound can teach them to use their consonant knowledge. The teacher might point to the first letter and say, "Can that word be *bunny*? It starts with an *r*. What would start with *rrrrr*?"

Later in development, assessments of oral reading substitutions show a different level of word knowledge. A transitional reader who substitutes *growled* for *groaned* in the sentence "Jason groaned when he missed the ball" is probably attending to several orthographic features of the word. The student appears to use the initial blend *gr*, the vowel *o* and the *-ed* ending to come up with an approximation that fits the meaning of the sentence. Because this student has vowel knowledge, a teacher might direct the student's attention to the *ou* pattern and ask him to try it again.

SOUND IT OUT? Our response to reading errors and our expectations for correcting such errors depend on a number of factors, one of which is knowing where students are developmentally. For example, it is inappropriate to ask beginning readers in the early letter name–alphabetic stage to sound out the word *flat* or even to look for a familiar part within the word because they simply don't know enough to sound out words or apply analogies. They must use context clues and pictures to identify unknown words on the page (Adams, 1990; Johnston, 2000). In contrast, students in the latter part of the letter name–alphabetic stage could be expected to sound out *flat* because they know other written words that sound and look the same and they know something about blends and short vowels. Students reading at their instructional level read most words correctly and when they encounter unfamiliar words in text, their orthographic knowledge, combined with context, will usually help them figure out the words with adequate comprehension. As noted earlier, there are parallels between oral reading errors and the types of spelling errors students make but there is not a one-to-one match, for with the use of context, students can read more difficult words than they can spell.

Qualitative Spelling Inventories to Assess Orthographic Knowledge

Although observations made during writing and reading offer some insight into students' development, assessments should also include an informal qualitative spelling inventory administered two or three times a year.

The Development of Spelling Inventories

Spelling inventories consist of lists of words specially chosen to represent a variety of spelling or phonics features at increasing levels of difficulty. The lists are not exhaustive in that they do not test all features; rather, they include those that are most helpful in identifying a stage



Ms Kiernan administers a spelling inventory to her class

of development and planning instruction. Students take an inventory as they would a spelling test. The results are then analysed to obtain a general picture of their orthographic development.

The first inventories were developed under the leadership of Edmund Henderson at the University of Virginia (Bear, 1982; Ganske, 1999; Invernizzi, 1992; Invernizzi, Meier & Juel, 2003; Morris, 1999; Viise, 1994). The same developmental progression has been documented through the use of these inventories with learning-disabled students (Invernizzi & Worthy, 1989), students identified as dyslexic (Sawyer, Wade & Kim, 1999) and functionally literate adults (Worthy & Viise, 1996). Spelling inventories have also been developed and researched for other alphabetic languages (Ford & Invernizzi, 2009; Helman, Delbridge, Parker, Arnal, Mödinger, 2016; Gill, 1980; Temple, 1978; Yang, 2005).

We start by focusing on the three inventories shown in Table 2.1: the Primary Spelling Inventory (PSI), the Elementary Spelling Inventory (ESI) and the Upper-Level Spelling Inventory (USI). Each can be found in Appendix A.

Using Inventories

Spelling inventories are quick and easy to administer and score, and they are reliable and valid measures of what students know about words. Many teachers find these spelling inventories to be the most helpful and easily administered literacy assessments in their repertoires. Using these spelling inventories requires the four basic steps summarised here and discussed in detail in the sections that follow.

1. Select a spelling inventory based on year level and students' achievement levels. Administer the inventory much as you would a traditional spelling test but do not let students study the words in advance.
2. Analyse students' spellings using a **feature guide**. This analysis will help you identify what orthographic features students know and what they are ready to study, as well as their approximate stage.
3. Organise groups using a **classroom composite form** and/or the **spelling-by-stage classroom organisation chart**. These will help you plan instruction for developmental groups.
4. Monitor overall progress by using the same inventory two or three times a year. Weekly spelling tests and unit spell checks will also help you assess students' mastery of the orthographic features they study, and are excellent tools to monitor progress.

SELECTING AN INVENTORY. The three spelling inventories described in this chapter can cover the range of students from primary to high school and college. The best guide to selecting one is the year level of the students you teach. However, you may find that you need an easier or more challenging assessment depending on the range of achievement in your classroom.

TABLE 2.1 Words Their Way® Spelling Assessments

Spelling Inventories	Year Levels	Developmental Range
Primary Spelling Inventory (PSI) (p. 398)	K–3	Emergent to late within word pattern
Elementary Spelling Inventory (ESI) (p. 402)	1–6	Letter name to early derivational relations
Upper-Level Spelling Inventory (USI) (p. 405)	5–12	Within word pattern to derivational relations

Table 2.1 is a guide to make your selection. Specific directions are provided in Appendix A, but the administration is similar for all of them.

Some teachers begin with the same list for all students but shift to small-group administration of other lists. For example, a Year 2 teacher may begin with the Primary Spelling Inventory and decide to continue testing a group of students who spelled most of the words correctly using the Elementary Spelling Inventory. A key point to keep in mind is that students must generate about five errors for you to determine a spelling stage.

Primary Spelling Inventory (PSI). The PSI found in Appendix A on page 398 consists of a list of 26 words that begins with simple CVC words (*fan, pet*) and ends with inflectional endings (*clapping, riding*). It is recommended for Kindergarten through early Year 3 because it assesses features found from the emergent stage through the within word pattern stage. The PSI is used widely along with the accompanying feature guide and is a reliable scale of developmental word knowledge. The PSI validity was established using the California Standards Tests (CST) for English Language Arts (ELA) (Sterbinsky, 2007).

For students in Kindergarten or with other emergent readers, you may only need to call out the first five words. In an early Year 1 classroom, call out at least 15 words so that you sample digraphs and blends; use the entire list of 26 words for late Year 1, and Year 2 and Year 3 students. For students who spell more than 20 words correctly, you should use the Elementary Spelling Inventory.

Elementary Spelling Inventory (ESI). The ESI found in Appendix A on page 402 is a list of 25 increasingly difficult words that begins with *bed* and ends with *opposition*. The ESI can be used in Year 1 through Year 6 to identify students up to the derivational relations stage. If a school or school system wants to use the same inventory throughout the primary year levels to track growth over time, this inventory is a good choice, but we especially recommend this inventory for Year 3 through Year 5. By Year 3, most students can try all 25 words but be ready to discontinue testing for students who are visibly frustrated or misspell five in a row. Students who spell more than 18 words correctly should be given the Upper-Level Spelling Inventory.

The words on the ESI present a reliable scale of developmental word knowledge. As with the PSI, the validity of the ESI was established using the California Standard Tests (CST) for English Language Arts (ELA) (Sterbinsky, 2007). In this study with 862 students, the relationships between scores on the ESI teachers' stage analysis and standardised reading and spelling test scores were moderate to strong.

Upper-Level Spelling Inventory (USI). The USI found in Appendix A on page 405 consists of a list of 31 words, arranged in order of difficulty from *switch* to *succession*. It can be used with students in upper primary to university. List words were chosen because they help identify—more specifically than the ESI—what students in the syllables and affixes and derivational relations stages are doing in their spelling.

The USI is highly reliable; for example, scores of 183 Year 5 students on the USI significantly predicted their scores on the Word Analysis subtest of the CST four months later (Sterbinsky, 2007). With normally achieving students, you can administer the entire list, but stop giving the USI to students who have misspelled five of the first eight words—the words that assess spelling in the within word pattern stage. The teacher should use the ESI with these students to identify within word pattern features that need instruction.

PREPARING STUDENTS FOR THE SPELLING INVENTORY. Unlike weekly spelling tests, these inventories are used for screening and are not used for grading purposes. Students should not study the list of words either before or after the inventory is administered. Set aside 20 to 30 minutes to administer an inventory. Ask students to number a paper as they would for a traditional spelling test. For younger students, you may want to prepare papers in advance with one or two numbered columns. (Invariably, a few younger students write across the page from left to right.) Very young students should have an alphabet strip on their desks for reference in case they forget how to form a particular letter.

Create a Relaxed Atmosphere. Students who are in Year 2 and older are usually familiar with spelling tests and can take the inventory as a whole class but sometimes it is easier to create a relaxed environment working in small groups, especially with Kindergarten and Year 1 students. If any students appear upset and frustrated, you may assess them individually at another time or use samples of their writing to determine an instructional level with the Qualitative Spelling Checklist.

Explain the Purpose. Students must understand the reason for taking the inventory so they will do their best. They may be anxious, so be direct in your explanation:

“I am going to ask you to spell some words. You have not studied these words and will not be graded on them. Some of the words may be easy and others may be difficult. Do the best you can. Your work will help me understand how you are learning to read and write, and how I can help you.”

Once these things are explained, most students are able to give the spelling a good effort. You can use the model lesson below to prepare younger students for the assessment or to validate the use of developmental spelling during writing. Lessons like these are designed to show students how to sound out words they are unsure of how to spell.

Copying. Some students will try to copy if they feel especially concerned about doing well in a test. Creating a relaxed atmosphere with the explanation suggested earlier can help overcome some of the stress students feel. Arrange seating to minimise the risk of copying or hand out cover sheets. There will be many opportunities to collect corroborating information, so there is no reason to be upset if primary students copy. If it is clear that a student has copied, make a note to this effect after collecting the papers and administer the inventory individually at another time.

Model Lesson for Spelling the Best You Can

To help young students feel more comfortable attempting to spell words, conduct several lessons using the theme, “How to Spell the Best You Can.” You might do this to prepare them for taking the inventory or to encourage them to write for many other purposes. If you want students to feel free to write about topics important to them, they need to take risks in their spelling. Hesitant writers who wait for the teacher to spell a word for them or avoid using words they can’t spell lose the reward of expressing themselves.

Talk about spelling: Begin a discussion by saying something like, “We are going to do a lot of writing this year. When we want to write a word and we don’t know how to spell it, what can we do?” Students might respond with, “Ask the teacher, ask someone else, use the word wall or use another word.” If no one suggests the strategy of listening for the sounds, bring it up: “You can say the words slowly and listen for the sounds. Do you ever do that? Let’s practise.”

Spell some words together: Say, “Let’s try spelling some words by listening for the sounds. Who has a word they want to spell?” A student might suggest something like *turtle*. The teacher can then respond, “That’s a good one. Let’s say it slowly and stretch out

the sounds. *Turtle* has two syllables: *turrr – till*. What is the sound at the beginning of *turtle*? What letter do we need to spell that /t/ sound? Continue to stretch out the word and listen for more sounds. Depending on the level of the group, you might generate a range of possible spellings: TL, TRTL, TERTL and TERTUL. Write down what the students come up with.

Spell it the best you can: Explain, “This is not the way you would see *turtle* spelled in a book, but it has some of the right letters. In Kindergarten (or Year __) it is okay to spell *the best you can*. Sometimes all you can do is start with the sound at the beginning and write the first letter, but you are getting practice in spelling! At the end of the year, you will be surprised by how much more you can write.” Repeat this exercise several times or when you feel it is needed.

If students criticise each other: Occasionally, a student might be critical about another student’s attempt: “That’s not right.” Handle this firmly and say something like, “The important thing is that you have written down the word you need and spelled it the best you can. You and I can read it. Later you will learn how to spell it correctly, but for now this is a good try.”

ADMINISTER THE INVENTORY. After setting up a relaxed atmosphere, you are ready to administer the inventory:

Call the Words Aloud. Pronounce each word naturally without drawing out the sounds or breaking them into syllables. Say each word twice and use it in a sentence if context will help students know what word is being called. For example, use *cellar* in a sentence to differentiate it from *seller*. Sentences are provided with the word lists in Appendix A. For most words, however, offering sentences is time-consuming and may even be distracting.

Can You Read What Students Have Written? Move around the room as you call the words aloud to observe students' work and behaviours. Look for words you cannot read due to poor handwriting. Without making students feel that something is wrong, it is appropriate to ask them to read the letters in the words that cannot be deciphered. Students using cursive whose writing is difficult to read can be asked to print.

Know When to Stop. As you walk around the room or work with a small group, scan students' papers to look for misspellings and look for signs of frustration to determine whether to continue with the list. With younger students who tire quickly, you might stop after the first five words if they do not spell any correctly. For older students in groups, who can usually take an entire inventory in about 20 minutes, it is better to err on the side of too many words than too few. Rather than being singled out to stop, some students may prefer to "save face" by attempting every word called out to the group even when working at a frustration level.

In Figure 2.2, you can see that Jake missed more than half the words on the inventory but continued to make good attempts at words that were clearly too difficult for him. However, his six errors in the first 15 words identify him as needing work on vowel patterns, and testing could have been discontinued at that point. Sometimes teachers are required to administer the entire list in order to have a complete set of data for each student. In this case, explain before you start that the words will become difficult but to do the best they can.

FIGURE 2.2 Jake's Spelling Inventory

Jake	September 8	9/25
1. bed	14. caryes	<i>carries</i>
2. ship	15. martched	<i>marched</i>
3. when	16. showers	<i>shower</i>
4. lump	17. bottel	<i>bottle</i>
5. float	18. faver	<i>favour</i>
6. train	19. rippin	<i>ripen</i>
7. place	20. selar	<i>cellar</i>
8. drive	21. pleascher	<i>pleasure</i>
9. brite	22. forchunate	<i>fortunate</i>
10. shopping	23. confdant	<i>confident</i>
11. spoyle	24. sivulise	<i>civilise</i>
12. serving	25. opozishun	<i>opposition</i>
13. choood		<i>chewed</i>

Score and Analyse the Spelling Inventories

After you administer the inventory, collect the papers and set aside time to score and analyse the results. Scoring the inventories is more than marking words right or wrong. Instead, each word has a number of features that are counted separately. For example, a student who spells *when* as *WEN* knows the correct short vowel and ending consonant and gets points for knowing those features even though the complete spelling is not correct. The feature guides will help you score each word in this manner. This analysis provides *qualitative* information regarding what students know about specific spelling features and what they are ready to study next.

SCORE STUDENT PAPERS. Begin by marking the words right or wrong. It helps to write the correct spellings beside the misspelled words as was done in the sample of Jake's spelling in Figure 2.2. This step focuses attention on each word and the parts of the words that were right and wrong and makes it easier to share results with parents or other teachers. At this point, you can calculate a raw score or **power score** by adding up the total number spelled correctly (nine words correct on Jake's paper in Figure 2.2). Table 2.2 can be used to get a rough estimate of the student's spelling stage. The table lists the power scores on the three major inventories in relation to estimated stages and their breakdown by early, middle or late stage designations. As we can see, Jake's ESI power score of 9 places him in the late within word pattern stage.

TABLE 2.2 Power Scores and Estimated Stages

Inventory	Letter Name			Within Word Pattern			Syllables and Affixes			Derivational Relations		
	<i>E</i>	<i>M</i>	<i>L</i>	<i>E</i>	<i>M</i>	<i>L</i>	<i>E</i>	<i>M</i>	<i>L</i>	<i>E</i>	<i>M</i>	<i>L</i>
Primary Spelling Inventory	0	1–3	4–6	7–10	11–15	16–19	20–22					
Elementary Spelling Inventory	0	1–2	3–4	5–6	7–8	9–10	11–13	14–16	17–18	19–25		
Upper-Level Spelling Inventory				1–2	3–6	7–8	9–10	11–15	16–18	19–22	23–25	26–31

FEATURE ANALYSIS. Feature guides help teachers analyse student errors and confirm the stage designations suggested by the power score. Every feature in every word is not scored; however, the features sampled are sufficient to identify the stages of spelling. The feature guides that accompany each inventory are included in Appendix A.

Jake's spelling inventory in Figure 2.2 will be used as an example for the feature guide in Figure 2.3.

Complete a Feature Guide. Use the following steps to complete the feature guide.

1. To score by hand, make a copy of the appropriate feature guide for each student and record the date of testing. The spelling features are listed in the second row of the feature guide and follow the developmental sequence observed in research.
2. Look to the right of each word to check off features of the word that are represented correctly. For example, because Jake spelled *bed* correctly, there is a check for the beginning consonant, the final consonant and the short vowel for a total of three feature points. Jake also gets a point for spelling the word correctly, recorded in the far-right column. For the word *bright*, which he spelled as BRITE, he gets a check for the blend *br* but not for the *igh* vowel pattern. Notice on Jake's feature guide in Figure 2.3 how the vowel patterns he substituted have been written in the space beside the vowel feature to show that Jake is using but confusing these patterns. Some teachers like to insert the actual errors a student made for each feature.
3. After scoring each word, add the checks in each column and record the total score for that column at the bottom as a ratio of correct responses to total possible features. (Adjust this ratio and the total possible points if you do not ask a student spell all the words.) Notice how Jake scored six out of six under Digraphs, seven out of seven for Blends and four out of five under Long Vowels.
4. Add the total feature scores across the bottom and the total words spelled correctly. This gives you an overall total score that you can use to rank-order students and to compare individual growth over time.

Common Confusions in Scoring. Questions often arise about how to score reversals and other errors.

Reversals. Letter reversals or **static reversals**, such as writing *b* as *d*, are not unusual for young spellers. Reversals should be noted and there is a space in the boxes of the feature analysis to record them but they are not considered spelling errors. Reversals might be considered handwriting errors instead and should be seen as the letters they were meant to represent. Letter reversals occur with decreasing frequency through the letter name–alphabetic stage.

Confusions can also arise in scoring **kinetic reversals** when the letters are present but out of order. For example, beginning spellers sometimes spell the familiar consonant sounds and

FIGURE 2.3 Feature Guide for the Elementary Spelling Inventory

Words Their Way Elementary Spelling Inventory Feature Guide

Student's Name Jake Fisher Teacher T. Atkinson Year 5 Date September
 Words Spelled Correctly: 9 / 25 Feature Points: 43 / 62 Total: 52 / 87 Spelling Stage: Late Within Word Pattern

SPELLING STAGES →	EMERGENT		LETTER NAME-ALPHABETIC			WITHIN WORD PATTERN			SYLLABLES AND AFFIXES			DERIVATIONAL RELATIONS		
	LATE	EARLY	MIDDLE	MIDDLE	EARLY	EARLY	MIDDLE	MIDDLE	LATE	EARLY	LATE	EARLY	EARLY	
Features →	Consonants Initial	Consonants Final	Short Vowels	Digraphs	Blends	Common Long Vowels	Diphthongs and R-influenced Vowels	Inflected Endings	Syllable Junctures	Unaccented Final Syllables	Advanced Suffixes	Bases or Roots	Feature Points	Words Spelled Correctly
1. bed	b ✓	d ✓	e ✓										3	1
2. ship		p ✓	i ✓	sh ✓									3	1
3. when			e ✓	wh ✓									2	1
4. lump	l ✓		u ✓		mp ✓								3	1
5. float		t ✓			fl ✓	oa ✓							3	1
6. train		n ✓			tr ✓	ai ✓							3	1
7. place					pl ✓	a-e ✓							2	1
8. drive		v ✓			dr ✓	i-e ✓							3	1
9. bright					br ✓	igh i-e							1	
10. shopping			o ✓	sh ✓				pping					2	
11. spoil					sp ✓		oi	oy					1	
12. serving							er	ving ✓					2	1
13. chewed				ch ✓			ew	oo	ed ✓				2	
14. carries							ar	ies	rr				1	
15. marched				ch ✓			ar	ed ✓					3	
16. shower				sh ✓			ow		er ✓				3	
17. bottle									tt ✓				1	
18. favour									v ✓	or			1	
19. ripen									p	en				
20. cellar									ll	ar ✓			1	
21. pleasure										ure	pleas ✓		1	
22. fortunate										ate ✓	fortun		2	
23. confident										ent	confid			
24. civilise										ise	civil			
25. opposition										tion	pos			
Totals			7 / 7	5 / 5	6 / 6	7 / 7	4 / 5	5 / 7	3 / 5	2 / 5	2 / 5	1 / 5	43	9



Completing the feature guide by hand

then tag on a vowel at the end (for example, FNA for *fan*). This can be due to repeating each sound in the word *fan* and extracting the short *a* after having already recorded the FN. Regardless, give credit for the consonants and vowels that are present but do not give a point for correct spelling. However, when students reverse letters in vowel patterns, such as spelling *train* as TRIAN or *bright* as BRIHGT, do not give credit because this suggests they need more work on the pattern.

Other Confusions. There are a few unique errors to consider that can be confusing to score. Very young spellers sometimes spell part of the word and then add a random string of letters to make it look longer (for example, FNWZTY for *fan*). It is also not unusual for students to add silent vowel markers where they are not needed (as in FANE for *fan*) or to include two possibilities (as in LOOKTED for *looked* or TRAINE for *train*) to cover all bases. In these examples, students would not receive credit for the vowels, but we would make note of the strategies they might be using. Such errors offer interesting insights into their developing word knowledge. FANE for *fan* may be incorrect but it represents a more sophisticated attempt than FN.

IDENTIFY FEATURES FOR INSTRUCTION. The completed feature guide can be used to determine what phonics or spelling features students are ready to study. Looking across the feature columns from left to right, *instruction should begin at the point where a student first makes two or more errors on a feature.* Consider the totals along the

bottom of Jake's feature guide. Ask yourself what he knows and what he is using but confusing. His scores indicate that he has mastery of consonants and short vowels, so he does not need instruction there. Jake only missed one of the long vowels (*igh* in *bright*) for a score of 4/5 and this can be considered an acceptable score. However, he missed two of the other vowels, so this is the feature that needs attention during instruction.

The features in the columns are presented in a general scope and sequence from beginning consonants to roots. However, there may be times when you vary the order of feature presentation. For example, some students may need more work on short vowels even when they have mastered blends and digraphs. In the upper spelling stages, we sometimes see students ready to study a number of features at the same time. In this case, the order will not be as important, and this offers more flexibility in grouping.

If you think that an inventory has overplaced a student, go on to the next inventory. Usually, the next inventory will place the student more conservatively. For example, you may have a few Year 3 students who scored in the early derivational relations stage using the ESI but after administering the USI, you find that they are in the syllable and affixes stage. Regardless, we may begin with word study in the syllables and affixes stage at a relatively fast pace to be certain these students understand syllable types including open and closed syllables, principles of accent and syllabication.

DETERMINE A DEVELOPMENTAL STAGE. Knowing the developmental spelling stage of students is essential in planning instruction—where to start word study instruction and for forming instructional groups. Knowing the student's developmental stage is also useful for navigating this book. For example, in Jake's case, refer to Chapter 6 for more information.

The continuum of features at the top of the feature guide shows gradations for each developmental stage of *early*, *middle* and *late*. A student who has learned to spell most of the features relevant to a stage is probably at the end of that stage. Conversely, if a student is beginning to use the key elements of a feature but still has some misspellings from the previous stage, the student is at an early point in that new stage. These gradations make assessing orthographic

knowledge more precise than simply an overall stage designation, and this precision will be useful in designing a word study curriculum.

Using the Feature Guide to Call a Level. A student's developmental level should be circled in the shaded bar across the top of the feature guide that lists the stages. Using Figure 2.3 as an example, look at the bottom row of the feature guide. Jake spelled all the short vowels and most long vowel features correctly but missed more than one in the other vowels category. Looking up from that feature to the shaded bar, we see that Jake falls in the later part of the within word pattern stage. This stage and gradation have been circled in the top row. Considering the first feature that needs instruction (he got five out of seven on other vowels), it seems safe to assign him to the late within word pattern stage and that has been written in the blank beside *Spelling Stage* at the top right of the feature guide.

Confirming the Developmental Levels. There are different ways to determine a developmental stage. While the spelling inventory is probably the most reliable, considering both the feature analysis and raw score, we recommend using multiple sources of information for a final call. For example, you may want to use The Qualitative Spelling Checklist, found in Appendix A, to analyse students' writing and compare the results from the checklist to the stage derived from the feature guide. Tables in each instructional chapter (Chapters 4 to 8) provide additional information about how to determine where students are within each stage. Spell Checks described later will also help to confirm the developmental level.

You do not need to make the discrimination within stages too weighty a decision. As regards planning instruction, taking a step backward to choose word study activities at a slightly easier level than the stage determination may indicate is often best. Introducing students to sorting routines when they are working with familiar features and known words is more effective.

Consider the Synchrony of Literacy Development. Spelling inventory results should be compared to what we know about students' reading and writing. Use Figure 1.12 or Table 2.3 to understand development by reading from top to bottom across the literacy behaviours of reading, spelling and writing. Look for corroborating evidence to place students' achievement along the developmental continuum.

Referring back to Jake's writing in Figure 2.1, we see similar strengths and weaknesses revealed by the inventory. His mastery of short vowels and his experimentation with long vowels and other vowels is what we would expect of a student in the middle to late within word pattern stage of spelling. When Jake reads he may confuse words like *choose* and *chose*. These errors in word identification will be addressed in word study when he examines the other vowels. His spelling inventory, writing sample and reading errors offer supporting evidence that we have identified his developmental stage and the features that need attention.

Some students are out of synchrony in their development, such as the student who is notoriously poor at spelling but is a capable reader. When there is a mismatch between reading and spelling development, you can help improve spelling and obtain synchrony by pinpointing the stage of spelling development and then providing instruction that addresses the student's needs.

Sample Practice

The spelling examples of five students in Figure 2.4 can be used to practise analysing student spellings and determining a developmental stage if you do not have a class of students to assess or if you want to try analysing a broad spectrum of responses. Make a copy of the ESI feature guide for each student. Determine both the developmental stage of the speller and the place you would start instruction. After you are finished, check the results at the bottom of the page. Were you close in the stages you selected? If you scored the spelling in terms of the three gradations within a stage, you may find that although your assessment may differ by a stage name, it is possible that the difference is just between the latter part of one stage and the early part of the next. Also compute a power score for each student (number correct) and use Table 2.2 on page 54 to estimate the stage. Were your results similar?

TABLE 2.3 Concordance of Year Levels, Reading and Spelling

Year Level	Spelling Stage	Reading Phase	Reading Stage	Book Levels		
				Lexiles	Letters	Numbers
PreK-K	Emergent	Pre-alphabetic	Emergent	N/A	A, B	1,2
K to Year 1	Early letter name	Partial alphabetic	Early beginning	N/A	C	3,4
Early Year 1	Middle letter name	Partial alphabetic	Middle beginning	N/A	D, E	4-8
Mid Year 1	Late letter name to early within word pattern	Full alphabetic	Late beginning	200-400	F, G	10-12
Late Year 1 to Early Year 2	Early within word pattern	Full alphabetic	Early transitional	200-400	H, I	14-16
Year 2	Middle within word pattern	Consolidated alphabetic	Middle transitional	400-600	J, K	18-20
Late Year 2	Late within word pattern	Consolidated alphabetic	Late transitional	400-600	L, M	24-28
Late Year 2 to Early Year 3	Early syllables and affixes	Consolidated alphabetic	Early intermediate	500-820	N-P	30-36
Year 4	Middle syllables and affixes	Automatic	Middle intermediate	600-900	Q-S	40
Year 5	Late syllables and affixes to early derivational relations	Automatic	Intermediate to advanced	740-1010	T-V	50
Year 6	Early derivational relations	Automatic	Intermediate to advanced	800-1015	W-Y	60
Year 7	Early to middle derivational relations	Automatic	Early to middle advanced	925-1185	W-Z	70
Year 8	Middle to late derivational relations	Automatic	Middle advanced to advanced	1000+	Z+	80

The year levels are general ranges and averages; the actual match will vary. The single year-level destinations are mid-year approximations. The book levels represent the most current systems used to level texts. The Lexile levels (Lexile Framework for Reading, 2013) reflect broad ranges using the "stretch" ranges presented in the Common Core State Standards in USA, though other forms of text complexity should be considered. The letters and numbers approximate the levelling systems used for beginning reading materials.

TEACHING TIPS

When Synchrony Is Not Observed

There are two common scenarios we have observed when there is a lack of synchrony between reading and spelling.

- Some students have very strong verbal skills and are quite bright, and when they read, they are able to use context better than most to comprehend what they read. However, when we listen to their oral reading, we see that they make many reading errors and their reading rate is significantly slower than you would expect. Such students will benefit from word study that requires them to analyse words at their developmental level as determined by a spelling inventory.
- English learners may have memorised how to spell many words, making their spelling development appear more advanced than their reading fluency and their comprehension. Such students will benefit from continued practice in reading and learning word meanings in English.

Figure 2.4 Examples of Students' Spelling in September

Spelling Words	Greg (Year 1)	Jean (Year 1)	Reba (Year 2)	Alan (Year 3)	Mitch (Year 5)
bed	BD	BED	bed	bed	bed
ship	SP	SEP	ship	ship	ship
when	YN	WHAN	when	when	when
lump	LP	LOP	lump	lump	lump
float	FOT	FLOT	flote	flote	float
train		TRAN	trane	train	train
place		PLAC	plais	place	place
drive		DRIV	drive	drive	drive
bright		BRIT	brite	brigt	bright
shopping		SOPNG	shopen	shoping	shopping
spoil			spoal	spoale	spoil
serving			serving	serveing	serving
chewed			chud	choued	chewed
carries			cares	carres	carries
marched			marcd	marched	marched
shower				shouer	shower
bottle				bottel	bottle
favour				favir	favour
ripen				ripen	ripen
cellar				seller	celler
pleasure					pleshur
fortunate					forchenet
confident					confedent
civilise					civilise
opposition					oposition

RESULTS:

Greg Early letter name–alphabetic; review consonants, study short vowel word families, digraphs and blends.

Jean Middle letter name–alphabetic; study short vowels.

Reba Middle within word pattern; study long vowel patterns.

Alan Late within word pattern; study long vowels and other vowel patterns.

Mitch Middle syllables and affixes; study syllable juncture and unaccented final syllables.

Since Mitch spelled so many words on the ESI correctly, consider administering the USI.

Group Students for Instruction

Your spelling analysis as discussed in the previous section will pinpoint students' instructional levels and the phonics and spelling features that are ripe for instruction. In most classrooms, there will be a range in students' word knowledge. For example, in a Year 2 class, most students will be in the within word pattern stage but there will also be students in the letter name–alphabetic stage who need to study short vowels and consonant blends, while others may be in the syllables and affixes stage and ready to study two-syllable words. After analysing students individually, you can create a classroom profile by recording the individual assessment data on a single chart.

Experience shows that when students study a particular orthographic feature, it is best if they work with others who are ready to study the same feature. For example, studying long-vowel patterns is difficult when some of the students in the group still need work on digraphs or blends and may not even be able to read the words that contain the long-vowel patterns. When students are taught at their developmental levels in spelling (even when instruction is below year level), they will make more progress than with materials that are too difficult for them (Morris, Blanton, Blanton, Nowacek & Perney, 1995). Chapter 9 offers suggestions about how to manage multiple instructional groups.

We present two ways to record and analyse information about the class: a classroom composite chart for each of the inventories to group students by features, and the spelling-by-stage classroom organisation chart to group students by developmental levels. These charts show you the instructional groups at a glance.

Classroom Composite Chart

After administering an inventory and completing a feature guide for each student, transfer the individual scores to the Classroom Composite Chart to get a sense of the group as a whole. See an example in Figure 2.5. These charts can be found with the corresponding inventory in Appendix A. The following steps will help you do this.

1. Begin by stapling each student's spelling test and feature guide together.
2. Order student papers by the power score (or number of words correct) or by the total feature score, and record students' names from top to bottom on the composite form on the basis of this rank order. Next, record scores from the bottom row of each student's Feature Guide in the row beside his or her name on the Classroom Composite Chart.
3. Highlight cells in which students are making two or more errors on a particular feature and column to spotlight areas of need. For example, a student who spells all but one of the short vowels correctly has an adequate understanding of short vowels and is considered to be at an independent level. However, students who misspell two or three of the short vowels need more work on that feature. Do not highlight cells in which students score a zero because this indicates frustration rather than using but confusing a feature. Look to the left of any zero scores to identify features that need attention first.
4. Look for instructional groups. If you rank-order your students when completing the composite chart, you can find clusters of highlighted cells that can be used to assign students to developmental stages and word study groups. The Year 5 class composite in Figure 2.5 shows that many students fall under the syllables and affixes stage of development because this is where they are making two or more spelling errors (students 3 through 12). Sarah (number 16) could also join this group. John, Maria R. and Patty (students 13–15), who missed more than two words in vowel patterns, should go with other students who all need work on common long vowels and fall under the middle within word pattern stage (students 17 through 25). Mike (student 26) needs individualised help, beginning with short vowels as well as digraphs and blends. At the upper end of the class composite are two students who fall into the derivational relations stage. However, we suggest that any students who score more than 18 or better on the ESI be reassessed with the USI to gather more information about particular features to study.

Spelling-by-Stage Classroom Organisation Chart

When you know students' developmental stages, you can also form groups with the Spelling-by-Stage Classroom Organisation Chart found in Appendix A on page 401. Some teachers find this easier to use than a class composite when planning groups. Students' names are recorded underneath a spelling stage on the chart, differentiating among those who are early, middle or late. After the names are entered, begin to look for groups and circle them.

Figure 2.6 shows examples of ways to form groups at three different year levels. You can see where teachers have used arrows to reconsider the placement of a few students. Inventory results are considered along with other observations of students' reading or writing. The arrows indicate students who might be placed slightly higher or lower as the groups take shape. Some of the group placement decisions might be based on social and psychological factors related to self-esteem, leadership and behaviour dynamics.

The first profile is of a Year 1 class with many emergent spellers. Although the teacher might have formed three groups, the four circled groups are also the teacher's reading groups. The Year 3 class has a large group of late within word pattern spellers and the arrows show how the teacher has tried to move some of the students into other groups for balance. The teacher in the Year 6 classroom could consider running two groups at the upper levels or combining them as one group. The three students in the letter name–alphabetic stage will need special attention because they are significantly behind for Year 6 students. Ideally, these students will have additional instruction with a literacy specialist or in a tutoring programme with activities that are appropriate for the letter name–alphabetic spelling stage.

Factors to Consider When Organising Groups

The Classroom Composite Chart and the Spelling-by-Stage Classroom Organisation Chart help to determine word study groups for instruction. Teachers often have questions about grouping.

HOW DO I MANAGE GROUPS? Ideally, you want no more than three groups to keep things manageable. If this sounds difficult, be assured that students working on different features and with different words can still work side by side during most follow-up word study routines that occur across the week. Only the initial teacher-led discussion requires a separate time. Different schemes for managing class, group and individual word study are discussed in Chapter 9. If three groups is overwhelming, start with two. A traditional spelling programme has no grouping at all, so even two groups will get students closer to their instructional level. Sometimes a fourth or even fifth word study group can be formed when there are specialists like ESL teachers who work with small groups.

HOW DO I FIT A DIVERSE CLASS INTO THREE GROUPS? If a wide range of achievement exists, some students may not be placed exactly at their developmental stages. Although you will certainly try to accommodate them, your best spellers are not likely to be negatively affected with year-level word study activities that might be a bit easy for them. However, your less able spellers such as Victoria, Juan and Mike in the Year 6 example will undoubtedly fall further behind if they do not get the instruction they need, so group your least able students as close as possible to their instructional level. In all cases student progress should be monitored, as described shortly, to adjust placement as needed.

WHAT ABOUT THE OUTLIERS? In many classrooms, there are students at each end of the developmental continuum who, in terms of word study and orthographic development, are outliers. For example, Zac, in the Year 3 class in Figure 2.6, is the only student in the middle syllables and affixes stage and placing him in a group by himself is impractical. He has been placed in the closest group for instruction or, because he is already above year level and making progress independently, he might be exempted from word study. Less advanced students, such as Jon in the second group of Year 6 students in Figure 2.6, may work with partners who can help them read and sort the group's words, such as one-syllable words with long-vowel patterns. English language learners also benefit from sorting with partners who can clarify word pronunciations and meanings.

FIGURE 2.6 Examples of Spelling-by-Stage Classroom Organisation Charts

Year 1 Spelling-by-Stage Classroom Organisation Chart

SPELLING STAGES →	Emergent			Letter Name–Alphabetic			Within Word Pattern			Syllables and Affixes			Derivational Relations	
	Early	Middle	Late	Early	Middle	Late	Early	Middle	Late	Early	Middle	Late	Early	Middle
	Gerald	Buck	Tammy	Milo	Brendi									
	Doug	Felicia 7	Kisty	Jennifer	Matthew									
	Danielle	Brad	Brandon	Jemilyn	5									
	5 Jon	Shaun	J.J.	Luis										
	Jennifer													
	Jona													
	Adam 6													
	Caritha													
	Reycke													

Year 3 Spelling-by-Stage Classroom Organisation Chart

SPELLING STAGES →	Emergent			Letter Name–Alphabetic			Within Word Pattern			Syllables and Affixes			Derivational Relations	
	Early	Middle	Late	Early	Middle	Late	Early	Middle	Late	Early	Middle	Late	Early	Middle
				Josh B.	Dominique	Elizabeth	Jan	Cruiq	Daniel	7				
				Dustin	Emily	Brennen	8	Melanie →	Melissa	Sare				
								Josh	Paula →					
								← Erik	Josh C.					
								Joshua 8	Sarah					
								← Cliff	Carmille					

Year 6 Spelling-by-Stage Classroom Organisation Chart

SPELLING STAGES →	Emergent			Letter Name–Alphabetic			Within Word Pattern			Syllables and Affixes			Derivational Relations	
	Early	Middle	Late	Early	Middle	Late	Early	Middle	Late	Early	Middle	Late	Early	Middle
				Victoria	Juan 3	Mike		Jon	Elizabeth →	Nicole	Phong	Sean	Steve	Desiree
								← Arccilia	Ray	Scott	Christi	Mario	Sheri	Eric
								9	Don	Jonna 6	Heather	11		
								← Rashid	Esther					

IT TAKES PRACTICE. Interpreting feature guides, determining stages and then creating and monitoring groups involves ongoing assessment, observations and teacher judgement. It cannot be reduced to a simple formula. Be assured that over time, you will gain expertise and satisfaction in being able to accurately identify and meet the instructional needs of your students.

TEACHING TIPS

Using the Inventory Across the Year

- Benny's spelling inventory results in Figure 2.7 show inventory results across Year 1 recorded on the same form.
- We recommend using the same spelling inventory each time so that you can compare progress on the same words. In Benny's inventory results, we can easily track the qualitative changes in his spelling over time.
- Don't be too surprised if students sometimes spell a word correctly one time and later spell the same word incorrectly. Because students are sometimes inventing a spelling for a word that they do not have stored in memory, they may invent it correctly one time and not the next. Or they might master short vowel sound matches but later use but confuse silent vowel markers as Benny did in his spelling of *fan* as FANE.
- Remember that you should never have students directly study the words in the inventory, although the words may naturally show up in word study activities that you plan. If students study the list in advance, assessment results will be inflated and you will lose valuable diagnostic information.
- Using the same inventory more than two or three times a year may familiarise students with the words enough to inflate the results. In between administrations of the spelling inventories, use the spell checks described next to monitor progress within and across stages. Teachers in upper primary school and secondary school may find that using an inventory only at the beginning and end of the year is sufficient.

Spelling Inventories for Formative and Summative Assessment

Students may be given the same spelling inventory up to three times during the year to assess what they have learned and to determine whether changes need to be made in groups or instructional focus. Figure 2.7 shows Benny's growth during the year, moving from early letter name–alphabetic spelling to the within word pattern stage. However, don't expect such dramatic progress in one year beyond the primary year levels. Some students will take two years to master the within word pattern stage.

FIGURE 2.7 Samples of Benny's Spelling Errors at Three Times in Year 1

	February	June	November
1. fan	FNA	fan	fane
2. pet	PT	pat	pet
3. dig	DKG	deg	dig
4. hope	HOP	hop	hope
5. wait	YAT	wat	wayt
6. sled	SD	sed	sled
7. stick	SK	stek	stike
8. shine	HIN	shin	shine

Benchmarks and Year-Level Expectations

Although it is true that all students do not develop at the same rate despite the very best instruction, it helps to articulate end-of-year-level expectations in terms of developmental word knowledge so that you can identify students who are at risk of falling behind. Matching specific spelling stages to year levels is impossible, but Table 2.4 captures the typical *range of development* within year levels and where students should be (at the very least) at the end of the year if they are

to succeed in subsequent year levels and meet standards in reading and writing. Based on the model of synchrony development in Chapter 1 and illustrated in Figure 1.12, Table 2.3 shows a concordance between developmental stages and instructional materials. For example, this table says that by mid-year, most Year 3 students are in the early syllables and affixes stage and are early intermediate readers, reading in the 500–820 Lexile range.

TABLE 2.4 Spelling Stage Expectations by Year Levels

Year Level	Typical Spelling Stage Ranges within Year Levels	End-of-Year Expectation
Pre-K	Early Emergent –Early letter name–alphabetic	Middle emergent
K	Emergent–Letter name–alphabetic	Middle letter name–alphabetic
1	Late emergent–Within word pattern	Early within word pattern
2	Late letter name–Early syllables & affixes	Late within word pattern
3	Within word pattern–Syllables & affixes	Early syllables & affixes
4	Within word pattern–Syllables & affixes	Middle syllables & affixes
5	Syllables & affixes–Derivational relations	Late syllables & affixes
6 +	Syllables & affixes–Derivational relations	Derivational relations

Additional Assessments

Other assessments and forms are useful as supplements or alternatives to the inventories. For example, the Emergent Class Record and the Kindergarten Spelling Inventory are appropriate for young students. Spell checks and goal-setting forms can help teachers fine tune placement and closely monitor progress. These additional assessments described next and listed in Table 2.5 can be found in Appendix A and B.

TABLE 2.5 Additional Spelling Assessments

	Year Level Range	Developmental Range
Qualitative Spelling Checklist	K–8	All stages
Emergent Class Record	Pre K–K	Emergent to letter name–alphabetic
Kindergarten Spelling Inventory (KSI)	Pre K–K	Emergent to early letter name–alphabetic
McGuffey Qualitative Inventory of Word Knowledge (QIWK)	1–8	All stages
WTW Spell Checks	K–12	Early letter name–alphabetic to early derivational relations
WTW Goal-Setting/Progress-Monitoring Charts	K–12	Early letter name–alphabetic to early derivational relations

Qualitative Spelling Checklist

When you look at students' writing in their journals or in the first drafts of their reports and stories, you can use the Qualitative Spelling Checklist (page 395 in Appendix A) to verify what types of orthographic features students have mastered, what types of features they are using but confusing and the degree to which they are applying their spelling knowledge in actual writing. Through a series of 20 questions, you check off the student's progress through the stages. Consider what features are used consistently, often, or not at all in their unedited writing. The checklist is set up to be used at three different points during the school year and can serve as a record of progress over time. Collecting a variety of writing samples across the curricular areas is a great way to verify students' application and transfer of their word study instruction.

Emergent Class Record

The Emergent Class Record is used to assess daily writing or spelling inventory results of pre-K students, Kindergarten students or other emergent spellers. Making a copy of the PSI feature guide for each student may seem like a waste of paper when at most they will only score a few initial and final consonants. The Emergent Class Record found in Appendix A on page 427 can be used as an alternative with the entire class represented on one form. It captures the pre-phonetic writing progression (from random marks to letters) that is missing from the other feature guides and covers the range from emergent through letter name–alphabetic spelling that is expected in many Kindergarten classes at the beginning of the year. Other emergent assessments are described in Chapter 4 and are available in Appendix A starting on page 410.

Kindergarten Spelling Inventory

The Kindergarten Spelling Inventory (KSI) has been used widely with thousands of students as part of Virginia's Phonological Assessment and Literacy Screening (PALS) (Invernizzi, Juel, Swank & Meier, 2006). Students are asked to spell only five three-letter words that have been carefully chosen after extensive research. A feature guide is provided, but unlike the feature guides described so far, students get credit for identifying phonemes and representing those sounds with phonetically logical letters, even if those letters are actually incorrect. For example, *jet* spelled GD will earn two points because G has a letter name that starts with /j/ and D and T are voiced/ unvoiced pairs whose sounds are produced in exactly the same place in the mouth. As a result, the KSI is a reliable measure of phonemic awareness development, letter–sound correspondences and their gradual development of conventional spelling (Invernizzi, Justice, Landrum & Booker, 2005). KSI scores in Kindergarten predict student's end-of-year reading standards scores as much as three years later (Invernizzi, Juel, Swank & Meier, 2008).

McGuffey Spelling Inventory

The McGuffey Qualitative Inventory of Word Knowledge (QIWK) (Schlagal, 1992) is useful for conducting individual testing and for obtaining year-level information; see page 409 in Appendix A. The inventory spans Year 1 through Year 8, with 20 to 30 words in each level. After administering the year-level list, use the list from the previous year level with students who fall below 50 percent and use the list from the next higher year level for students who score above 90 percent to determine an instructional spelling level (Morris, Blanton, Blanton & Perney, 1995; Morris et al., 1986).

The QIWK is especially useful when you want to report spelling achievement in terms of year levels. In addition, the words in these lists present plenty of opportunities to observe a student's spelling across a variety of features. For example, for teachers wanting to obtain a fuller assessment of prefixes, suffixes and roots, Levels 5 and 6 offer a larger number of derivational words with prefixes and suffixes to analyse. However, a feature guide has not been developed for the McGuffey Inventory so you must analyse errors yourself to determine which features and patterns students know and which they are using but confusing.

Monitor Student Growth over Time

Monitoring students' progress in response to instruction with brief, ongoing assessments alerts us to the need to adjust the content and pacing of instruction to meet student needs, and arranging additional instruction for students who may need extra help meeting long-term goals. Teachers have been monitoring their students' progress for years through weekly spelling tests that provide immediate feedback regarding students' short-term retention of specific words they have studied. But few teachers consider long-term retention, the generalisation of the spelling patterns students have learned relative to words they may not have studied or the application of students' orthographic word knowledge in their writing. We offer several ways you can monitor progress in orthographic development in the short and long terms.



Students can begin to take traditional weekly spelling tests once they are studying short vowels

WEEKLY SPELLING TESTS AND REVIEW TESTS. We recommend weekly tests at most year levels as a way to monitor mastery of the studied features and to send a message to students and parents alike that students are accountable for learning to spell the words they have sorted and worked within various activities all week. Students should be successful on these weekly tests when they are appropriately placed for instruction. If they are misspelling more than a few words, it may mean that you need to adjust your instruction. They may either need to spend more time on a feature with follow-up activities, or they are not ready to study the feature and should work on easier patterns first. You may also want to periodically give a review posttest. Do not ask students to study for these tests in advance as that would not be a true test of retention. Simply select a sample of words from previous lessons and call them aloud as you would for any spelling test. Below, we describe prepared spell checks designed to assess particular spelling features. These can be found in Appendix B.

SPELL CHECKS. Spell checks are mini-inventories that can be used over shorter periods of time than spelling inventories to assess students' mastery of specific features and words over and beyond what they may have demonstrated in weekly spelling tests. Like inventories, spell checks are organised by sequential groups of phonics features and spelling patterns, but each spell check includes more words for each feature. Because spell checks are more thorough, they can also be used to confirm the stage designation and placement determined by the spelling inventories. If students misspell only one or two words in a feature category on the inventory, you may want to do some further assessment using the spell checks. In Jake's case (see his feature guide in Figure 2.3), we might want to gather some more information about his knowledge of long-vowel patterns because he misspelled *bright*. If Jake were to spell 90% of the words correctly on the spell check for common long vowel patterns, you would have additional assurance that he is in the latter part of the within word pattern stage and needs no further work on common long vowels. These spell checks can be found in Appendix B and in the *Words Their Way* companion volumes where they are described as unit tests. Spell checks serve a variety of purposes.

Pretests to Determine Need for Instruction. A score of 30% to 70% on a spell check would suggest that a student is using but confusing a feature, making it an area ripe for instruction



FIGURE 2.8 Omar's Spell Checks for Preconsonantal Nasals

Oct 10	Nov 7	Nov 29
1. rug rung	1. bring	1. rung
2. lamp	2. camp	2. lamp
3. prin print	3. hunt	3. print
4. theng think	4. blend	4. thingk think
5. limp	5. wink	5. limp
6. stup stump	6. tent	6. stup stump
7. send	7. thank	7. send
8. plat plant	8. dup dump	8. plant
9. lag long	9. sang	9. long
10. jok junk	10. hand	10. junk
3/10 30%	9/10 90%	8/10 80%

(we recommend taking a step back to an easier feature when possible if a student scores less than 50%) In Figure 2.3, Jake's inventory results showed that he spelled the *r*-influenced vowels in the words *serv*ing, *carries* and *mar*ched correctly but missed several of the other vowel patterns. A spell check of more *r*-controlled vowels might reveal that he (1) needs thorough instruction if he scored less than 75%, (2) could use a quick review if he scored between 75% and 85% or (3) could skip the study of *r*-controlled vowels entirely if he scored at 90% or better. Pretesting students on particular features is helpful when you are concerned about pacing as it can identify features that students do not need to study in depth.

Posttests to Monitor Progress. Comparing the results on a posttest to a pretest is an excellent way to demonstrate progress. Figure 2.8 shows Omar's spell checks for short vowels and

preconsonantal nasal sounds (the *m*'s and *n*'s that come before consonants at the end of words). The first is a pretest on which he scored 30 percent. The second, using a different form on which he scored 90 percent, was given after he had spent several weeks working on that feature in his word sorts. Several weeks later, his teacher assessed his retention of this feature by administering another form of the same spell check. Although Omar misspelled two words in the delayed posttest, eight out of ten words spelled correctly is still a good indication of mastery.

Target Re-teaching. Sometime a posttest will reveal that a student has not retained knowledge about spelling a particular feature and re-teaching is needed. Rather than repeating all the lessons however, a careful analysis might reveal that only a review is needed or only a particular sound or pattern is problematic. Omar's teacher recorded his scores on the progress-monitoring chart for late letter name-alphabetic spellers in (Figure 2.9). If Omar had scored less than 90% on the posttest, some targeted review would be needed. In his case, it appears that the *ump* pattern is a problem (he missed that pattern twice), so that pattern could be targeted by comparing words like *jump* and *stump* to words like *cup* and *pup* in which there is no preconsonantal nasal.

Assess Generalisations and Meanings. In some cases, a posttest that uses words students have not studied is recommended. This is particularly important when a unit of study has focused on a broad generalisation (or rules) such as how to add inflected endings (*-ed*, *-ing*, *-s*, *-es*). In other cases (that is, homophones, prefixes or root words), it is just as important to assess meaning as spelling. Specialised pre- and posttests can be found in the *Words Their Way* companion volumes for certain features, and students in the derivational relations stage are often asked to define words as well as spell them.

FIGURE 2.9 Omar's Goal-Setting/Progress-Monitoring Chart

10. Spell short vowels with preconsonantal nasals	ing ✓ ang ✓ ong ✗ ung ✗ amp ✓✓ ump ✗✗ imp ✓ ant ✗ int ✗ ent ✓ unt ✓ and ✓ end ✓✓ ank ✓ ink ✗ unk ✗
Spell Check 10	Pretest: 30% Date: 10/10 Posttest: 90% Date: 11/7

Expectations and Goal-Setting

Setting high expectations for students, setting realistic goals for making progress over time and involving students in the process of setting goals are important. Generally speaking, long-term goals reflect your basic expectations for what stage your students must be in to succeed in the next year level. (See Spelling Stage Expectations by Year Level in Table 2.4) In contrast, short-term goals indicate the features necessary to study and learn to reach the basic long-term stage goal (Flanigan et al., 2011). Goal-setting forms make explicit what must be learned to reach the ultimate long-term goal and can be used to track student progress and to guide your conferences with specialists, parents and students. Goal-setting forms have been created for each of the developmental stages and can be found in Appendix B or in the *Words Their Way* companion volumes.

USING THE FORMS TO RECORD PROGRESS. The goals are stated for each feature or unit of study and a check box to the right corresponds to the spell checks with spaces for pre- and posttest results. Figure 2.9 is a sample that shows how Omar's teacher has checked off each feature he used correctly and put an X beside those he is missing. Different colours of ink can indicate different testing dates.

INVOLVE STUDENTS IN GOAL-SETTING. It can be motivating for students to set goals and monitor their own progress. We recommend that you meet with students individually and share the results of the inventory or spell checks to set goals. The charts help student define a set of goals that are within reach – within their zone of proximal development. This is especially helpful for students who are struggling in the area of spelling and may feel overwhelmed with all they need to learn.

Assessing the Spelling Development of English Learners

By assessing their orthographic knowledge using the assessments described in this chapter, teachers can determine whether English learners are applying the rules of phonology and orthography from the written form of their primary language to English or vice-versa (Helman, 2004, 2010). Bilingual learners can often use knowledge of their primary language to spell words in a second language (Babayigit, 2014; Helman, 2004; Pasquarella, Chen, Gottardo, Geva, 2014).

Additional assessments in their primary or first language provide a more complete understanding of the word knowledge of English learners. A spelling inventory in students' spoken language can indicate their literacy levels in the primary language and, more specifically, show which orthographic features they already understand. *Words Their Way with English Learners* discusses spelling development, assessment and instruction for English learners in depth (Helman, Bear, Templeton, Invernizzi & Johnston, 2012) and also provides inventories in several languages.

for English learners

The Influences of Students' Primary Languages

As you listen to the speech and oral reading of English language learners, notice the influences of their first languages on pronunciation and look for spelling errors that may be explained by a primary language or dialect. For example, one teacher learned about the influence of different East Indian dialects when she noticed confusions of /p/ for *f* and /sh/ for *s*. Another teacher noted her Korean students consistently confusing *r* for *l* and vice versa. In spoken Korean, /r/ and /l/ are not different sounds and are represented with the same letter in Hangul, the Korean writing system (Yang, 2005).

FIGURE 2.10
Rosa's Spelling

1. bed	bed
2. ship	shep
3. when	wan
4. lump	lamp
5. float	flowt
6. train	trayn
7. place	pleays
8. drive	kids
9. bright	brayt
10. shopping	shapen
11. spoil	spoyo
12. serving	sorven
13. chewed	shod
14. carries	cares
15. marched	marsh
16. shower	showar
17. cattle	cadoto
18. favour	fayvr
19. ripen	raypn
20. cellar	sallar

PREDICTABLE CONFUSIONS. English consonant sounds are often problematic for Spanish speakers, who make a variety of substitutions that can be traced to the influence of Spanish on their spelling (Bear et al. 2003). Examples include spelling *that* as DAT and *ship* as CHAP because the digraphs /th/ and /sh/ do not exist in Spanish. *Hot* may be spelled JAT because the silent *h* in Spanish can be spelled with a *j*. Short *a*, *e*, *i* and *u* do not occur in Spanish, and the sound we call short *o* is spelled with the letter *a*. We can expect many confusions about how to represent these short vowel sounds such as using *a* for the short *o* in *hot*. Look in each of the instructional chapters for specific guidance on the interrelatedness of students' home languages and English.

INVENTORY EXAMPLE. Because students are expected to learn the orthography of English, administering one of the inventories from Table 2.1 to see what they know and are ready to learn is useful. The spelling sample of a Year 2 student in Figure 2.10 shows how a student's spoken Spanish can affect her English spelling. Several of Rosa's attempts follow the logical substitutions that are seen from English-speaking students in the letter name–alphabetic stage; that is, SHEP for *ship* and WAN for *when*. Other errors make good sense in relation to Spanish letter–sound correspondences. For example, given the pronunciation of *a* as /ah/ in Spanish, her spelling of SHAPEN for *shopping* is understandable. She replaces the *ch* in *chewed* with *sh* (SHOD). Rosa is also trying to find a spelling for the long *i*, shown by her use of AY in two of her spellings (bright as BRAYT and ripen as RAYPN). The long *i*—when elongated—really sounds like two vowels (“eye-ee”—a diphthong). Rosa is using the *y*, pronounced as a long *e* in Spanish, to spell the second half of the vowel combination.

Conclusion

Looking at a student's spelling gives us a window into that student's word knowledge, the information he or she uses to read and write words. The word *assessment* comes from the Latin word *assidere*—“to sit beside.” Spend some time sitting beside your students and looking through the window that their spellings provide, and use inventories to assess what they know about how words work.

A summary of the developmental sequence can be found inside the front cover of this book, and each of the instructional chapters for this book offers detailed information about the stage, the features to study and activities to enhance instruction. Remember that the inventories only sample the most common features. At each stage, there is a considerable body of knowledge that students should master before they move on to the next stage.

Keep your fingers on the pulse of development by monitoring progress over time using the spell checks and the goal-setting/progress-monitoring tools discussed in this chapter. The assessments in this chapter are a start because they let us know what each student is ready to learn, knowledge that is crucial to organising word study instruction—the topic of Chapter 3.