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SPELLING INSTRUCTION FOR BEGINNING WRITERS
IN WHOLE LANGUAGE CLASSROOMS

A Project
Presented to the
Faculty of
California State University,
San Bernardino


In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Education: Reading

by
Gabriele Lenz
March 1996

SPELLING INSTRUCTION FOR BEGINNING WRITERS
IN WHOLE LANGUAGE CLASSROOMS

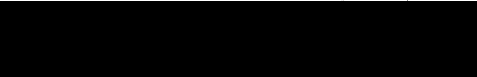
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Gabriele Lenz
March 1996
Approved by:


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2-14-96

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ABSTRACT

Teachers of beginning writers, who believe in a whole language philosophy for teaching language arts, are faced with the challenge of integrating spelling instruction into their writing programs. Traditional approaches that involve word lists and weekly spelling tests are not in accordance with whole language beliefs. In a whole language view spelling is a complex developmental process that needs to be addressed in the context of meaningful writing. Many teachers use a writing workshop approach to provide students with opportunities to write on meaningful topics, but they are unsure of how to include spelling instruction.

This project presents the issues that confront teachers before they can integrate spelling instruction with the writing workshop approach. These issues are: 1) How is spelling a developmental process? 2) How can writing workshop be organized to include spelling instruction? 3) How is spelling development facilitated? 4) How is spelling progress assessed and evaluated? and 5) How are parents informed about spelling?

A spelling resource provides answers to the above questions. It contains information and suggestions that enable teachers to decide how to include spelling instruction as part of their writing program and thereby help their students develop as spellers. The resource includes reproducible pages that assist teachers in the area of assessment and parent communication.

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STATEMENT OF THE PROBLEM

Whole language teachers believe in a philosophy of teaching reading and writing that emphasizes meaning. They "begin with real reading and writing experiences that focus on meaning because they want their students to quickly learn that reading and writing are for communication" (Powell & Hornsby, 1993, p.9). Written communication particularly is most effective when the writer uses conventional means of conveying the intended meaning.

One of these conventions is spelling, and whole language teachers know that conventional spelling is important. On a societal level, spelling ability is sometimes taken as an indication of one's level of literacy, writing ability, and even intelligence (Tarasoff, 1990). Sitton (1990) states that "spelling errors convey a subtle message of limited intelligence or a lack of conscientious effort on the part of the writer" (p. 13). On a meaning level, standard spelling is important

because it increases the predictability of the written message, thus aiding reading fluency. The need to pay attention to every letter when reading is unnecessary if the words are spelled predictably (in standard form). The reader is then able to focus on meaning rather than on decoding (Tarasoff, 1990, p. 12).

Spelling has traditionally been taught as an isolated skill. In traditional spelling instruction all students are often presented with the same list of words which they are responsible for memorizing for the weekly test. Graves (1983) states that even though students may receive high scores on weekly spelling tests, the ultimate test is what

they do with spelling within the process of writing for meaning. And writing for context is the area where traditional methods are failing. Current research in spelling does not support the heavy emphasis on drill and weekly spelling tests. Success on these tests does not transfer to other real writing activities, where spelling really counts (Douglass, 1989; Routman, 1988, 1994; Sitton, 1990; Tarasoff, 1990).

Whole language teachers realize that students need to learn conventional spelling, and they fear that by following traditional spelling approaches that overemphasize spelling as an isolated skill, they are going against the grain of whole language (Gentry & Gillet, 1993). A whole language view of spelling is much broader and focuses on various components, such as taking risks with spellings, teaching and applying spelling strategies, and recognizing and correcting misspellings when students are in the process of editing or proofreading their written work (Routman, 1994). Norris (1989) believes that spelling instruction in whole language

focuses on the function of writing to communicate meaningful ideas to real readers. The child's developmental experience with spelling is considered to be of primary importance, and children are encouraged to experiment with spelling in accord with their own development (p. 98).

Wilde (1992) also addresses the developmental aspect of learning to spell, along with the complexity of the process. Both of these are concepts that are consistent with a whole language philosophy. She states that learning to spell involves a "multilayered conceptualization, learned largely

through direct experience, that becomes more elaborate and integrated over time" (p. 58).

Many teachers are confused about the role of spelling in the whole language classroom, and they see spelling and whole language at opposite ends of a mythical continuum (Powell & Hornsby, 1993). These teachers are faced with the challenge of changing their spelling instruction to fit their philosophical beliefs about teaching spelling. They want to be true to the whole language philosophy by providing their students with experiences and opportunities in meaningful contexts that will enable them to develop into proficient writers, but they are not sure how to do that.

They believe that learning to spell is a complex developmental process, and they know that presenting isolated lists of words for their students to memorize and then reproduce on a spelling test is not in accordance with their beliefs, but the challenge lies in finding meaningful teaching methods that are in accordance with those beliefs. Routman (1994) states,

If one acknowledges the research that clearly demonstrates the stages all children go through in learning to spell, then the question becomes not whether to teach spelling as an integrated, developmental part of the language arts, but how to accomplish this goal most effectively (p. 238).

Organizing and managing a writing program that includes spelling instruction within the context of meaningful writing is a task that requires much thought and planning, and few teachers have neither the time nor the resources to tackle such a project. That is how this project about spelling

instruction within the writing workshop approach came to be.

Purpose of the Project

The purpose of this project is to provide teachers of beginning writers with a spelling resource that will assist them in developing a spelling instruction model as part of their whole language writing program. The term "beginning writers" is used to describe students who are for the most part in preschool, kindergarten, first grade, and second grade. The writing of these students may range from drawing pictures and scribbling to spelling words phonetically, with some high frequency words spelled correctly.

The spelling resource will provide teachers with information that facilitates students' progress toward conventional spelling during a writing workshop approach. The basis for that information will come from four whole language spelling principles proposed by Routman (1994). They are: 1) Spelling should facilitate communication of written language, not limit it, 2) Spelling is a complex developmental process and an integral part of writing, 3) The need for standard spelling should be kept in proper perspective, and 4) There should be no special spelling curriculum or regular lesson sequences.

Spelling competence develops gradually over time, and on the way to standard spelling other types of spelling, often called invented spelling, creative spelling, or transitional spelling, are used by beginning writers. Gentry (1982) describes stages of spelling through which all writers pass. They are based on specific observable writing behaviors from

the kind that is unreadable by people other than the inventive writer who produced it to conventional writing that is readable by most readers and shows a high degree of proficiency. Others have categorized writing into spelling stages, sometimes called levels, similar to those of Gentry, but they generally are all based on the premise that students progress through spelling developmentally, as seen in their written products and use of strategies.

The spelling resource will include a number of ideas for teachers who want to include whole language based spelling instruction in a writing workshop approach. First, the resource will provide descriptions of developmental writing behaviors, against which teachers can compare their students' writing. Second, it will describe one way to organize a writing workshop in a classroom of beginning writers. Third, the guide will suggest strategy lessons and activities that facilitate students' progress to the next level of spelling development. Fourth, the spelling resource will include ideas and assessment tools to document students' spelling growth. And fifth, it will provide ideas for communicating a whole language based spelling program to parents.

Theoretical Foundation

My beliefs about teaching language arts, including spelling, are consistent with many whole language principles. A language arts curriculum based on those principles integrates reading, writing, speaking, and listening, where the goal is always the communication of ideas. In the decoding and skills models of teaching language arts, each of

those four areas is taught separately, and the goal is the acquisition of skills, after which meaning would follow. I believe that the curriculum in whole language classrooms changes with the needs of the learners, while the curriculum in skills-based classrooms is set and unchanging. In decoding and skills-based classrooms the learners receive the curriculum, while in a whole language classroom they help create it through their interests and needs. I use reading and writing workshop approaches in my first grade classroom, where the four areas of language arts are constantly integrated. Because there are certain specific pieces of literature and types of writing that are required by my school and district, my students do not determine as much of the curriculum as those in a true whole language classroom.

Consistent with the whole language belief about the nature of the learner and the role of the teacher, I believe that classrooms are most effective if they are organized so that students have choices, which the teacher provides based on the needs of the students. Students are engaged in meaningful language activities in which the teacher invites them to participate. I believe that the teacher is the facilitator of learning, provides support and encouragement for learning to take place, and trusts that the learners will learn. Students are responsible for their own learning, and they have opportunities to construct new knowledge based on existing knowledge. In decoding and skills-based classrooms, students are like empty vessels, waiting to be filled with the teacher's superior knowledge. In my classroom, the

students are often given choices about what to read and write about during workshop times, and I am there to guide them along, while they construct meaning from a book or try to convey it through a story. My classroom has learners with different needs, and I create opportunities that allow all of them to be successful.

With regard to spelling instruction, I agree with the whole language position that it is most effective if it takes place in the context of meaningful writing and not as a separate skill, as the proponents of decoding and skills teaching would have it. They believe students learn to spell by memorizing words and spelling patterns on a weekly basis. I consider spelling one of several conventions of writing that develops over time. Students' spelling proficiency increases with repeated experiences of seeing and producing print, and I believe that standard spelling is not necessary until the editing part of the writing process, so that someone else can easily read the writing.

With regard to assessment, I believe spelling can be adequately assessed as part of an overall writing assessment and does not need to be treated as a separate skill in the form of a spelling test, as is common in decoding and skills-based language arts models. In my classroom I teach spelling to individuals when a student edits a piece of writing that will become a book for our reading workshop collection. I also address spelling when I point out phonetic and visual patterns of rhyming words when we are reading a big book together. I do not, however, have any assessment tools in

place at this time, nor do I feel that I am addressing spelling needs adequately. The individual attention that my students get when editing a story for spelling only occurs every few weeks, and I believe that more frequent and structured spelling instruction, perhaps in small groups, will benefit students when they are in the process of writing. I do believe that the traditional approach to teaching spelling goes against my philosophy, but I think there must be more that I can do to help my students on the road to becoming competent spellers.

In conclusion, the need for this project arises from the discrepancy between whole language practices that highlight the gaining and creating of meaning and traditional spelling approaches. Teachers want to apply whole language beliefs to spelling instruction, but are not sure of how to do that. This project will give teachers some information and ideas that will not only help beginning writers develop their spelling strategies in a writing workshop approach, but also help teachers teach spelling in a way that is consistent with their whole language beliefs.

LITERATURE REVIEW

"Spelling is a tool for writing. The purpose of learning to spell is so that writing may become easier, more fluent, more expressive, and more easily read and understood by others" (Gentry and Gillet, 1993, p. 57). While the purpose of learning to spell is generally agreed upon by educators and researchers, the methods employed by teachers to produce effective spellers have been questioned. Spelling instruction has become a major controversy for teachers as well as parents. Gentry and Gillet (1993) state,

At present, two philosophies of spelling education are pulling in opposite directions like the entangled lines of two kites in flight. Whole language and traditional views of spelling education have crisscrossed in an inextricable tangle of theories, attitudes, and myths. The resulting tension threatens to break both lines (p. 2).

Proponents of the traditional view of spelling instruction believe that spelling is largely the memorization of words and their visual patterns. Proponents of the whole language view see spelling as a complex developmental process that is influenced by language and memory variables (O'Flahavan & Blassberg, 1992). Gentry and Gillet (1993) believe that elements of both views have a place in a balanced spelling instruction program. They assert that there is more than one way to teach spelling, and individual teachers must decide what works best for them.

This literature review addresses several questions that confront teachers of beginning writers in their search for a spelling instruction model that works for them and their

students. They are 1) How is spelling a developmental process? 2) How is a language arts program organized to include spelling instruction? 3) How is spelling development facilitated? 4) How is spelling progress assessed and evaluated? and 5) How are parents informed about spelling? After reviewing the current literature regarding these questions, teachers will be able to have the information needed to decide what kind of spelling instruction model they believe will work best for them and their students.

How Is Spelling a Developmental Process?

There has been much research done in the area of describing the developmental process that leads students to become competent spellers. Teachers of emergent writers need to be familiar with that research in order to recognize where their students are in their spelling development. "Knowing how students fall along the developmental continuum enables teachers to assess students' spelling knowledge and to design appropriate instruction" (Morris cited in O'Flahavan & Blassberg, 1992, p. 409). Current research can be reviewed by first highlighting the sequence of the developmental spelling process in terms of the writing children produce, and then by looking at how various authors interpret and categorize children's writing. Some authors look at children's written products and divide the process into spelling stages. Others look at written products and describe the process in terms of how the writing reflects concepts or knowledge learned about spelling. Still others describe the process in terms of the strategies children use

to spell.

Pre-alphabet learning.

The developmental spelling process begins long before children enter school. They experiment with producing print themselves as a result of making many discoveries about print. Gentry and Gillet (1993) describe these discoveries as occurring during the time that young children are read to by adults who run their finger under the black marks (words) on the page. One of the first discoveries is that the black marks, not the pictures, tell the story, and in order to tell the story the same way every time, one has to "read" the black marks. This discovery leads to children's earliest writing attempts, consisting of scribbles. They know that these marks tell a story, and they are more than happy to tell it to someone. Tarasoff (1990) describes scribbles as the result of children developing the concept that print conveys meaning, and they draw pictures and squiggles to communicate their meaning to others. Scribbling takes on a definite form with characteristics of the children's first language (Douglass, 1989), and it reflects the visual features of a culture's spelling system, as Wilde (1992) remarks after observing that French children's scribbles may contain accent marks.

Horizontal scribbles appear after children discover that the black marks are arranged horizontally left to right. This behavior develops by roughly age four, provided that the child has been read to and experimented with scribbles already (Gentry & Gillet, 1993). At first children scribble

in both linear directions; eventually they only do it left to right. Chavers (1988), who describes spelling development in terms of levels, places this writing behavior in level 1, which she calls spelling awareness because children become aware of the directionality of print. Read (1986), who conducted a study of preschoolers' and kindergartners' phonetic spellings in order to get a glimpse at their spelling processes, found that children produce linear writing many months or even years before they realize that there is an accepted directionality.

Letter-like character writing is the result of the discovery that the scribbled marks on a page are certain kinds of marks, made with lines and curves, but children do not yet know that these marks are called letters. In their own experimentation children now move from scribbled writing to character writing, including some letters (Gentry and Gillet, 1993). Read (1986) found that children could distinguish Roman letters from other non-pictorial symbols, and Douglass (1989) found that a mixture of letter-like signs and symbols continues at least into the sixth year for some children. At this point children may still perceive writing as drawing (Douglass, 1989) or as representing objects rather than corresponding to language at all. Read (1986) found that children's letter-like writing for a big object, like a bear, took up more space than the writing for a small object, like a mouse.

Alphabet/sound learning.

Strings of random letters (B k T A R s 3 H) appear in

children's writing after they discover that the marks are the same on all the pages in all the books and on all the neighborhood signs, and that this helps others to read them. Children develop the concept that print is made up of letters, many of which they are beginning to recognize, name, and produce (Tarasoff, 1990). They string these letters, and perhaps still some numbers, together randomly to write messages for others. They know that their letters are the marks one needs to use to write, but they do not yet know the letter/sound relationships. Chavers (1988) places random letter writing in level 2, which she calls primitive spelling, Norris (1989) places it in the prephonemic stage, which lacks phonetic writing, and Gentry (1982) places it in the precommunicative stage, because it represents "writing before it can be read by people other than the inventive speller who produced it" (Gentry & Gillet, 1993, p. 26). Powell and Hornsby (1993) refer to these writers as emergent spellers because they are using print to communicate meaning, but they do not have enough graphophonic knowledge to communicate a message through writing alone. They have to draw pictures or tell what their message is.

Following strings of random letters is often the appearance of letter names to show words (R = are, U = you). This behavior "demonstrates the emergence of the alphabetic principle, the idea that alphabetic letters say sounds" (Gentry & Gillet, 1993, p. 27). Gentry (1982) calls this the semiphonetic stage, which includes an awareness of speech sounds that roughly correspond to individual letters and also

the emergence of spaces between words. Norris (1989) calls this type of writing the letter-name stage, and she includes in this stage writing where a letter name represents a syllable, such as LFNT for elephant. Zutell (1978) also found this pattern in children's attempts to write what they hear (example: GRIV for drive because the sound for /dr/ sounds like the beginning of the letter G). Tarasoff (1990) and Read (1971) both report the use of letter names in children's writing. "Young children just beginning to spell will sometimes use a letter-name strategy; that is, they will print the letter when they hear its name, not its sound (e.g. b for bee, c for see, r for are)" (Tarasoff, 1990, p. 50). Read (1971) describes the remarkable independence of a preschool child who pronounced the word "dad" and then tried to represent the sounds as he related them to the letter names he knew. Zutell (1979) reports from a study that the use of the letter-name strategy persists into third grade for some children, indicating that it plays a lasting part in the spelling development of young writers.

Children's writing begins to show sound/symbol relationships when they "begin to make the transition into realizing that the letters in words aren't random but are related to sounds" (Wilde, 1992, p. 39), which often occurs before first grade, providing children have already been engaged in ongoing and meaningful reading and writing at home. Gentry and Gillet (1993) and Norris (1989) still call this the semiphonetic stage, and Powell and Hornsby (1993) call it the beginning of the novice phase because writers at

this point only have some graphophonic knowledge to communicate meaning to others, and they assign letters strictly on the basis of sound. Chavers (1988) places the beginning of sound/symbol representation into level 3, which she calls prephonetic spelling. By her description prephonetic spelling is characterized by a match between some consonants, especially initial ones, and their sounds, and by its difficulty to read because not all the sounds of a word are represented. Tarasoff (1990) and Graves (1983) found that there is a general progression in which sounds of words are represented in writing. Children generally begin sound/symbol representation with initial consonants, sometimes followed by random letters ("Gbkit" might mean "grass"). Next is the addition of final consonants ("GS" for "grass"), followed by the insertion of medial consonants ("GRS"). Vowels are often left out in this early phonetic representation. When they do appear, they are often place holders ("GRES") because children are unsure of which vowel to choose (Graves, 1983). Children sometimes decide on the vowel by using the letter-name strategy (For the word "rain" children might write "RAN" because the sound that follows /R/ is the same as the name of the letter "A") or by using articulation cues (For the word "bed" children might write "BAD" because the short e sound is articulated in the same place in the mouth as the letter name "A") (Tarasoff, 1990). Wilde (1992) comments that "consonants are more consistent than vowels in their spelling and are therefore easier than vowels for young writers to spell" (Wilde, 1992, p. 5). Read

(1986) found that this concrete phoneme by phoneme encoding is the major spelling strategy that young writers use even long after they stop reading familiar words in this manner.

Accompanying the awareness of sound/symbol correspondences is the development of the concept of a word as a speech and meaning unit (Tarasoff, 1990). Up to this point children may still run their words together; perhaps they forget to put spaces because they are so involved in sounding out, or they are not fully aware of what a word is. Once they grasp that their writing reflects their speech and consists of individual words, then spaces, dashes, and periods appear to indicate the end of one word and the beginning of another. This behavior is also closely tied to the fact that children see these markings in print when they read, and they incorporate them into their own writing (Tarasoff, 1990).

Spelling strategy learning.

As children's spelling development progresses, their writing represents increasingly complex spelling strategy learning, beginning with the phonetic strategy. After becoming more familiar with the sound/symbol correspondences, children's writing becomes more phonetic. For the first time all surface sound features are represented in the spelling, vowels appear more frequently, and the writer knows many conventionally spelled words already. Gentry (1982) and Norris (1989) call this the phonetic stage because all phonemes are represented, but the spelling is still unconventional ("rdr" for "order" and "jup" for "jump").

Chavers (1988) places this type of writing into level 4, which she calls phonetic spelling, because there is an almost perfect match between letters and sounds and some sight words are spelled correctly, making the writing rather easy to read. Powell and Hornsby (1993) still refer to this phase as the novice phase, and Tarasoff (1990) found that children at this stage refine their phonics generalizations and begin to include their knowledge of blends (tr, gr, bl, br, and so on), short vowels, consonant digraphs (th, wh, sh, ch), and diphthongs (ai, ay, oa, ow, ou, and so on).

Once children's writing looks more and more like conventional writing, and it includes many correct spellings that are not phonetic, children have developed the concept of visual strategy (Tarasoff, 1990). This type of writing may appear along with the refinements of phonics generalizations and include the correct use of homophones (two/too, there/their, and so on). Several authors (Chavers, 1988; Gentry & Gillet, 1993; Norris, 1989) call this stage transitional and describe it as a further disassociation between spoken and written language because the writer writes not only what English sounds like, but also what it looks like. Vowels appear in every syllable, silent letters appear, inflectional endings appear (-ed, -ing, -s) and a larger repertoire of conventionally spelled high frequency words is evident. Gentry (1982) found that spellings in this stage may have all the letters but in reverse order ("huose" for "house"), and that nasals now appear before consonants, which were usually left out in the phonetic stage ("lamp"

instead of "lap"). Bean and Bouffler (1987) also report on the "spelling-as-it-looks strategy" (p. 15), as well as the "spelling-by-analogy strategy" (p. 15), which means that children are using what they already know about a familiar word in a new situation ("reskyou" for "rescue" shows that the familiar word "you" is applied to a new word). Tarasoff (1990) also reports that children begin to represent common letter sequences that represent a sound (-ight, -tion, and so on), probably because they have seen words with those sequences in print.

When children's writing reaches the point where most words are spelled correctly, children have more than likely developed the concept that spelling is not only related to sound and visual patterns, but also to meaning (Tarasoff, 1990). "Children's spelling development moves from concrete phonetic spellings to abstract standard spellings, where children have to learn that "please" and "pleasant" are spelled alike, even though they have different sounds, but instead those words are related historically and have the same root" (Read, 1986, p. 41). Tarasoff (1990) believes it is now more difficult to describe a developmental sequence because individual writers have a base of accumulated knowledge and strategies that influence their spelling abilities. Gentry and Gillet (1993) place this writing in the conventional stage, Chavers (1988) places it in level 6, which she calls correct spelling, and Powell and Hornsby (1993) refer to it as the independent phase. The writing behaviors that characterize this phase include mostly correct

spellings, especially of high frequency words, accurate spellings of prefixes, suffixes, possessives, homonyms, contractions, and plural forms. Writers in this stage have acquired efficient strategies to spell new words, including irregularly spelled ones, and they use proofreading strategies to locate and correct unconventional spellings. Bean and Bouffler (1987) found that one strategy these sophisticated writers use is being indeterminate. When unsure of a spelling, writers may let the reader figure out the correct spelling by being vague in their handwriting. For example, writers who do not know if a word is spelled "ie" or "ei" may write those two letters similarly and put the i-dot in the middle. Another strategy is opting for another word to convey the same meaning (Bean & Bouffler, 1987). The use of invented spelling continues even with very mature writers because "invented spelling is not a stage but a strategy used by all writers" (Bean & Bouffler, 1987, p.16). Wilde (1992) comments, "As writers continue to mature, their spellings change in two ways: Children learn more words, so that their proportion of correct spellings is higher, and their invented spellings reflect increasingly sophisticated knowledge about our spelling system" (p.51).

The preceding sequence of spelling behaviors describes a process that children begin before they put a writing utensil to hand and continue after they end their formal schooling. The terminology and approaches used to describe this process vary from researcher to researcher, but they all agree that the process is very complex. It "begins globally,

perhaps with a scribble intended to represent a message as a whole, and eventually becomes far more complex, incorporating increasingly elaborated knowledge of the various linguistic levels represented in spelling" (Wilde, 1992, p. 23).

Familiarity with the developmental spelling process gives teachers the knowledge to analyze their students' spelling and design instruction according to the students' needs. "It is important to remember that any developmental phases or stages, no matter how they are described, are continuous and overlapping, and children will vary widely in their development within and across these phases" (Powell & Hornsby, 1993, p. 27).

How Is a Language Arts Program Organized to Include Spelling Instruction?

Spelling is part of language arts, and teachers who follow a whole language philosophy in their approach to teaching language arts organize spelling instruction around the same general principles. One of those principles is that instruction is student-centered. Scott (1994), O'Flahavan and Blassberg (1992), and Norris (1989) believe that spelling instruction should begin with the students' level of spelling knowledge and respond to the developmental changes in their knowledge. Wilde (1992) agrees that "a more holistic program in spelling starts with the learner rather than a set curriculum, and suggests that instruction can be most useful when targeted to individual development" (p. 60). The teacher's role is to guide learning by creating situations and circumstances in which spelling development can take

place, and in which the students are the focus (Bean & Bouffler, 1987).

Integrated spelling instruction.

Another general principle of whole language learning is that instruction is meaningful and integrated. Meaningful spelling instruction should take place in the context of other language activities, especially reading and writing. Zutell (1978) states that "effective spelling instruction requires environments in which children are encouraged to read and write extensively, and to test, evaluate and revise, if necessary, their developing theories of how the spelling system works" (p. 850). Current research also recommends daily, purposeful, student-selected reading and writing activities in order for emergent writers to develop into successful spellers (Avery, 1993; Graves, 1983; Norris, 1989; O'Flahavan & Blassberg, 1992; Routman, 1988; Wilde, 1992).

The reading/spelling connection receives much attention in the literature, and several points of view emerge. Krashen (1993) analyzed several studies on the effects of reading on spelling to see if more reading will result in better spelling. The results are mixed. Some studies show no gains in spelling from additional reading, while others show that reading develops good spellers, although not great spellers, as seen in the existence of excellent readers who misspell many common words (Krashen, 1993).

Other authors share the point of view that reading experiences influence spelling development in significant ways. It is during extensive reading activities that

students see written language, which gives them a visual memory base for words they want to spell (Avery, 1993; Zutell, 1978), and it is usually only because they have seen a word in print that they know for sure how to spell it (Wilde, 1992). Powell and Hornsby (1993) state that "the more young children learn about sound/symbol relationships in their reading program, the more they will be able to use that knowledge when attempting to spell the words they want to use" (p. 78). Bartch (1992) integrates spelling into literature and shared reading, and her students are seeing the relationship among reading and spelling. They notice words while reading literature and point out sounds and word endings during big book readings. From these examples it seems that reading certainly does have a positive effect on spelling development, and teachers can use their reading program to address some aspects of spelling.

Since spelling is a more obvious component of writing, it is best learned when taught within the context of writing (Batzle, 1992). "Without writing, there would be little purpose in learning to spell. Thus, the proper place for spelling instruction is within the writing program. Active daily writing, for real purposes and real audiences, is necessary for spelling development in all grades" (Gentry & Gillet, 1993, p. 57). In organizing their writing program, teachers often set up writing workshops, where students are actively engaged in the writing process on a daily basis (Avery, 1993; Calkins, 1994; Hamer, 1992). Avery (1993) defines writing workshop as "a daily time where we work on

writing, struggle with evolving texts, develop writing skills, and learn to use writing as an effective tool for communication and learning" (p.87).

Organizing a writing workshop begins with setting aside a predictable time each day, from a minimum of 30 minutes to as much as an hour. A typical writing workshop includes a five-to-ten-minute mini-lesson, where the whole class gathers on the carpet for a short lesson that addresses a writing need, such as selecting a topic. Following the mini-lesson is usually a time block of 20-30 minutes, where students are busy composing, revising, editing, or publishing stories, poems, reports, letters, or other pieces of writing. This work time is often followed by a sharing session of 10-15 minutes, where a few students read either their work in progress or their published pieces to their peers, who make comments and/or suggestions. Other common elements of writing workshop are: students choose their own topics; students receive help from their peers; students meet with the teacher in small groups or in individual conferences to receive needs-based instruction; writing follows a process of drafting, responding, revising, editing, and publishing; and the writing is done for a real audience (Avery, 1993; Calkins, 1994; Graves, 1983; Hamer, 1992; Powell & Hornsby, 1993; Routman, 1988).

Spelling instruction can take place at several different times during writing workshop. One of those times is during the mini-lesson. Mini-lessons are most effective if they are short, focused on one characteristic to improve writing,

gentle in tone, and responsive to the needs of the writers in the classroom (Avery, 1993; Calkins, 1994). They can be lessons about workshop procedures, or they can be strategy or skill lessons. A mini-lesson on a spelling strategy for emergent writers might focus on demonstrating how to say a word slowly in order to hear some letter names, which should then be written down. A spelling mini-lesson might also focus on a word or word family that many students are using in their writing. For example, emergent writers use the word "my" quite often in their writing and may spell it "mi." A mini-lesson can teach the correct spelling of that word and others that follow the same spelling pattern (by, fly, sky, cry, and so on). Many students will remember how to spell "my" from just that short lesson, and some will also be able to write "fly" correctly at some later point because they remember the mini-lesson that connects the two similar words. Although mini-lessons should not always focus on spelling, when they do, students will have an opportunity to learn a new spelling strategy or a word that they want to use in their writing (Avery, 1993).

Another appropriate time for spelling instruction in writing workshop is during the 20-30 minutes of work time following the mini-lesson. The teacher can spend part of that time with a small group of students who have the same spelling need (O'Flahavan & Blassberg, 1992). The time can be used to teach the group a spelling strategy, for which those students are ready, or it can focus on specific words. By forming a small group, the teacher is able to meet the

specific spelling needs of a few students and move them along developmentally (O'Flahavan & Blassberg, 1992).

Current research indicates that the best time and place to address spelling during writing workshop is during the editing part of the writing process, which usually takes place in individual conferences between the emergent writer and the teacher (Avery, 1993; Calkins, 1994; Gentry & Gillet, 1993; Graves, 1983, 1994; Routman, 1988; Wilde, 1992). While other students are busily writing during the 20-30 minutes of work time, the teacher makes time to meet one-on-one with those students who are ready to take a piece of writing to publication. Since published pieces will be read by others, the conventions of writing, including spelling, have to be in place. The reason for not requiring standard spelling on first drafts is to allow the writer to concentrate on the flow of ideas and not be slowed down by worries over accurate spelling (Calkins, 1994; Graves, 1994; Routman, 1988). Up to this point in the writing process invented spelling, including random letters, letter names, and phonetic spelling, has been accepted and even encouraged, but when work is going to be read by others, standard spelling will help the reader gain meaning from the text. "Invented spelling is a convenience for the writer, but conventional spelling is a courtesy to the reader, and dealing with spelling is part of the editing process in writing" (Wilde, 1992, p. 63).

There are several ways to organize an individual conference with students. Conferences can focus on the

content of the writing or its design (letter, narrative, report, and so on), on evaluation of student work, or on the process of writing; that is, discussing how the writing came to be (Calkins, 1994). It is during a process conference that the teacher and student may talk about the spelling strategies that the student is using, and the teacher can tell the student about a new strategy that will help bring about a developmental change. The focus could also be on specific words that the student has tried to spell or is ready to learn. For example, the teacher can compare the student's spelling to the standard one and praise the student for a successful attempt (Graves, 1983), or the teacher can show the student that "they" and "then" start with a word the student already knows, "the", and that he or she just has to add certain letters to make new words (Clay, 1993a). This one-on-one contact provides very meaningful and student-centered instruction and helps the student along the path of becoming a competent speller.

Modified traditional spelling instruction.

Organizing a writing workshop, complete with mini-lessons, small group meetings, and individual conferences is not the only way to address spelling instruction that is student-centered and meaningful. Other models of studying words and learning strategies can be found in the current literature on spelling instruction (Bartch, 1992; Gentry & Gillet, 1993; Routman, 1994; Wilde, 1992). Bartch (1992) proposes implementing a spelling strategy time of about 45 minutes once a week, which she tried in her own second grade

classroom. That time block began with a mini-lesson, during which she taught one specific spelling strategy, such as using the classroom word wall for unfamiliar words. Following the mini-lesson, students used the newly acquired strategy, as well as those learned in previous weeks, to help them spell words during writing time. Her spelling instruction was delivered once a week to the whole class, and the strategies were selected based on the needs of the majority.

Routman (1994) also suggests organizing a weekly time of 45 minutes to an hour, but instead of teaching a whole class spelling strategy, she recommends that students find and record five or more words from their daily writing that they want to learn to spell. She suggests that students make several attempts at spelling those words on Have-a-Go sheets, and then volunteers help students make 3x5 cards of these words for personal dictionaries. The instruction would be student-centered and meaningful in the sense that the students select the words they want to learn.

Another spelling instruction model is proposed by Gentry and Gillet (1993), who suggest that along with reading and writing workshop times in the classroom, teachers can establish a time for spelling workshop. They believe that spelling study should not be simply an extension of the writing workshop, but a time set aside for the intensive study of words and spelling patterns. They believe 15 minutes per day can be spent in spelling workshop activities. Since students' spelling needs will vary, students spend

their time in activities that address their own needs. It may be that prephonetic spellers, whose spellings consist of mostly random letters, engage in activities that promote phonetic awareness, while transitional spellers, whose spellings are nearly standard, work with activities related to word endings. The teacher's role during spelling workshop is to observe the students' engagement with the various activities in order to determine future instructional needs.

Yet another model is proposed by Wilde (1992) for those teachers who, either because they are required to, or because they are unsure of alternatives, use a traditional spelling curriculum that includes textbooks with lists of words to be learned each week. She provides the following organizational guidelines: On Mondays, five words are chosen from the list, either by students individually or with assistance from the teacher. Those words are written down and studied at school and for homework. On Tuesdays, Wednesdays, and Thursdays, students study those words by first looking at a word and thinking about its spelling, then saying the letters out loud, then covering the word and writing it from memory, and then repeating those steps if necessary. On Fridays, students can test each other on those words, but the teacher does not grade the test traditionally. Instead, the teacher can monitor the students' progress and help in adjusting the word list to be studied. This organizational model resembles the traditional method of spelling instruction, but it is more personalized and contains fewer words than traditional lists. Wilde states that students will learn many more words

incidentally through ongoing reading and writing activities, and that this model is intended primarily for teachers who have to use word lists or who are not quite ready to give up a more traditional program.

Whatever organizational model is used, writing workshop, spelling workshop, or a specific word study time that may include some aspects of traditional spelling instruction, the literature points out that spelling is an important part of writing and needs to be addressed appropriately. Focusing on standard spelling too early in the writing process may inhibit the flow of ideas, and students may perceive that how they write is more important than what they write. Not addressing standard spelling, however, may signal to the students that it is not important at all, and their written messages may not communicate effectively. Teachers need to organize spelling instruction around the message that spelling "is simply one of many skills necessary for effective writing" (Sitton, 1990, p. 11) and "in order to best help children develop their understanding of the writing system, teachers must consciously construct environments in which children have the opportunity to systematically examine words and to freely generate, test, and evaluate their own spelling strategies" (Zutell, 1978, p. 847).

How Is Spelling Development Facilitated?

Once teachers are able to determine, by looking at their students' written work, at which point along the developmental spelling continuum the students are working, and once they have organized their language arts program to

include a time and place to address spelling, they are faced with the question of how to facilitate spelling development. Teachers can answer this question by selecting instructional practices and activities that are most effective in helping to expand their students' spelling knowledge and strategies (Zutell, 1978). "The more children learn about the patterns and strategies of spelling and the more they write and get feedback, the more their spelling will approach conventional spelling" (Tarasoff, 1992, p. 54).

The next question, then, is how do beginning writers learn about spelling patterns and strategies in a whole language classroom? Current research on spelling instruction indicates that teachers need to use both formal and informal methods in order to "facilitate a developmental change in the strategies that a child uses to represent words" (Norris, 1989, p. 101). Tarasoff (1990) believes that "some students will effortlessly learn spelling from immersion in language activities; others will require structured lessons that focus clearly on specific knowledge and on specific strategies" (p. 85). Other spelling authors agree that many children develop effective spelling strategies independently, while others progress more slowly and need to be taught specific strategies with more teacher direction (Bean & Bouffler, 1987; Clay, 1993b; Gentry & Gillet, 1993; Tarasoff, 1992; Wilde, 1992). The literature presents many ideas about what whole language teachers can do to facilitate spelling development in their beginning writers. They include: 1) Providing multiple writing opportunities, 2) Developing a

positive attitude toward spelling, 3) Promoting independence during the writing process, 4) Matching instruction to students' development, and 5) Teaching proofreading strategies.

Providing multiple writing opportunities.

By providing multiple writing opportunities on a regular basis, teachers are informally facilitating spelling development in their students. Authors on spelling agree that frequent writing activities for different audiences and different purposes and on a variety of topics give children the opportunity to explore the spelling system, apply what they know, and construct new knowledge (Bean & Bouffler, 1987; Calkins, 1994; Read, 1986; Tarasoff, 1992; Wilde, 1992). "Just as children interact with oral language in order to speak, they must interact with written language in order to learn to write and spell" (Gentry & Gillet, 1993, p. 16). Gentry (1992) states that "frequent application of spelling knowledge while writing moves spelling forward developmentally" (p. 198). By writing, children become aware of the need to attend to spelling because they have to pay attention to letter detail, letter order, sound sequences, and letter sequences, in order to effectively communicate their thoughts and ideas to others (Clay, 1979; Powell & Hornsby, 1993).

Authors disagree, however, on whether teachers should provide students with motivational activities for writing, or whether the motivation should come from within the students. Calkins (1994), who favors a writing workshop approach,

believes that teachers do not have to bribe, entice, or force students to write, but that students will want to write about their personal and interpersonal experiences. Teachers just have to establish the time and place for writing to occur. Avery (1993) agrees with that position and adds, "All children have experiences to write about. They do not need to go on elaborate family vacations or own fancy toys to find topics" (p. 89). In Reading Recovery, a program that helps low-achieving first graders with reading and writing on an individual, daily basis, students are asked to write stories, which are often brief messages or a single sentence, about something that interests them. The teacher does not provide the topic for these students, who are often reluctant writers (Clay, 1993b).

Some authors believe that providing students with motivational writing activities will enhance their writing, and therefore their spelling, because it allows them to spend more time writing than thinking about what to write (Bean & Bouffler, 1987; Gentry, 1982; Powell & Hornsby, 1993; Wilde, 1992). They suggest that purposeful writing experiences include writing creative stories, lists, songs, poems, recipes, letters, cards, signs, and lists. One activity that might motivate students to write is based on predictable books. After learning to read them, students can write their own versions based on the original. The predictable nature provides a supportive structure on which writers base their innovations. The original version provides spellings and rhyming patterns, and in writing a new version, students

attend to those patterns and their graphophonic connections (Bean & Bouffler, 1987; Powell & Hornsby, 1993).

Other writing activities that motivate students are journal writing, especially dialogue journals, where students can see the correct spellings in the teacher's responses to their entries (Powell & Hornsby, 1993), picture writing, where students select pictures to create the setting for a story (Bean & Bouffler, 1987), and written conversations, which take place between a proficient writer and a reluctant one, so the reluctant writer can learn from the spellings of the proficient writer (Bean & Bouffler, 1987; Powell & Hornsby, 1993). Wilde (1992) also points out that students pick up the spellings of many words that are part of theme-related writing. For example, after reading and writing about giraffes over a period of time, many students will learn how to spell "giraffe" correctly because they have seen it and written it so many times by the end of the unit.

Since spelling has the same function in student-selected writing as it does in teacher-selected writing, which is to enable the reader to understand the message of the writing, it does not really matter how the writing comes to be. Teachers can decide for themselves how the writing opportunities are presented to their students, either with external motivation, without it, or a combined approach.

Developing a positive attitude.

Teachers can facilitate spelling development in their beginning writers by helping them develop a positive attitude toward spelling. They can accomplish this goal by making the

students feel confident in their own abilities and by helping them accept that standard spelling is not always required. Tarasoff (1992) believes that if children have a positive attitude toward improving spelling, progress can be made. She states, "Developing a self-concept of being a good speller comes from experiences. It is essential that children experience success and feel they are learning in their beginning attempts to spell" (p. 101).

Teachers can make students feel confident in their abilities by accepting their system of spelling (Read, 1971) and displaying their handwritten texts alongside a standard typewritten version because it shows them that their spelling is valued (Wilde, 1992). Teachers also instill confidence when they emphasize students' strengths and praise spelling approximations and risk-taking. They can compare the students' spelling to the standard one and point out how many sounds or letters are correctly represented, rather than pointing out the errors (Routman, 1988). When editing for spelling in a writing conference, teachers can choose one or two words to correct in front of the student, instead of marking all incorrect spellings (Tarasoff, 1992). Confident spellers develop when teachers point out what children have learned rather than what they do not know (Tarasoff, 1992).

Beginning writers can also develop a positive attitude toward spelling when they realize and accept early in their writing career that standard spelling is not always required. Teachers need to demonstrate that standard spelling is important when someone wants to read the writing (Avery,

1993). "Learning to spell is only one aspect of developing written communication. In fact, spelling becomes important only in the process of sharing written communication with others" (Tarasoff, 1992, p. 1). Beginning writers should learn that the primary goal for writing is the expression of ideas, and that too much attention at first on spelling may hinder the natural flow of language and result in the view that learning to write is a matter of spelling words rather than of constructing meaning (Sanacore, 1993). Teachers can communicate this concept to their beginning writers by encouraging invented spellings during the initial drafting of a piece of writing and assuring them that they will learn when and how to use standard spelling as they learn more about words and writing (Wilde, 1992). When teachers make beginning writers feel confident right from the start, and when they explain the place that spelling has in the writing process, then students will develop a positive attitude toward spelling, which is a very important factor in their spelling development.

Promoting independence.

Whole language teachers who use a writing workshop approach to teach writing can facilitate their beginning writers' spelling development by teaching them strategies that promote their independence during the writing process. Independence in writing is a goal of any writing program, and Wilde's (1992) goal for a spelling program is "the creation of independent, competent writers, with independence coming first" (p. 57). She believes that if schools foster

independent writing first, competence in spelling will evolve over time. A writing workshop approach certainly expects independent writing from students, as they spend most of the workshop time independently composing rough drafts, revising, or editing their pieces in progress, while teachers meet with small groups or conduct individual conferences.

According to Bean and Bouffler (1987), there are two points at which spelling is important in the writing process. The first point is when students are composing their first drafts, putting meaning on the paper. At this point spelling should assist them, not hinder their attempts to write. The second point is when students become readers of their own writing in order to proofread it and replace temporary spellings with standard ones. In order for students to work through spelling independently at both of these points, they need to know and apply strategies that will allow them to work without the help of teachers. Two major strategies that they can use are invented spelling and external resources.

Invented spelling, also called temporary spelling, is a strategy that all writers use, even adults, when they do not know the standard spelling and do not want to interrupt the flow of writing to find it (Powell & Hornsby, 1993). Beginning writers can learn to use this strategy and independently produce spellings any time they write. "Even without being able to read, children can attempt to write using what they know" (Tarasoff, 1992, p. 104). It is tedious work for children to figure out for themselves how to record their own speech, but by attempting it and immersing

themselves in the task, their success improves (Clay, 1993a).

The best way to teach invented spelling is to model it for the children and help them understand that using it will benefit them as writers (Wilde, 1992). Gentry and Gillet (1993) describe a lesson that teaches invented spelling. It involves showing beginning writers, on a surface that they can all see, the many ways to write a message, such as drawing a picture, scribbling letter-like symbols, or random letters, and then telling what the message is. Then the teacher writes the message by slowly sounding out the words aloud, as the corresponding letters are written. Lastly the teacher writes the message conventionally and points out that adults would write it like this. The teacher explains that as they learn to read better and write more, their spelling will look more and more like that of adults. Then the students are given a chance to try invented spelling.

Obviously not all beginning writers will immediately be able to hear sounds in words or know what to write down for them. Powell and Hornsby (1993) suggest teaching other have-a-go strategies for those and more proficient students. Along with sounding out each part of a word and writing down corresponding letters, they suggest writing the first letter and putting a dash for the unknown part or circling or underlining any word or part of a word that needs to be checked later. Drawing a picture of the word in question may also help remember it. More proficient spellers may learn how to try to visualize the word if they know they have seen it before. All of these strategies allow writers to rely on

their own spelling knowledge, and with repeated practice, they can use them independently whenever they write and not have to wait and sit for help.

Many authors suggest the use of external resources as a strategy that promotes independence in writers (Bartch, 1992; Routman, 1994; Scott, 1994; Avery, 1993; Powell & Hornsby, 1993; Bean & Bouffler, 1987; Graves, 1994; Gentry & Gillet, 1993). Writers consult them for words they want to spell, instead of asking the teacher, which was usually encouraged before the writing process curriculum became popular (Wilde, 1992). External resources include other students in the room, labels and signs around the classroom, picture dictionaries and other reference books, alphabet charts on the wall and on individual desks, personal dictionaries, and wall charts hanging around the room that contain words the students may want to write. Wall charts can be created by the whole class or in small groups in a mini-lesson. They can contain frequently used words, theme-related words, words that fit a spelling pattern or rule, or words that rhyme.

As students are writing and need a word whose spelling they do not know, they can find it somewhere in the room and copy it. Gentry and Gillet (1993) caution against mere copying of words from resources. They say that it does not help students remember them. Instead of copying words, they should look at them and try to write them from memory, then check them against the source. This process helps sharpen visual memory and makes students more independent.

Teachers play an important role in teaching students how

and when to use external resources. They can teach how to use them through modeling and demonstrating the steps involved. Authors do not agree, however, as to when students should consult external resources. Some advocate their use at any time when students need a word (Bartch, 1992; Routman, 1994; Scott, 1994), while others advocate their use only during final editing because the flow of writing may be interrupted by stopping and looking or asking for a word (Avery, 1993; Powell & Hornsby, 1993; Tarasoff, 1990).

Teachers need to decide what works best for each individual student and then encourage individuals to use that strategy. Students who are less proficient readers may not be able to locate a word on a chart or in a book, and they may benefit more from using only invented spelling. Proficient readers, however, may be able to find a specific word quickly on a chart or in a handy dictionary, and they may benefit from using external resources without disrupting the flow of ideas.

Matching instruction to students' development.

By teaching strategies that are developmentally appropriate in terms of the writing students produce, teachers will help their students move along the developmental spelling continuum. The literature points out three major strategies that students need to learn about and use in order to become competent spellers. They are graphophonic knowledge (letter/sound relationships), visual memory (the way words look), and morphemic knowledge (the meanings of words and word parts) (Gentry & Gillet, 1993;

Powell & Hornsby, 1993; Routman, 1994; Tarasoff, 1990, 1992). Beginning writers focus on graphophonic knowledge. As they become more competent and discover that many English spellings do not relate strictly to their sounds, they rely more and more on visual strategies and meaning-related strategies (Tarasoff, 1992). The key to teaching these three strategies is to look at individual children's existing strategies and to build new ones on those (Clay, 1993b; Tarasoff, 1990). Tarasoff (1992) states, "All learning involves refining and expanding prior knowledge by relating it to what they already know" (p. 10).

Some beginning writers are not yet ready to use letter/sound relationships to spell words. "Children need many experiences with alphabet letters in many contexts before they begin to understand the relationship between letters and sound" (McGee & Richgels, 1989, p. 224). They need to develop an awareness of print and that letters are used to convey meaning, and they need to learn the letter names and how to form them on paper. An awareness of print and knowledge of letter names can be developed when teachers point to and say letters and words on signs and labels, in books, and in children's names, and when they model writing and reading messages for students, who in turn will begin to imitate writing and reading behaviors. (Gentry & Gillet, 1993; McGee & Richgels, 1989; Norris, 1989; Scott, 1994; Tarasoff, 1992).

Knowing how to form letters, both capital and lower-case, is necessary for students to be able to move beyond

scribbling and making letter-like characters. Teachers can help this process along by providing opportunities to write and tools that are used to print letters, such as pencils, pens, markers, paper, typewriter, and computer (Read, 1986). Tarasoff (1990) states that it is easier to pay attention to spelling and creative writing when children know the letters and how to form them quickly, especially lower-case ones, since they are used most often in text. She suggests helping students learn to form letters by providing hints about how to remember them, such as the letter "h" that looks like a house with a chimney. Once students begin to know letter names and how to print them, their writing will begin to include them more and more.

Once students are spelling with random letters, teachers can move them along developmentally by introducing them to letter/sound relationships, also called the graphophonic strategy. "Since a very high percentage of English words are spelled as they sound, the first step is to direct children to that spelling strategy" (Bean & Bouffler, 1987, p. 31).

Teachers can begin to develop students' graphophonic knowledge by pointing out beginning and ending sounds in big books, poems, charts, and stories. Teachers can also ask students to predict how a word begins or ends as they write for the whole class (Routman, 1994). Gentry & Gillet (1993) offer several ideas for increasing students' graphophonic knowledge. One is called beginning sound brainstorming, which asks students to brainstorm words that begin with a common consonant sound. Teachers write the words that are

given on a chart, and students then come forward and underline the common beginning letter for those words. The emphasis is on the beginning sound, so students can see which letter is used to show that sound. Other activities involve clapping for each syllable or individual sound, which helps students segment words into sound parts. Rhyming games also help students increase their graphophonic knowledge by showing them that many words that sound alike are also spelled alike (Gentry & Gillet, 1993; Tarasoff, 1992).

Although these fun games and activities are helpful in developing graphophonic knowledge, it is more important that students can apply their graphophonic knowledge when writing themselves. Several authors explain ways that teachers can encourage students to represent sounds with letters when they are engaged in writing activities (Bartch, 1992; Calkins, 1994; Gentry, 1982; Graves, 1994; Tarasoff, 1990, 1992). These ways generally include teachers modeling how to sound out words by stretching out their sound parts slowly but naturally, and then writing down the letters one at a time for each sound heard. Since beginning spellers may not be able to read and therefore not know what words should look like, teachers should teach them that the way to decide which letters to put down as they are sounding out words is by choosing letters whose names are the same as the sounds they are trying to write (the sound for "are" can be written "r"), or by choosing letters that are made in the same place in the mouth as those sounds ("Went" can be written "ynt" because the sound for "w" is made in the same place in the mouth as

the letter "y") (Tarasoff, 1990, 1992). Some students will be able to apply their graphophonic knowledge easily, while others may need to have this strategy modeled many times and receive more directed guidance.

Reading Recovery teachers provide this guidance by using sound segment boxes, where students first are asked to move counters into boxes that represent sounds of words. Later students write a letter into each box that represents the sound they hear in a word they want to spell. Teachers assist students with this task until students can independently write the correct letters into the boxes. With continued success, the boxes are no longer used, and students apply this "sounding out" strategy in their everyday writing (Clay, 1979). Students, who are using the graphophonic strategy effectively, and whose writing is phonetically readable, are ready to learn new spelling strategies.

One concept that students may or may not develop alongside the letter/sound relationship is the concept of a word. Even students who are proficient at representing sounds with their corresponding letters may print those phonetic sounds in a string and not leave spaces between words. The literature points out several ways for teachers to help students develop the concept of a word (Gentry & Gillet, 1993; Powell & Hornsby, 1993; Tarasoff, 1990, 1992). One way is for teachers to point to each written word as it is read during shared reading, such as from big books, poems, posters, and messages on chart tables. Students will learn through repeated readings that words are separated from each

other by spaces, and they will imitate the pointing to each word when they reread those texts (Gentry & Gillet, 1993). When teachers write in front of the class, they can model how to leave spaces when writing texts by putting two fingers after each written word. Students will begin to do the same. Tarasoff (1992) states, "Much of what children learn is acquired through watching and imitating others, especially people they like and admire" (p. 26).

Gentry and Gillet (1993) suggest several activities that show how stories and poems and other writing are made up of words. One activity asks teachers to copy a sentence from a familiar story onto a strip of paper and then to cut the strip into individual word cards. Students are then asked to reassemble the word cards into the original sentence. Tarasoff (1992) takes this activity further and suggests that students write their own sentences and cut the words apart, only to reassemble them again in the correct order.

It takes some students only one or two demonstrations before they leave spaces between words when they write, and it takes others repeated demonstrations. Students need to have many meaningful writing opportunities to practice leaving spaces, and it is certain that through those opportunities all writers eventually learn the concept of a word.

The use of visual memory plays an important part in learning how to spell. Since not all English words are spelled according to their individual sounds, students need to learn many words by remembering the way they look or

relating them to a familiar visual pattern. Students whose writing shows very effective use of the graphophonic strategy to spell words are ready to be taught how to use their visual memories of words to spell. Calkins (1994) suggests that teachers begin to teach this strategy by pointing out to students that they already know how to spell many small words correctly because they have used them often and seen them in books. These include words such as "you," "the," and "like." Teachers can then tell students that knowing how words look will help them write from memory and more automatically.

Several authors suggest activities that increase students' awareness of visual patterns in words, so they have a base of knowledge from which to draw when trying to visualize a word (Gentry & Gillet, 1993; Scott, 1994; Tarasoff, 1990, 1992). These activities include finding little words in longer words, such as "tea," "each," and "her" in "teacher," listing words that fit a similar spelling pattern on charts, such as a chart for words that end in "-ight," and identifying rhyming patterns that have two different spellings, such as "-ane" and "-ain" or "-eat" and "-eet."

Many students begin to use their visual memories to spell after very little instruction, but many others first need to be taught how to visualize words. Gentry and Gillet (1993) suggest an activity that asks students to remember details of a picture after seeing it for thirty seconds. The premise is that students will form a visual image of the picture in their minds and then recall the details even after

the actual picture is removed. Tarasoff (1990, 1992) suggests a similar activity to teach visualization of words. The activity begins with teachers writing a familiar sight word on the board and drawing a TV screen around it. Teachers then ask students to look at the word carefully, as if they were watching TV, and to continue to keep a picture of the word in their minds even after the TV is turned off; that is, after the word is erased. After a few seconds the word is erased, and students are asked to see the word that is now a picture in their heads and to write it down the way they remember it. By repeating this visualization strategy often, teachers encourage students to visualize familiar reading words when they want to write. Some students are more efficient than others in using their visual memories to spell words, but with the guidance of teachers all students can learn to use this strategy and develop as spellers.

The last major spelling strategy that writers need to learn is the use of morphemic knowledge. "When spellers solve spelling problems by using information they know about words and word parts, they are using morphemic knowledge" (Powell & Hornsby, 1993, p. 28). This includes inflectional endings, such as "-ed" and "-ing", prefixes and suffixes, contractions, compound words, and possessives, to name a few. Beginning writers usually are not ready for such meaning-related knowledge, although they use it in their oral language all the time (Tarasoff, 1992). Beginning writers use mainly graphophonic and visual knowledge, and learning the rule for adding suffixes will not make much sense to

them. Gentry & Gillet (1993) point out that students may be ready for lessons on morphemic knowledge around third grade.

That does not mean that some beginning writers should not be taught meaning-related spelling strategies. Students who write "jump~~t~~" and "landid" will certainly benefit from a lesson on "-ed" endings and what it means to use them.

Teachers can point out words in books that end in "-ed" and encourage students to use that ending when they spell words that show an action that already happened (Tarasoff, 1992).

Students will eventually develop all three of the major spelling strategies just described (graphophonic knowledge, visual memory, and morphemic knowledge), and their spelling will become more and more standard, but they need the guidance of teachers who will decide when students are ready to benefit from each strategy (Powell & Hornsby, 1993). "The focus is upon teaching children according to their individual needs" (Norris, 1989, p. 106), and teachers must decide what those needs are. They look at students' written products and determine when students will benefit from instruction related to letter names and letter formation, letter sounds, the concept of a word, the way words look, or word meanings. When they have determined what kind of instruction is developmentally appropriate for each child, they will provide that instruction and thereby facilitate each child's spelling development.

Teaching proofreading strategies.

One more thing that teachers can do to facilitate spelling development in beginning writers is to teach

strategies for proofreading or editing for spelling. Many authors address the need for even beginning writers to learn how to proofread their own work for several reasons (Bean & Bouffler, 1987; Calkins, 1994; Gentry, 1982; Graves, 1994; Powell & Hornsby, 1993; Tarasoff, 1990, 1992; Wilde, 1992). The reasons include that proofreading is an essential step in the writing process, where temporary spellings are changed to standard ones, that it teaches students to be critical readers of their work because they have to focus on the visual features of words, and that it gives them ownership of their texts from beginning to end.

Powell and Hornsby (1993) suggest that teachers demonstrate the proofreading process to students by displaying an unnamed student's piece of writing for the class and modeling how to check for spelling. By watching, students will learn the procedure and begin to follow it on their own papers. Teachers can also teach proofreading by modeling their own writing of a memo to a colleague or a letter to parents in front of the class and then revising and checking it for spelling. Students would see how an authentic text is taken through the writing process, from drafting, to revising, to editing, to publication.

Beginning writers obviously will not be able to standardize all their invented spellings independently, and teacher expectations for proofreading or editing need to be adjusted to fit students' development (Gentry, 1982; Wilde, 1992). At the very least, young writers can begin rudimentary editing by rereading their texts and checking for

very basic things, such as name, date, and if the word "like" is spelled correctly. These basic editing items can be on a checklist that changes as children's knowledge changes. After editing for these few items, students can put their writing into a basket labeled "finished pieces," signaling that they are ready to meet in a conference with the teacher for assisted editing (Calkins, 1994).

The literature on spelling includes varying opinions regarding the actual procedure for rereading a text and proofreading it for spelling. Powell and Hornsby (1993) and Tarasoff (1990, 1992) suggest that students reread their texts from the end to the beginning and from right to left, in order to remove the meaning behind the text and focus on each word's visual features. Bean and Bouffler (1987), however, advise against the backwards reading because it is too laborious for beginning writers, many of whom would not be able to read their texts that way at all due to the lack of spaces between words and the phonetic spellings. They favor using a ruler to focus on one line at a time.

While rereading, Powell and Hornsby (1993) and Tarasoff (1992) suggest that students look at each word carefully and ask themselves, "Does it look right?" If a word does not look right, and they think it needs to be changed, they should circle or underline it. Calkins (1994) prefers that children lightly underline those words because circling them destroys the appearance of the draft. After going through the whole text, looking at each word, and marking the ones that may need correction, students should go back to each

marked word and try to correct it.

Depending on their individual reading abilities, some students may be able to locate some of the correct spellings in the external resources mentioned before, and some students may need help in standardizing all their spellings. Several authors suggest that before students consult external resources, they try to spell the marked words in two or three different ways, look at each alternate spelling, and see which one looks right. This strategy is often called "Have-a-go" and is useful for visual learners, who may be able to spot a correct spelling after seeing it among others (Bartch, 1992; Calkins, 1994; Powell & Hornsby, 1993; Routman, 1988; Scott, 1994; Wilde, 1992).

After students have independently proofread their work according to the established procedures, they should meet with the teacher or other adult in a one-on-one conference to finalize the editing process. The literature offers several ideas of what teachers can do about spelling during these editing conferences. Zutell (1978) suggests that teachers start by praising students for their spelling efforts and any words that they were able to correct themselves. Calkins (1994) advocates the use of the "Have-a-go" strategy with the teacher present, who then points the student in the right direction to locate the correct spelling of the word.

Once the correct spelling has been located, the teacher compares it to the invented one, highlighting the similarities between the two spellings. This comparison enables the student to form a new hypothesis about how words

are spelled, and it may encourage the student to remember the standard spelling for the future (Powell & Hornsby, 1993; Routman, 1994; Zutell, 1978). Clay (1993b) believes that students will remember the spelling of a new word, especially a high-frequency word, when teachers ask them to write it over and over several times during the conference, in different locations on the page, or on a chalkboard, and again another day. This helps students practice producing the sequence of letters for that word and remember it in every detail.

Beginning writers do not need to change or correct every invented spelling on their own, or even during a conference. Tarasoff (1990) suggests that only two or three words are corrected by the student with someone's help, especially those words for which the student shows an interest or those that are used most often. This will allow for retention of those few words. Teachers can change the rest of the spellings after the conference and transcribe the text into standard spelling, so the writing can be published and read by others (Graves, 1983; Powell & Hornsby, 1993).

Students' proofreading abilities will increase with repeated practice. Teachers can set the guidelines and expectations for how much proofreading students should do on their own or in a conference, and the expectations are determined by the writers' levels of development. Writers of any age can learn some proofreading strategies, and their frequent application will help facilitate spelling development.

In conclusion, there are a variety of things teachers can do to facilitate spelling development in their beginning writers. They can provide many opportunities for meaningful writing, so that students can apply their spelling knowledge and strategies. Teachers can help students develop a positive attitude toward spelling, so that students can write with confidence and know that standard spelling is not required from the start. Teachers can model and encourage invented spelling and the use of external resources, so that students will become independent writers, which is very important in a writing workshop approach. Teachers facilitate spelling growth by teaching developmentally appropriate spelling strategies, such as the use of graphophonic knowledge, visual memory, and morphemic knowledge, so that students' spellings will show changes towards conventional spellings. And lastly, teachers can teach proofreading strategies, so that students can become critical readers of their work and begin to edit their own texts.

Teachers can use a writing workshop approach to address all these spelling needs, which their students will have at different times throughout the school year. The writing workshop can be the vehicle through which teachers deliver instruction. Mini-lessons at the start of the workshop can address a spelling need that the whole class has, while small group instruction for a few with a common spelling need can take place while other children are writing on their own. Opportunities to instruct one-on-one are created when

teachers walk among the writers, stopping here and there to provide encouragement or guidance, and when teachers conduct individual conferences to help edit a piece for publication.

Teachers need to take advantage of the many planned and unplanned opportunities throughout the school day, and especially during writing workshop, to address spelling.

Hamer (1992) states,

Being able to identify when a child is ready for learning and what should be modeled is the mark of the experienced teacher. For some children a particular point may need to be modeled over and over again. For others, once shown never forgotten (p. 69).

How Is Spelling Progress Assessed and Evaluated?

The review of the current literature about spelling instruction in a writing workshop approach addresses several ways to assess and evaluate the spelling growth of beginning writers. "Assessment refers to the gathering of information, or data collecting. Evaluation refers to the process of examining the evidence and finding value in it. It is here that judgments and interpretations are made on the collected data" (Batzle, 1992, p. 12). The purpose of spelling assessment and evaluation is to get to know individual students, what they know about spelling and what strategies they use, in order to provide them with appropriate instruction that enables them to become competent and confident writers (Calkins, 1994; Tarasoff, 1990).

Since spelling is an integral part of writing, whole language proponents believe the best way to assess spelling is within the context of meaningful writing and as a natural part of the writing process, where students are rarely able

to tell the difference between learning and evaluation (Batzle, 1992; Powell & Hornsby, 1993; Routman, 1994; Sitton, 1990; Tarasoff, 1990, 1992). Tarasoff (1992) states, "Evidence of what children know about spelling is gained by examining their writing, and listening and watching as they write" (p. 22).

Bean and Bouffler (1987) and Tarasoff (1990) talk about balanced assessment, which includes assessing both the process and the products. Process assessment includes observing the spelling process during actual writing and asking students questions that provide insight into the strategies and knowledge they use. These questions might be, "What do you do when you want to spell a word?" or "How do you know if a word is spelled wrong?" (Tarasoff, 1990, p. 80). Product assessment refers to the written texts that students produce. These texts show which words students are able to spell conventionally, which words are close approximations, and whether any spelling changes were made during the writing process. Both types of assessments are important in helping teachers learn about students' spelling knowledge.

Portfolio assessment.

Spelling assessment and evaluation requires teachers to develop systems for finding out about their students. "Efficiency is one of the most important characteristics of a good system of record-keeping" (Calkins, 1994, p. 323). An efficient and popular data collection system for the writing workshop approach is portfolio assessment. A portfolio is a

collection of those items that show students' spelling growth over time. The collection can be saved in boxes, scrapbooks, binders, file folders, or anything that keeps the portfolio items together and easily accessible for review (Batzle, 1992). Calkins (1994) refers to a portfolio as a "record of the writer's journey" (p. 324), and Gutknecht (1992) says,

A portfolio is a public demonstration of the child's development as a literate person and as a learner. The portfolio contains the examples of a child's work that s/he sees fit to display and talk about to others in much the same way an artist or architect keeps a collection of works (p. 218).

Writing samples.

There are a variety of assessment tools that teachers can use to learn about students' spelling knowledge and keep in portfolios. One assessment tool is the writing that students produce. Teachers can keep periodic samples of their students' writing in portfolios. The writing can come from a variety of genres, such as poetry, narrative stories, informational reports, and many more. The literature points out that writing samples should be dated and include rough drafts as well as student-edited final drafts (Powell & Hornsby, 1993; Wilde, 1992). Teachers can look at these samples and analyze them for spelling strategies that were used to create them, for spelling patterns over time, for words that are spelled correctly or are close approximations, and for changes in spelling strategies (Gentry, 1982; Powell & Hornsby, 1993; Zutell, 1978). Wilde (1992) states that "growth is obvious from just the briefest look at how a child's spellings have changed over time" (p. 150).

Record keeping tools.

Other tools that can be saved in portfolios and used to assess students' spelling progress are based on records kept by teachers after analyzing writing samples, observing students, or talking to students. These tools include cumulative word lists, observation checklists, anecdotal records, and self assessment surveys. A cumulative word list can contain words that students know how to spell already, words that students learn each week, and/or words that students would like to learn (Wilde, 1992). Clay (1979, 1993b) refers to the words that students can write correctly without any help as the students' cumulative writing vocabulary, which will grow and grow. She keeps a weekly record of these words for Reading Recovery students and uses the list as a guide to what she can ask students to write independently in their stories. She also uses the list as a starting point for new words to teach because new knowledge should build on existing knowledge. Students who can spell "is" already may be introduced to "it" and "in," which may soon be on the cumulative list as well. Routman (1994) suggests that teachers keep an "I Can Spell" sheet with students' writing folders, where mastered words are listed, and the list is periodically sent home to parents. Hamer (1992) points out that teachers can get the words for the word list when they look at students' writing samples or when they rove around the room and notice students spelling words correctly without help. The list can be a topic of discussion during spelling conferences with students, and it

can be used to determine future spelling needs for students.

An observation checklist, which several authors consider part of process assessment (Batzle, 1992; Bean & Bouffler, 1987; Graves, 1994; Powell & Hornsby, 1993), can be used to record observations made while students are engaged in writing. On the checklist teachers could list certain spelling behaviors or spelling strategies that they may expect to see their students using. As teachers observe students during writing workshop, they check off which behaviors are observed and on what date. Over time growth in spelling knowledge should become apparent. Graves (1994) suggests using an observation checklist that contains categories, such as "words spoken," to show what the observed student intends to write, "sounding line," to show how the student breaks the words into sound segments, "writing line," to show how the student spells those sounds, and "resources used," to show which external resources, if any, the student consults to write any of the words needed.

Anecdotal record keeping is a very popular assessment tool during writing workshop. Anecdotal records are brief narratives that tell about students' spelling strategies, concepts of literacy, and attitudes (Powell & Hornsby, 1993). Teachers can take anecdotal records as they move among the writers and observe without intervening. They can plan whom to observe but should also be prepared for unexpected opportunities to observe any students who are doing something noteworthy (Powell & Hornsby, 1993). Teachers often carry around a clipboard with a label or index card for each

student, on which they write and date their observations. A notebook or composition book with a page for each student serves the same purpose (Calkins, 1994; Powell & Hornsby, 1993). The labels can be stuck on a folder inside the portfolio, and index cards and notebook pages can just be dropped into the portfolio. Wilde (1992) believes that these anecdotal records, if taken while teachers are unnoticed, show what students do in natural settings, and are important in helping teachers best understand children's knowledge and learning.

Self assessment surveys can also provide a record of spelling growth over time. Self assessment allows students to be part of the assessment process, and it gives teachers information about students' perceptions of their spelling abilities. Students can conduct a self assessment every three months or so by comparing an older piece of writing with a newer one and analyzing it for spelling changes (Powell & Hornsby, 1993). Wilde (1992) suggests that students write periodically - younger students can be interviewed - on topics such as "What I know about spelling" and "What do I do when I don't know how to spell a word?" Teachers will be able to find out what students' attitudes about spelling are and what kind of spelling strategies they believe they are using. This information is important because teachers can use it to help change negative attitudes and teach new strategies.

Informal spelling test.

One final assessment tool is an informal spelling test,

which some authors believe is one more piece of data that adds to the overall assessment (Gentry & Gillet, 1993; Powell & Hornsby, 1993; Tarasoff, 1990). Teachers can dictate a short sentence or list of common words to students and analyze their miscues based on the number of correct phonemes instead of on the number of correct words. They can compare the spelling test spellings with context writing spellings and may find that some students can write some words in isolation but not in context, and vice versa. Gentry and Gillet (1993) suggest that teachers use the developmental spelling test, which helps teachers determine the specific stage of development at which a child is functioning at a particular point in time. Gentry and Gillet claim that the advantages of this test over traditional spelling tests and even over writing samples are that it is quick to administer, easy to analyze, and it provides the same results as an analysis of invented spelling in collected writing samples.

The test has 10 words (monster, united, dress, bottom, hiked, human, eagle, closed, bumped, type), and it is given to the whole class of five through seven year olds or individuals during workshop, and the analyses of the students' spellings of those words can determine each student's developmental level if the majority of spellings are in one spelling stage. After administering the test, each spelling is analyzed and placed in a stage (precommunicative, semiphonetic, phonetic, transitional, conventional) that typifies specific writing behaviors. The number of words that fall in each stage are added, and the

one with the most is probably the developmental level of the student. Teachers can use this information to individualize spelling instruction, and the results of this periodic test can be saved in the spelling portfolio to document growth over time. Teachers who use spelling tests need to remember that they do not show the same results as a writing sample or some of the other assessment tools, and they do not lend themselves well for use in a writing workshop approach to teaching writing and spelling.

In conclusion, teachers of beginning writers have a variety of options regarding assessment tools. Writing samples, checklists, word lists, anecdotal records, and self assessments can all be collected during writing workshop and saved in a portfolio throughout the year. Teachers probably should not limit their spelling assessment to one or two tools, but use a variety of them. A combination of assessment tools will provide teachers, parents, and students with valuable information regarding the students' spelling attitudes, knowledge, and strategies. This information can then be used to determine future instructional needs, which is the main purpose of assessment and evaluation.

How Are Parents Informed About Spelling?

Most research that addresses spelling instruction usually also addresses communicating with parents. Parents are an important link in the home-school connection, and when it comes to spelling instruction, teachers want parents on their side. This is especially true in classrooms where traditional approaches are being replaced by writing workshop

approaches. Routman (1994) states that parents rarely question the traditional approach to spelling because they probably learned to spell through that approach, and they are not generally aware of the research supporting a developmental view of spelling. Bean and Bouffler (1987) state that many parents expect that children will be given lists of spelling words to learn, and if such lists are not brought home, they feel the school is failing in its job. It is the teachers' responsibility to inform parents how spelling is taught, to reassure them that children will develop standard spelling without lists, and to elicit their help at home. Without the support of parents, it is very difficult to implement a developmental spelling program.

There are several different ways of informing parents of the spelling program used at school. Bean and Bouffler (1987) and Routman (1994) suggest that teachers inform parents at the beginning of the year of their program by sending them a letter in which they make it clear that standard spelling is important and expected, but not for rough drafts. Wilde (1992) suggests that the letter include a definition of invented spelling and what kinds of invented spelling parents might see in their children's writing, such as strings of random letters and phonetic spellings. Powell and Hornsby (1993) encourage teachers to send home weekly newsletters to tell parents about new spelling strategies that the students have learned.

Open house is a perfect opportunity to share the spelling program with parents, where they can see spelling

development in progress in displays around the room (Routman, 1994). Powell and Hornsby (1993) take the open house idea even further and suggest organizing a parent information session, where teachers demonstrate spelling strategy lessons or compare the traditional approach with the workshop approach. Parents would be able to see specifically how the two methods differ.

Spelling progress can be shared with parents at conferences. Powell and Hornsby (1993) suggest asking the parents to bring in evidence of their children's spelling growth in writing done at home. Teachers and parents can then compare it to the writing the children have done at school. Advocates of portfolios suggest that teachers share the portfolio collections with parents, pointing out how their children's spelling has grown over time, which strategies they are using, and which words they can already spell conventionally (Batzle, 1992; Chavers, 1988; Graves, 1994; Hamer, 1992; Powell & Hornsby, 1993). After seeing word lists, anecdotal records, and spelling checklists, parents will be reassured that teachers are not neglecting spelling.

Routman (1994) and Powell and Hornsby (1993) suggest inviting parents to observe the classroom during writing workshop time. Parents can witness in person how students help themselves through spelling problems and what strategies teachers are teaching to various students. Parent volunteers who come on a regular basis can even assist during workshop time by encouraging students and helping reluctant writers

with "Have-a-Go" sheets and proofreading (Routman, 1994).

By keeping parents informed through letters, open house, conferences, and inviting them to the classroom, teachers are able to show them that it is possible to teach spelling while still focusing on meaning. Once parents realize that spelling can be taught successfully through the writing workshop approach and without weekly spelling lists and tests, they generally approve of the non-traditional spelling program. Bartch (1992) sent a spelling survey to the parents of her students at the end of the school year, and the parents were excited about her new spelling program without weekly tests. They also reported that their children had a better attitude about spelling. Having teachers and parents on the same side when it comes to spelling instruction provides beginning writers with all the support they need to develop effective spelling strategies and become competent spellers.

Literature Review Conclusion

In summary, this literature review addresses five issues that teachers are faced with when deciding on a spelling instruction model that works for them and their students and leads to optimal spelling growth in students. The first issue addressed in the literature review is the idea that spelling is a complex developmental process. This process has been interpreted in several ways. It has been divided into stages and levels that describe the type of writing students produce, it has been described in terms of how the writing reflects concepts or knowledge learned about

spelling, and it has been described in terms of the strategies that students use to spell. The developmental spelling process spans from early childhood all the way into adulthood, and students' spellings take on more and more complex characteristics along the way.

The second issue is organizing for spelling instruction. The research suggests that spelling should be part of the writing program, such as the writing workshop approach. Spelling instruction can take place at several different times during the workshop, from the opening mini-lesson to the individual editing conferences. An important point to remember in organizing for spelling instruction is that teachers have to convey to their students when it is important to spell conventionally, and they have to establish a classroom environment that enables students to develop as spellers.

The third issue in this literature review revolves around the specific things that teachers can do to facilitate spelling development in their students. Teachers can provide many varied opportunities for writing, which gives students a forum in which to learn about spelling. They can also help students develop a positive attitude toward spelling by accepting and praising their efforts. Teachers can encourage writing independence by teaching students to use invented spelling and outside resources, such as peers and reference books and charts. A very important role of teachers is to teach students the use strategies that will produce a qualitative change in their spellings. One final task is for

teachers to show students how to proofread their work and be able to produce a piece of writing that contains standard spellings.

The fourth issue in this literature review concerns assessing and evaluating spelling progress. The research suggests that teachers collect data about students' spelling knowledge and strategies and save it over time in a portfolio. The assessment tools from which teachers can choose include writing samples, checklists, cumulative word lists, anecdotal observation records, self assessments, and even spelling tests. After analyzing and evaluating the collected data for each student periodically, teachers will have the information needed to provide appropriate spelling instruction.

The fifth and last issue in this literature review deals with communicating to parents. The research stresses the importance of informing parents about non-traditional spelling programs through letters, open house, and hands-on workshops. Parents can become part of the writing workshop routines by visiting and volunteering, which gives them a first-hand view of spelling instruction in action. They can find out about their own children's spelling progress by attending conferences and discussing their children's portfolios with teachers.

Out of the literature review comes a need for the project that provides teachers with a resource for including spelling instruction in a writing workshop approach. This resource will provide information about the developmental

spelling process and what kind of spelling beginning writers may use. It will also provide an organizational model for teachers of beginning writers. It will provide answers to such questions as "How do I make spelling part of a whole language approach?" and "How do I organize a writing workshop?" and "What do I need to do to help students move from prephonetic to phonetic writing?" The resource will present instructional ideas and strategies to teach students at various points of development, in order to help them move along in spelling, and it will supply information to assess students' spelling progress. Lastly, the resource will suggest ideas for communicating a meaning-based spelling approach to parents.

The resource will not be a prescribed spelling program to follow. Instead it will present ideas that have shown to be effective in the writing workshop approach. Teachers who use this resource may need to adapt some of the suggestions to fit the needs of their classrooms, but the overall hope is that teachers will feel comfortable enough using the resource to address spelling instruction, so that they will not want to go back to traditional spelling instruction approaches.

GOALS AND LIMITATIONS

Goals

The first goal of this project is to provide teachers of beginning writers with a spelling resource that will assist them in incorporating spelling instruction into a meaning-based writing program, specifically the writing workshop approach. The spelling resource will contain information to help teachers become familiar with the developmental spelling process, organize for spelling instruction in a writing workshop, facilitate spelling progress in their students, learn to document spelling growth through authentic assessment, and communicate with parents about spelling. Teachers will be able to compare their students' writing to descriptions of developmental spelling behaviors, in order to determine their students' spelling needs. Then teachers can choose from a variety of ideas, strategy lessons, and activities that facilitate students' progress to the next stage of spelling development.

The second goal of this project is to help beginning writers develop spelling strategies to enable them to focus on creating meaning when writing, rather than stumbling over spelling. By teachers following or adapting the suggestions in the spelling resource, it is hoped that students will develop a positive spelling attitude, become increasingly more independent in solving spelling problems, and show growth in spelling ability.

Teachers who use this spelling resource should know that it is just a resource with suggestions, not a prescribed

spelling program. The ideas presented in the spelling resource are based on the literature review regarding integrated spelling instruction. Individual teachers still need to make decisions regarding their own students and what will work best for them.

Limitations

There are several limitations of this project. One limitation is that the project is not beneficial for teachers whose teaching philosophy does not include whole language practices, such as centering instruction on the communication of meaning, giving students choices, or authentic assessment. Teachers who focus on decoding or skills in their approaches to teaching writing will not be able to use the spelling resource because it will not provide them with spelling lists or spelling rules to present to their students in sequential order.

Another limitation is that the project focuses on only one convention of writing, namely spelling. Other writing conventions, such as punctuation, capitalization, grammar, organization, and style are not addressed. Although whole language teachers do not advocate isolated skill teaching, they do teach specific skills in context when the students show a need for them. Since the type of spelling students use determines their effectiveness to communicate meaning through writing, teachers need to provide spelling strategies that will enable students to communicate effectively with the readers of their writing. This is especially true for students whose writing contains random letters and very

little letter/sound relationship. The strategies to improve students' punctuation or grammar, although they are equally as important as spelling and may be similar to spelling strategies, are not included in this spelling resource.

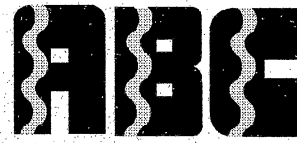
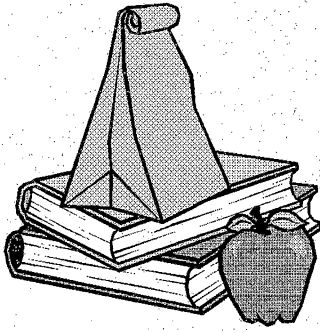
A third limitation of this project is that the suggestions for facilitating spelling development are intended for teachers whose students exhibit typical writing behaviors for beginning writers (those whose writing ranges from scribbling to random strings of letters to sound/symbol relationships). Teachers of more advanced writers (those whose writing includes many standard spellings and knowledge of complex spelling patterns) will probably not benefit from this resource as much because the strategies taught to help their students progress in spelling are somewhat different. These teachers may have to adapt some of the ideas presented to fit the needs of their more mature spellers.

A final limitation of this project deals with the interpretation of the spelling resource's language and the application of the suggested activities. It is possible that teachers may misinterpret the resource's intent and expect to find prescribed steps to spelling instruction. It is also possible that they may misdiagnose the writing behaviors of their students and teach inappropriate strategies to their students, which might result from a mismatch between their interpretation of the students' spelling needs and the resource's communicative intent. Since whole language teachers do not rely on a prescribed program to tell them how to teach spelling, they have to decide for themselves what

their students' needs are, and some teachers are more capable of doing that than others, which influences the types of strategies they use with their students.

In conclusion, the spelling resource is intended for those teachers who espouse a whole language philosophy, teach spelling to beginning writers, are willing to try the writing workshop approach in helping their students develop spelling strategies that foster growth, are looking for ways of documenting spelling growth, and need ideas about communicating their spelling instruction model to parents.

APPENDIX A
A SPELLING RESOURCE FOR TEACHERS



A Spelling Resource For Teachers

by

Gabriele Lenz

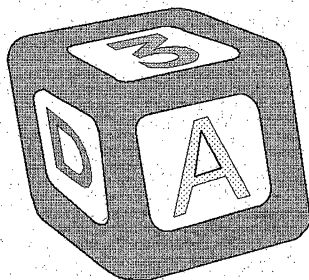


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MY JOURNEY WITH SPELLING

My journey with spelling began many years ago when I was a kindergarten student in Germany. I don't remember if I knew how to write my name yet, but I do remember a particular incident with a little boy, who tried to convince me that he knew how to write his name. We were both standing by the writing table that had lots of different kinds of paper on it, as well as crayons, markers, and pencils. This little boy proudly announced that he knew how to write, and he reached for a crayon and began to scribble some marks on his paper that contained swirls and loops. He showed me his scribbles and professed that it said his name, Edgar. I looked at it and confidently replied, "That's not real writing. That's scribbling." Then Edgar asked me to write his name, and I recall answering something like, "I don't know how to write your name, but I do know that that isn't it. I was very proud of myself for not letting Edgar fool me and for recognizing when something wasn't real writing. I'm sure Edgar eventually learned how to write his name the "real" way, and I eventually learned that scribbling is real writing for five-year-olds.

My next recollection with spelling is from third grade, still in Germany. Spelling tests involved the teacher dictating a paragraph, which we had to write with correctly spelled words. Now and then Mr. Hertkorn, our teacher, had us exchange papers with our neighbor, who then checked our paper and wrote at the top how many words we missed. My best friend, Carmen, and I were very good at these dictations,

rarely missing any words. Our classmates envied us. One day Mr. Hertkorn dictated a really difficult passage, and during the test I looked over at Carmen's paper and saw that she was having trouble with the same words that I was unsure of. I was very worried about my reputation as a good speller, as I'm sure Carmen was, and when Mr. Hertkorn asked us to exchange papers to correct, we simultaneously looked at each other with pleading eyes, and, after a brief pause, nodded at each other with reassurance. As Mr. Hertkorn displayed the correct spellings on the chalkboard, Carmen and I erased each other's errors and replaced them with the correct spellings, pretending we had gotten them right. I think we left one error in place so it wouldn't look suspicious, but our reputation as good spellers was intact. Fortunately we were not caught that day, and fortunately we never felt like we had to cheat again. As a teacher, I don't want my students to feel that they have to cheat in order to be considered good spellers.

When my family moved to the United States during sixth grade, I was not only confronted with a new language, but also a new way of doing spelling. Each week we had a list of words that were similar in some way, and each day we had to do something with those words. One day we had to write each word five times, and another day we had to match them to sentences. On Fridays we had a test, where the teacher read each word twice, and we had to write it correctly in list format. The teacher collected the tests, corrected them, and returned them to us with a percentage written at the top. I

didn't know much English that year, but I did very well on spelling tests because I was able to memorize words easily. I had to put more effort into remembering what they meant because each week, after bringing my new spelling list home, I had to look each word up in a German/English dictionary and find out what its German equivalent was.

I attribute part of my success in spelling during that year and the years since then to my diligent work with learning the meanings of words and word parts, some of which have the same roots in German and English. I was able to apply my knowledge of German to the learning of English. I attribute another part of my success in spelling to the fact that German has a more consistent one-to-one sound/symbol relationship in the way words are spelled than English does, and when an English word has a cognate in German, I am able to sound it out in German and just about spell it right in English. Needless to say, I was always a good speller, and even as an adult, my reputation as such often prompts my friends and colleagues to ask me how to spell this or that word, and I can usually get it right. I do use spell check and a dictionary for those times where my own spelling knowledge isn't enough.

As a teacher, I have also taken a journey with spelling. I don't think I've taught spelling the same way two years in a row in my eight years as a first or second grade teacher. My first year as a teacher was a struggle in many ways, and I knew of no other way to teach spelling than to follow the spelling book. Everything was scripted and "spelled" out for

me; all I had to do was follow the plan, which I did. My second graders were responsible for memorizing words that rhymed with "cat" the first week, words that rhymed with "hen" the second week, and so on. I found that those students who did their homework and spent time with those words usually did very well on Friday's spelling test, while those students who had not spent any time with the required words did poorly. I still remember my frustration, though, when students who had done a great job on the tests week after week misspelled the same words when they wrote in their journals. I couldn't quite understand how that happened, except to think that they weren't concentrating when they wrote narrative text.

With the advent of whole language during my second year of teaching also came the disappearance of spelling books. By then I had realized that they were not as useful as I had thought my first year, and I wanted to change my spelling instruction anyway. One of the big words in whole language is "integrated," and so I thought I would integrate spelling words into narrative text and teach spelling the way I had been taught in Germany, through dictations. Each week I came up with clever sentences that incorporated the spelling words, which I chose from the old spelling book. Instead of writing "cat" and "hen" in isolation, the spelling test required my students to write "I see the cat," and "I see the hen." I figured that students would remember the words better if they learned them as part of a text. The results were the same. Several weeks after students spelled words

correctly in my dictated sentences, they misspelled the same words in their own sentences. I did notice, however, that they were beginning to spell "the" and "see" correctly, although these words were not necessarily the words I was testing.

In subsequent years I changed my spelling instruction format a little bit more each year. I still followed the basic traditional approach of providing the words on Monday and testing them on Friday, but I was trying to make spelling more relevant to my students and integrate it with other areas of language arts. One year I dictated a theme-related poem each Friday that we had read all week, and I assigned spelling grades as usual, by calculating the percentage of correct spellings. My hope was that students would at least learn to spell the little words like "and," "the," "is," and so on, because they appeared in each poem at least four to five times. Yes, there were some students who excelled in this type of spelling test, but those students probably would have excelled in any kind of spelling program. There were also many students who agonized each Friday and failed the spelling test by traditional standards. What I learned from this experiment is that many students were unable to read the poem by Friday, much less learn how to spell it. I wanted all of my students to be successful and continued to search for a way to make it possible.

When I began teaching first grade, I gave up on the whole spelling instruction idea because I had come to realize that there is no list of words or poem that all of my

students can spell correctly. I didn't know how to individualize spelling instruction without devoting two hours of the day to that subject alone. I didn't need spelling grades anymore, either, because our district's report card had become more whole language based. Besides, many of the first graders came to school not knowing all the letters of the alphabet. I knew I couldn't expect them to learn to spell words for which they didn't even know the letter names. My teaching philosophy had changed to more and more whole language views, but I didn't know how to put those views into practice with respect to spelling.

Then I learned about writing workshop and how students spend a large block of time writing on topics of their choice. I believe in giving students choices and providing them with opportunities to write about things that they like and want to share. I also want them to see writing as a process that begins with a rough draft, which is then revised and edited and finally published in some way so it can be shared with others. I saw the writing workshop approach as a vehicle to accomplish those goals. I saw how spelling fit into the editing part of the writing process, and I took the steps to begin writing workshop in my first grade classroom.

Soon students were busily writing every day about various topics and saving their pieces in writing folders. On a rotating basis students had an individual conference either with me or my instructional aide and selected a piece from their folders that they wanted to have published, which resulted in a little book that was shared and then placed in

the classroom library for others to read. During the conference the piece was revised and edited, which included spelling. Only a few spelling changes were made with the students present, and the instruction was in the form of showing the students the correct spelling of the frequently used words. The rest of the editing took place when I typed the stories on my computer at home in preparation for turning them into little books, which the students illustrated. The original pieces of writing were filed in the students' portfolios, in which I looked at report card time to decide how students had progressed.

At the end of that year I felt very good about my writing program, and I saw that students were making progress in all areas of writing, including spelling. They were learning to spell many common words correctly without ever seeing them on a test. They were usually excited about writing, and they really enjoyed getting to share a published book and then putting it on the classroom shelf, where others could read it during reading workshop. I had finally found a way to apply my whole language beliefs about learning to read and write and spell, and I decided to continue using the writing workshop approach in the following year.

I am now conducting writing workshop again in my first grade classroom, but I am looking for ways to improve it. I again teach spelling to individuals when a piece of writing is edited for publication. I also address spelling when I point out phonetic and visual patterns of words when we are reading a big book or poem together. I do not, however, have

any spelling assessment tools in place at this time, nor do I feel that I am addressing spelling needs adequately. The individual attention that my students get when editing a story only occurs once every few weeks, and I feel like I should address spelling more often and sometimes in small groups. I do believe that the traditional approach to teaching spelling goes against my philosophy, but I think there must be more that I can do to help my students on the road to becoming competent spellers.

This is how far my journey with spelling has come, and I need some help before I can continue the journey. That is why I have created this spelling resource for teachers of beginning writers. I plan to use it in my classroom and hope that other primary teachers will be able to use it in some way in their classrooms. As a whole language teacher, I am always reflecting on my instructional practices and looking for ways to improve them. After doing an extensive review of the current literature on spelling, I found out that many of the things that I am currently doing in my classroom are considered effective teaching methods and are consistent with whole language beliefs. I also found ways to improve my writing program, including spelling.

The purpose of this spelling resource is to assist teachers like me in incorporating spelling instruction into a meaning-based writing program, specifically the writing workshop approach. The spelling resource contains information to help teachers become familiar with the developmental spelling process, organize for spelling

instruction in a writing workshop, facilitate spelling progress in their students, learn to document spelling growth through authentic assessments, and communicate with parents about spelling. Teachers will be able to compare their students' writing to descriptions of developmental spelling behaviors, in order to determine their students' spelling needs. Then teachers can choose from a variety of ideas, strategy lessons, and activities that facilitate students' progress to the next stage of spelling development.

Teachers who use this spelling resource need to remember that it is just a resource with suggestions, not a prescribed spelling program. The information presented is based on the literature review regarding integrated spelling instruction. Individual teachers still need to make decisions regarding their own students and what will work best for them. It is hoped that by teachers adapting the suggestions in this spelling resource, students will develop a positive spelling attitude, become increasingly more independent in solving spelling problems, and show growth in spelling ability.

THE DEVELOPMENTAL SPELLING PROCESS

Pre-Alphabet Learning

The developmental spelling process begins long before children enter school. They experiment with producing print themselves as a result of making many discoveries about print. These discoveries occur during the time that young children are read to by adults who run their finger under the black marks (words) on the page. One of the first discoveries is that the black marks, not the pictures, tell the story, and in order to tell the story the same way every time, one has to "read" the black marks. This discovery leads to children's earliest writing attempts, consisting of scribbles. They know that these marks tell a story, and they are more than happy to tell it to someone.

Horizontal scribbles appear after children discover that the black marks are arranged horizontally left to right. This behavior develops by roughly age four, provided that the child has been read to and experimented with scribbles already. At first children scribble in both linear directions; eventually they only do it left to right.

Letter-like character writing is the result of the discovery that the scribbled marks on a page are certain kinds of marks, made with lines and curves, but children do not yet know that these marks are called letters. In their own experimentation children now move from scribbled writing to character writing, including letters. A mixture of letter-like signs and symbols continues at least into the sixth year for some children. At this point children may

still perceive writing as drawing or as representing objects rather than corresponding to language at all. Children's letter-like writing for a big object, like a bear, may take up more space than the writing for a small object, like a mouse.

Alphabet/Sound Learning

Strings of random letters (B k T A R s 3 H) appear in children's writing after they discover that the marks are the same on all the pages in all the books and on all the neighborhood signs, and that this helps others to read them. Children develop the concept that print is made up of letters, many of which they are beginning to recognize, name, and produce. They string these letters, and perhaps still some numbers, together randomly to write messages for others. They know that their letters are the marks one needs to use to write, but they do not yet know the letter/sound relationships.

Following strings of random letters is often the appearance of letter names to show words (R = are, U = you). This behavior "demonstrates the emergence of the alphabetic principle, the idea that alphabetic letters say sounds" (Gentry & Gillet, 1993, p. 27). The use of the letter-name strategy persists into third grade for some children, indicating that it plays a lasting part in the spelling development of young writers.

Children's writing begins to show sound/symbol relationships when they "begin to make the transition into realizing that the letters in words aren't random but are

related to sounds" (Wilde, 1992, p. 39), which often occurs before first grade, providing children have already been engaged in ongoing and meaningful reading and writing at home. There is a general progression in which sounds of words are represented in writing. Children generally begin sound/symbol representation with initial consonants, sometimes followed by random letters ("Gbkit" might mean "grass"). Next is the addition of final consonants ("GS" for "grass"), followed by the insertion of medial consonants ("GRS"). Vowels are often left out in this early phonetic representation. When they do appear, they are often place holders ("GRES") because children are unsure of which vowel to choose. Children sometimes decide on the vowel by using the letter-name strategy (For the word "rain" children might write "RAN" because the sound that follows /R/ is the same as the name of the letter "A") or by using articulation cues (For the word "bed" children might write "BAD" because the short e sound is articulated in the same place in the mouth as the letter name "A"). "Consonants are more consistent than vowels in their spelling and are therefore easier than vowels for young writers to spell" (Wilde, 1992, p. 5). This concrete phoneme by phoneme encoding is the major spelling strategy that young writers use even long after they stop reading familiar words in this manner.

Accompanying the awareness of sound/symbol correspondences is the development of the concept of a word as a speech and meaning unit. Up to this point children may still run their words together; perhaps they forget to put

spaces because they are so involved in sounding out, or they are not fully aware of what a word is. Once they grasp that their writing reflects their speech and consists of individual words, then spaces, dashes, and periods appear to indicate the end of one word and the beginning of another. This behavior is also closely tied to the fact that children see these markings in print when they read, and they incorporate them into their own writing.

Spelling Strategy Learning

As children's spelling development progresses, their writing represents increasingly complex spelling strategy learning, beginning with the phonetic strategy. After becoming more familiar with the sound/symbol correspondences, children's writing becomes more and more phonetic. For the first time all surface sound features are represented in the spelling, vowels appear more frequently, and the writer knows many conventionally spelled words already. Children at this point refine their phonics generalizations and begin to include their knowledge of blends (tr, gr, bl, br, and so on), short vowels, consonant digraphs (th, wh, sh, ch), and diphthongs (ai, ay, oa, ow, ou, and so on).

Once children's writing looks more and more like conventional writing, and it includes many correct spellings that are not phonetic, children have developed the concept of visual strategy. This type of writing may appear along with the refinements of phonics generalizations and include the correct use of homophones (two/too, there/their, and so on). There is a further disassociation between spoken and written

language because the writer writes not only what English sounds like, but also what it looks like. Vowels appear in every syllable, silent letters appear, inflectional endings appear (-ed, -ing, -s) and a larger repertoire of conventionally spelled high frequency words is evident. Children's spellings may have all the letters but in reverse order ("huose" for "house"), and nasals now appear before consonants, which were usually left out in more phonetic writing ("lamp" instead of "lap"). Children are also using what they already know about a familiar word in a new situation ("reskyou" for "rescue" shows that the familiar word "you" is applied to a new word). Common letter sequences that represent a sound (-ight, -tion, and so on) may also appear in children's writing, probably because they have seen words with those sequences in print.

When children's writing reaches the point where most words are spelled correctly, children have more than likely developed the concept that spelling is not only related to sound and visual patterns, but also to meaning. "Children's spelling development moves from concrete phonetic spellings to abstract standard spellings, where children have to learn that *please* and *pleasant* are spelled alike, even though they have different sounds, but instead those words are related historically and have the same root" (Read, 1986, p. 41). It is now more difficult to describe a developmental sequence because individual writers have a base of accumulated knowledge and a repertoire of strategies that influence their spelling abilities. Writing now includes mostly correct

spellings, especially of high frequency words, accurate spellings of prefixes, suffixes, possessives, homonyms, contractions, and plural forms. Writers have acquired efficient strategies to spell new words, including irregularly spelled ones, and they use proofreading strategies to locate and correct unconventional spellings.

The use of invented spelling continues even with very mature writers because "invented spelling is not a stage but a strategy used by all writers" (Bean & Bouffler, 1987, p. 16). Wilde (1992) comments, "As writers continue to mature, their spellings change in two ways: Children learn more words, so that their proportion of correct spellings is higher, and their invented spellings reflect increasingly sophisticated knowledge about our spelling system" (p. 51).

The preceding sequence of spelling behaviors is summarized in a list in "Tools for Teachers." It describes a process that children begin before they put a writing utensil to hand and continue after they end their formal schooling. The terminology used to describe this process varies in the literature, but everyone agrees that the process is very complex. Familiarity with the developmental spelling process gives teachers the knowledge to analyze their students' spelling and design instruction according to the students' needs. "It is important to remember that any developmental phases or stages, no matter how they are described, are continuous and overlapping, and children will vary widely in their development within and across these phases" (Powell & Hornsby, 1993, p. 27).

SPELLING INSTRUCTION DURING WRITING WORKSHOP

"Spelling is a tool for writing. The purpose of learning to spell is so that writing may become easier, more fluent, more expressive, and more easily read and understood by others" (Gentry and Gillet, 1993, p. 57). Since spelling is a component of writing, it is best learned when taught within the context of writing. "Without writing, there would be little purpose in learning to spell. Thus, the proper place for spelling instruction is within the writing program. Active daily writing, for real purposes and real audiences, is necessary for spelling development in all grades" (Gentry & Gillet, 1993, p. 57).

In organizing a writing program, teachers often set up writing workshop, a time where students are actively engaged in the writing process on a daily basis. Organizing a writing workshop begins with setting aside a predictable time each day, from a minimum of 30 minutes to as much as an hour. A typical writing workshop includes a five-to-ten-minute mini-lesson, where the whole class gathers on the carpet for a short lesson that addresses a writing need. Following the mini-lesson is usually a time block of 20-30 minutes, where students are busy composing, revising, editing, or publishing stories, poems, reports, letters, or other pieces of writing. Teachers often spend this work time doing several different things. They may spend part of the time walking among the students, stopping here and there, and encouraging their efforts. They may meet with a small group during this time to address a common writing need, which may be related to

spelling. And they may devote some of the time to conducting individual conferences with students, in order to help them with editing a piece of writing.

The large block of work time is often followed by a sharing session of 10-15 minutes, where a few students read either their work in progress or their published pieces to their peers, who make comments and/or suggestions. Other common elements of writing workshop are: students choose their own topics; students receive help from their peers; students meet with the teacher in small groups or in individual conferences to receive needs-based instruction; writing follows a process of drafting, responding, revising, editing, and publishing; and the writing is done for a real audience.

Spelling instruction can take place at several different times during writing workshop. One of those times is during the mini-lesson. Mini-lessons are most effective if they are short, focused on one characteristic to improve writing, gentle in tone, and responsive to the needs of the writers in the classroom. They can be lessons about workshop procedures, or they can be strategy or skill lessons. A mini-lesson on a spelling strategy for emergent writers might focus on demonstrating how to say a word slowly in order to hear some letter names, which should then be written down. A spelling mini-lesson might also focus on a word or word family that many students are using in their writing. For example, emergent writers use the word "my" quite often in their writing and may spell it "mi." A mini-lesson can teach

the correct spelling of that word and others that follow the same spelling pattern (by, fly, sky, cry, and so on). Many students will remember how to spell "my" from just that short lesson, and some will also be able to write "fly" correctly at some later point because they remember the mini-lesson that connects the two similar words. Although mini-lessons should not always focus on spelling, when they do, students will have an opportunity to learn a new spelling strategy or a word that they want to use in their writing.

Another appropriate time for spelling instruction in writing workshop is during the 20-30 minutes of work time following the mini-lesson. The teacher can spend part of that time with a small group of students who have the same spelling need. The time can be used to teach the group a spelling strategy, for which those students are ready, or it can focus on specific words. By forming a small group, the teacher is able to meet the specific spelling needs of a few students and move them along developmentally.

The best time and place to address spelling during writing workshop is during the editing part of the writing process, which usually takes place in individual conferences between the emergent writer and the teacher. While other students are busily writing during the 20-30 minutes of work time, the teacher makes time to meet one-on-one with those students who are ready to take a piece of writing to publication. Since the 20-30 minutes of work time are also ideal for conducting small group lessons, teachers have to decide how to best spend that time. The work time may be

extended to 45 minutes, or perhaps it can be divided into segments, one for walking among and encouraging the students who are writing, one for small group instruction, and one for individual conferences. An instructional aide or responsible parent volunteer can help during any of those segments. Obviously more students can be helped more often when other adults are present.

Since published pieces will be read by others, the conventions of writing, including spelling, have to be in place. The reason for not requiring standard spelling on first drafts is to allow the writer to concentrate on the flow of ideas and not be slowed down by worries over accurate spelling. Up to this point in the writing process invented spelling, including random letters, letter names, and phonetic spelling, has been accepted and even encouraged, but when work is going to be read by others, standard spelling will help the reader gain meaning from the text. "Invented spelling is a convenience for the writer, but conventional spelling is a courtesy to the reader, and dealing with spelling is part of the editing process in writing" (Wilde, 1992, p. 63).

There are several ways to organize an individual conference with students. Conferences can focus on the content of the writing or its design (letter, narrative, report, and so on), on evaluation of student work, or on the process of writing; that is, discussing how the writing came to be. It is during a process conference that the teacher and student may talk about the spelling strategies that the

student is using, and the teacher can tell the student about a new strategy that will help bring about a developmental change. The focus could also be on specific words that the student has tried to spell or is ready to learn. For example, the teacher can compare the student's spelling to the standard one and praise the student for a successful attempt. This one-on-one contact provides very meaningful and student-centered instruction and helps the student most along the path of becoming a competent speller.

Organizing a writing workshop, complete with mini-lessons, small group meetings, individual conferences, and share time is not an easy task, especially for teachers who are used to a writing program that involves students quietly writing on the same topic. Writing workshop is a lively time of the day because so many different things are going on at the same time. It requires students to work independently for much of the time, which does not happen automatically. It is important that teachers establish routines that students can follow, so they do not have to interrupt the teacher during a small group meeting or a conference when they need help.

Teachers who would like to include writing workshop in their school day, must first make many decisions regarding procedures and routines before they ever mention it to students. The decisions they have to make include how to decide on a mini-lesson each day, how long the work time should be, what students will do with their many rough drafts while waiting for a conference with the teacher, how to

decide which students need a small group meeting, how to make sure students are on task when the teacher is not walking among them, how edited pieces of writing will be published and illustrated and shared, and many more. Once teachers have made some of these decisions, they can share them with their students and slowly begin to establish writing workshop routines. They can always be revised and adjusted along the way, depending on the needs of the class. Many whole language teachers find writing workshop to be a successful approach to teaching writing, including spelling, and they continue to use it and look for ways to improve it.

FACILITATING SPELLING DEVELOPMENT

Once teachers are able to determine, by looking at their students' written work, at which point along the developmental spelling continuum the students are working, and once they have set up writing workshop routines to include a time and place to address spelling, they are faced with the question of how to facilitate spelling development. Teachers can answer this question by selecting instructional practices and activities that are most effective in helping to expand their students' spelling knowledge and strategies. "The more children learn about the patterns and strategies of spelling and the more they write and get feedback, the more their spelling will approach conventional spelling" (Tarasoff, 1992, p. 54).

The next question, then, is what can teachers do specifically to help beginning writers learn about spelling patterns and strategies during writing workshop? Teachers need to use both formal and informal approaches in order for students to develop their spelling knowledge and strategies. "Some students will effortlessly learn spelling from immersion in language activities; others will require structured lessons that focus clearly on specific knowledge and on specific strategies" (Tarasoff, 1990, p. 85). The things that teachers can do during writing workshop include: 1) Providing multiple writing opportunities, 2) Developing a positive spelling attitude, 3) Promoting writing independence, 4) Matching instruction to students' development, and 5) Teaching proofreading strategies.

Providing Multiple Writing Opportunities

Teachers are providing multiple writing opportunities on a regular basis during writing workshop, and by doing that, they are informally facilitating spelling development in their students. Frequent writing activities for different audiences and different purposes and on a variety of topics give children the opportunity to explore the spelling system, apply what they know, and construct new knowledge. "Just as children interact with oral language in order to speak, they must interact with written language in order to learn to write and spell" (Gentry & Gillet, 1993, p. 16). By writing, children become aware of the need to attend to spelling because they have to pay attention to letter detail, letter order, sound sequences, and letter sequences, in order to effectively communicate their thoughts and ideas to others.

Many teachers who use a writing workshop approach believe that students will want to write about their personal and interpersonal experiences and do not need to be enticed with story starters or writing ideas. Other teachers believe that providing students with motivational writing activities will enhance their writing, and therefore their spelling, because it allows them to spend more time writing than thinking about what to write. Teachers need to decide on an individual basis from where the motivation for their students' writing should come. Perhaps a combined approach is the answer, especially in schools or districts where students are required to write for specific prompts or in specific domains. I have tried several combined approaches

in my classroom. One consisted of doing writing workshop for three days a week and allowing students to choose their writing topics and domains, while on the other two days they either wrote on required topics, or we wrote a class big book. Another approach involved turning writing workshop into rotating centers, where groups of students wrote on a different topic each day of the week. I have used some, but not all of the following activities:

- * Free choice
- * Holiday-related writing
- * Theme-related writing
- * Writing a letter or card to someone
- * Writing a solution to a problem
- * Choosing a picture to write about
- * Writing words to a wordless picture book
- * Writing the ending to a story starter
- * Making a shape book or pop-up book
- * Writing a new version of a predictable book
- * Writing a report, biography, or personal account
- * Writing a fairy tale
- * Writing in a personal journal
- * Writing a poem or an innovation on one
- * Writing a song
- * Writing a recipe
- * Writing a wish list or list of things to do

Since spelling has the same function in student-selected writing as it does in teacher-selected writing, which is to enable the reader to understand the message of the writing,

it does not really matter how the writing comes to be. The key to facilitating spelling growth is to give students daily and meaningful opportunities to write.

Developing a Positive Spelling Attitude

Teachers can also facilitate spelling development in their beginning writers by helping them develop a positive attitude toward spelling. They can accomplish this goal by making the students feel confident in their own abilities and by helping them accept that standard spelling is not always required. If children have a positive attitude toward improving spelling, progress can be made. "Developing a self-concept of being a good speller comes from experiences. It is essential that children experience success and feel they are learning in their beginning attempts to spell" (Tarasoff, 1992, p. 101).

Teachers can make students feel confident in their abilities by accepting their system of spelling and displaying their handwritten texts alongside a standard typewritten version because it shows them that their spelling is valued. Teachers also instill confidence when they emphasize students' strengths and praise spelling approximations and risk-taking. They can compare the students' spelling to the standard one and point out how many sounds or letters are correctly represented, rather than pointing out the errors. Confident spellers develop when teachers point out what children have learned rather than what they do not know.

Beginning writers can also develop a positive attitude

toward spelling when they realize and accept early in their writing career that standard spelling is not always required. Teachers need to demonstrate that standard spelling is important when someone wants to read the writing. "Learning to spell is only one aspect of developing written communication. In fact, spelling becomes important only in the process of sharing written communication with others" (Tarasoff, 1992, p. 1). Beginning writers should learn that the primary goal for writing is the expression of ideas, and that too much attention at first on spelling may hinder the natural flow of language and result in the view that learning to write is a matter of spelling words rather than of constructing meaning. Teachers can communicate this concept to their beginning writers by encouraging invented spellings during the initial drafting of a piece of writing and assuring them that they will learn when and how to use standard spelling as they learn more about words and writing. When teachers make beginning writers feel confident right from the start, and when they explain the place that spelling has in the writing process, then students will develop a positive attitude toward spelling, which is a very important factor in their spelling development.

Promoting Writing Independence

Whole language teachers who use a writing workshop approach to teach writing can facilitate their beginning writers' spelling development by teaching them strategies that promote their independence during the writing process. A writing workshop approach certainly expects independent

writing from students, as they spend most of the workshop time independently composing rough drafts, revising, or editing their pieces in progress, while teachers meet with small groups or conduct individual conferences. In order for students to work through spelling independently, they need to know and apply strategies that will allow them to work without the help of teachers. Two major strategies that they can use are invented spelling and external resources.

Invented spelling, also called temporary spelling, is a strategy that all writers use, even adults, when they do not know the standard spelling and do not want to interrupt the flow of writing to find it. Beginning writers should learn to use this strategy and independently produce spellings. "Even without being able to read, children can attempt to write using what they know" (Tarasoff, 1992, p. 104). It is tedious work for children to figure out for themselves how to record their own speech, but by attempting it and immersing themselves in the task, their success improves.

The best way to teach invented spelling is to model it for the students and help them understand that using it will benefit them as writers. Teachers can first model it for the whole class during a mini-lesson, and then they can model it again for some students in a small group meeting or individual conference. Modeling invented spelling may include the following components, which may span over a few days:

1. Write a message for the students in many ways, such as drawing a picture, scribbling letter-like symbols, or writing random letters.
2. Tell them what the intended message is.

3. Write the message again by slowly sounding out the words aloud and writing the corresponding letters. Only write the letters that are actually audible.
4. Write the same message conventionally and point out that adults would write it like this.
5. Compare the purely phonetic version to the standard one and explain that as they learn to read better and write more, their spelling will look more and more like that of adults, but in the meantime they should put down those letters that they hear when they say the words very slowly.
6. Repeat the lesson the next day with a new message and have the students tell you the sounds they hear and the letters you should write. Again compare it to the standard version and praise their approximations.
7. Repeat the lesson the next day with a new message and have students try to sound it out for themselves and write the letters they hear. Show them the standard version of the message and ask students to compare their versions to it. Again give much praise for approximations.

Obviously beginning writers will not immediately be able to hear sounds in words or know what to write down for them after two or three days of modeling. Some students may need to have invented spelling modeled many times before they begin to try it on their own. Teachers may also choose to show them other ways to independently write down their intended messages. These ways include writing any letters that seem reasonable, writing the first letter and putting a dash for the unknown part, and drawing a picture of the word in question. All of these strategies allow writers to rely on their own spelling knowledge, and with repeated practice, they can use them independently whenever they write and not have to wait for help.

The use of external resources is also a strategy that promotes independence in writers. Writers consult them for words they want to spell. External resources include:

- * Other students in the room
- * Labels and signs around the classroom
- * Picture dictionaries and other reference books
- * Big books
- * Student-made books
- * A word wall that contains frequently used words
- * Alphabet charts on the wall and on individual desks
- * Personal dictionaries
- * Posters of nursery rhymes and poems
- * Wall charts hanging around the room

Wall charts can be created by the whole class or in small groups in a mini-lesson. They can contain frequently used words, holiday words, theme-related words, words that fit a spelling pattern (bl-, br-, gr-, pl-, tr-, and so on), or words that rhyme. As students are writing and need a word whose spelling they do not know, they can find it somewhere in the room and use it. Instead of merely copying it, however, students should look at it and try to write it from memory, then check it against the source. This process helps them remember it for the future and develops their visual memory.

Teachers play an important role in teaching students how and when to use external resources. They can teach how to use them through modeling and demonstrating the steps involved. Teaching them when to use external resources

depends on the students, and teachers need to decide what works best for each individual student. Students who are less proficient readers may not be able to locate a word on a chart or in a book, and they may benefit more from using only invented spelling. Proficient readers, however, may be able to find a specific word quickly on a chart or in a handy dictionary, and they may benefit from using external resources without disrupting the flow of ideas.

Matching Instruction to Students' Development

Another way that teachers can help their students develop in spelling is by teaching strategies that are developmentally appropriate in terms of the writing students produce. There are three major strategies that students need to learn about and use in order to become competent spellers. They are graphophonic knowledge (letter/sound relationships), visual memory (the way words look), and morphemic knowledge (the meanings of words and word parts). Beginning writers focus on graphophonic knowledge. As they become more competent and discover that many English spellings do not relate strictly to their sounds, they rely more and more on visual strategies and meaning-related strategies. The key to teaching these three strategies is to look at individual children's existing strategies and to build new ones on those.

Awareness of print

Some beginning writers are not yet ready to use letter/sound relationships to spell words. "Children need many experiences with alphabet letters in many contexts

before they begin to understand the relationship between letters and sound" (McGee & Richgels, 1989, p. 224). They need to develop an awareness of print and that letters are used to convey meaning, and they need to learn the letter names and how to form them on paper. An awareness of print and knowledge of letter names can be developed when teachers do the following:

- * Read to and with students and point to the words (big books, posters, charts, signs, labels, names).
- * Have students bring in environmental print and read it together (cereal boxes, candy wrappers, soda cans, advertisements, coupons, and so on).
- * Talk about letters in words, especially students' names.
- * Display students' names on a chart in the room and refer to it often.
- * Spell words together.
- * Recite the alphabet while pointing to each letter.
- * Say the letters as you print a word.
- * Ask students to locate certain letters in printed text.

Knowing how to form letters, both capital and lower-case, is necessary for students to be able to move beyond scribbling and making letter-like characters. Teachers can help this process along by doing the following:

- * Provide many opportunities to write.
- * Provide various writing tools (paper, pencils, markers, crayons, pens, typewriter, computer keyboard).
- * Provide other tools to make letters and words (magnetic letters, playdough, sand, alphabet toy blocks, alphabet puzzle pieces).
- * Model how to form letters (capitals and lower case)

and write in front of students often.

- * Provide hints about how to form letters ("h" looks like a house with a chimney, "M" looks like two mountains).
- * Provide individual alphabet charts that match capitals and lower case letters, so students can refer to them when writing.
- * Praise their efforts at forming letters.

Some of the preceding suggestions can be incorporated into a mini-lesson at the start of writing workshop if most of the class can benefit from it. If most of the students know the letter names and how to print them, teachers can conduct small group mini-lessons for those students who can benefit from the above activities. Teachers can also address individual student's needs regarding letter names and letter formation during conferences. Teachers should keep in mind that students who are spelling with random letters may still need to learn their names, even though they can form them correctly.

Graphophonic knowledge

Once students begin to know letter names and how to print them, their writing will begin to include them more and more. Teachers can help these students move along developmentally by introducing them to letter/sound relationships, also called the graphophonic strategy. "Since a very high percentage of English words are spelled as they sound, the first step is to direct children to that spelling strategy" (Bean & Bouffler, 1987, p. 31). Teachers can begin to develop students' graphophonic knowledge by doing the following:

- * Point out beginning and ending sounds in big books, poems, charts, and stories.
- * Point out rhyming words in texts.
- * Ask students to predict how a word begins or ends when you write for the class.
- * Ask students to brainstorm words that begin with a common consonant sound, and write the words down.
- * Ask students to clap for each syllable or sound in words, which helps students segment words into sound parts.
- * Ask students to say a word that matches the beginning or ending sound of a word that you provide.
- * Ask students to think of rhyming words and write them on a chart, so they can see their spelling similarities.
- * Ask students whose names begin with a certain sound to form a group.
- * Ask students to think of words that rhyme with students' names.
- * Ask students to sort name cards by initial sounds.
- * Ask students to sort picture cards into groups that share the same initial or final sound.
- * Show students words that are in the same word family and how their spelling is similar (Example: bat-cat-sat).
- * More activities can be found in Teaching Kids to Spell by J. R. Gentry and J. W. Gillet.

Although these fun games and activities are helpful in developing graphophonic knowledge, it is more important that students can apply their graphophonic knowledge when writing themselves. Teachers can provide the following strategy instruction either to the whole class during a mini-lesson, to small groups during writing workshop, or to individuals

when walking around during work time:

- * Model stretching words out slowly but naturally and writing down one letter at a time for the sounds heard. Then have students practice it.
- * Model how to write letter names for words or parts of words that sound like a letter they know (Example: R = are, U = you). Then have students practice it.
- * Model how to choose letters that are made in the same place in the mouth as the letters they know (Example: YNT = went because the letter name "y" and the sound for "w" are made in the same place).
- * Model how to think of familiar words that might help with the spelling of a new word (Example: "the" starts with "th," so "that" starts with "the" because their initial sounds are the same).

Students will begin to use these graphophonic strategies when they have seen them modeled several times and their efforts are praised. With continued daily writing and applying these strategies, their spellings will take on more phonetic features, to the point that someone can almost read the students' writing without their assistance.

Concept of a word

One concept that students may or may not develop alongside the letter/sound relationship is the concept of a word. Even students who are proficient at representing sounds with their corresponding letters may print those phonetic sounds in a string and not leave spaces between words. There are several ways for teachers to help students develop the concept of a word:

- * Point to each written word when reading big books, charts, poems, and messages on the board.
- * Point out that there are spaces between words to make reading easier.

- * Ask students to tell you a short sentence and write it on the chalkboard (Example: "I see a dog."). Then ask them to make the sentence longer by adding a word or words, and you add the word(s) after leaving spaces (Example: "I see a dog and a cat."). Show students the word(s) you added and how they are separated by spaces.
- * Do the same activity as above by using word cards in a pocket chart. Students can come up and insert or add words to change the sentence.
- * Write down a sentence that students provide on a strip of paper. Display it in the pocket chart. Cut the strip apart into words and tell them that each part is called a word. Mix the cards so they are out of order and form a nonsense sentence. Ask students to come up and put the sentence back in order.
- * Have students do the above activity with their own sentences.
- * Model how to leave a space (two fingers) after each written word and encourage students to do that when they are writing.
- * More activities can be found in Teaching Kids to Spell by J. R. Gentry and J. W. Gillet.

It takes some students only one or two demonstrations before they leave spaces between words when they write, and it takes others repeated demonstrations. Students need to have many meaningful writing opportunities to practice leaving spaces, and it is certain that through those opportunities all writers eventually learn the concept of a word.

Visual memory

The use of visual memory plays an important part in learning how to spell. Since not all English words are spelled according to their individual sounds, students need

to learn many words by remembering the way they look or relating them to a familiar visual pattern. Students whose writing shows very effective use of the graphophonic strategy to spell words are ready to be taught how to use their visual memories of words to spell. In order to have a visual memory of words, students must have seen words numerous times in print. The following ideas can help students develop and use their visual memories to spell words:

- * Point out that many students know how to spell some words already without sounding them out because they have seen them in books and can write them from memory.
- * Tell them that knowing how words look will help them write from memory and more automatically.
- * Teach them how to visualize a word. First write a familiar sight word on the board and draw a TV screen around it. Then ask students to look at the word carefully, as if they were watching TV, and remember what it looks like even after the TV is turned off. After a few seconds turn the TV off by erasing the word and ask students if they still have a picture of it in their heads. Ask them to write the word down the way they remember it. Repeat this activity several times, also including unfamiliar words.

Teachers may also want to use some of the following activities that develop an awareness of visual patterns in words, so students can begin to look at words in text in terms of how they fit a common visual pattern:

- * Point out little words in longer words and have students find little words in long words you provide (Example: "tea," "each," "ache," and "her" are in the word "teacher").
- * Make sets of cards that match a visual pattern (-at, -ake, -it, and so on) and some cards that do not match the chosen pattern. Display a set of cards and have students find the card that does not match the pattern.

- * Discuss phonetic patterns and how they are spelled. Make charts for words that follow a given pattern (Example: The "gh" is silent in "night," "fight," "caught," "bought," and so on).
- * Discuss homophones, which have the same pronunciation but different meanings and spellings, and list them on a chart to hang up in the room (Example: wood/would, plane/plain, read/reed).
- * Make cards for words with similar vowel spellings and ask students to sort the words according to their vowel sounds (Example: "our," "cough," and "group" all contain "ou," but the vowel sound is different in each word).
- * Other activities can be found in Teaching Kids to Spell by J. R. Gentry and J. W. Gillet.

Many students begin to use their visual memories to spell after very little or no instruction, but many others need repeated demonstrations to visualize words, as well as more exposure to visual patterns and their different spellings. With the guidance of teachers and opportunities to practice the visual strategy, all students can learn to use it and develop as spellers.

Morphemic knowledge

The last major spelling strategy that writers need to learn is the use of morphemic knowledge. "When spellers solve spelling problems by using information they know about words and word parts, they are using morphemic knowledge" (Powell & Hornsby, 1993, p. 28). This includes inflectional endings, such as "-ed" and "-ing", prefixes and suffixes, contractions, compound words, and possessives, to name a few. Beginning writers usually are not ready for such meaning

related knowledge, although they use it in their oral language all the time. Beginning writers use mainly graphophonic and visual knowledge, but when their writing shows good use of those two strategies, they may be ready to benefit from some instruction on morphemic knowledge.

Teachers can help them in the following ways:

- * Teach the inflectional ending "-ed" and that it indicates when something already happened. Provide examples of familiar words and how to add "-ed." Point out how that ending is pronounced in three different ways but always spelled the same because it has a certain meaning - past action (Example: "jumped" has /t/, "climbed" has /d/, and "landed" has /ed/).
- * Teach other common inflectional endings and their meanings. Show how these endings are added to words, and how root words sometimes change before endings are added (Example: "-ing" means the action is going on now, "-s(es)" means more than one, "-er" means more, "-est" means most, and so on)
- * Teach the correct use of capitals by pointing them out in reading and giving basic rules for using them (Example: names, beginning of sentences, and so on). Have students sort words by capitals/lower-case letters.
- * Teach how contractions are formed from two words, and how their spellings are related to their meaning (Example: "-n't" means "not," "-'ve" means "have").
- * Teach how compound words are formed and list common ones on a chart for a reference. Point out that they have the same spelling pattern as when each word is spelled separately.
- * Teach the meaning of the apostrophe in possessives to show ownership. Use the students' names in examples and show how to write.

Students will eventually develop all three of the major spelling strategies just described (graphophonic knowledge, visual memory, and morphemic knowledge), and their spelling

will become more and more standard, but they need the guidance of teachers who will decide when students are ready to benefit from each strategy. "The focus is upon teaching children according to their individual needs" (Norris, 1989, p. 106), and teachers must decide what those needs are. They look at students' written products and determine when students will benefit from instruction related to letter names and letter formation, letter sounds, the concept of a word, the way words look, or word meanings. When they have determined what kind of instruction is developmentally appropriate for each child, they can provide that instruction and thereby facilitate each child's spelling development.

Teaching Proofreading Strategies

One more thing that teachers can do to facilitate spelling development in beginning writers is to teach strategies for proofreading or editing for spelling. Even beginning writers can learn how to proofread their own work. It teaches students to be critical readers of their work because they have to focus on the visual features of words.

Teachers can help students learn to proofread their work in the following ways:

- * Tell them that proofreading is done after all the ideas have been written down in a way that makes the most sense to future readers.
- * Model how to reread their work when done, pointing carefully to each word and checking if it looks right. Use an unnamed student's paper or take a memo to a colleague through the whole writing process, in order for students to see how an authentic text is proofread.
- * Provide a list of common words that students can be expected to read, such as "the" and "my" and others. Show students how to check if their writing contains

the words on the list, and if they spelled them correctly. Ask them to lightly underline the misspelled words and go back to change them after proofreading the whole piece.

- * Teach students how to use the external resources mentioned earlier to locate words that they have attempted to spell in their writing and that they know they can change themselves.
- * Teach students to "Have-a-go" with some of the words that they know are not spelled conventionally. "Have-a-go" involves writing a questionable word in two or three different ways and looking at the alternate spellings to see which one looks right

Depending on their individual reading abilities, some students may be able to change a few of their invented spellings to standard ones, and some students may need help in standardizing all their spellings. After students have independently proofread their work according to the established procedures, they should meet with the teacher or other adult in a one-on-one conference to finalize the editing process. There are several ideas of what teachers can do about spelling during these editing conferences.

These ideas include:

- * Start by praising students for their efforts in producing the writing, including content and conventions, of which spelling is one. Point out any strategies that students applied correctly or words that students were able to spell or correct on their own.
- * Ask students to select a few words that they would like to learn how to spell and guide them through the "Have-a-go" strategy. Direct them to an external resource where they can find the correct spelling.
- * Compare their invented spellings to standard ones and highlight the similarities between them. This will give students the confidence to continue to use invented spellings because they are successful at doing so.

- * Ask students to write the standard spelling, for words they would like to remember, over and over several times, in different locations on a paper, or on a different surface. This helps them to remember the sequence of letters in every detail.

Beginning writers do not need to change or correct every invented spelling on their own, or even during a conference. Only two or three words need to be corrected by the student with someone's help, especially those words for which the student shows an interest or those that are used most often. This will allow for retention of those few words. Teachers can change the rest of the spellings after the conference and transcribe the text into standard spelling, so the writing can be published and read by others.

Students' proofreading abilities will increase with repeated practice. Teachers can set the guidelines and expectations for how much proofreading students should do on their own or in a conference, and the expectations are determined by the writers' levels of development. Writers of any age can learn some proofreading strategies, and their frequent application will help facilitate spelling development.

In conclusion, there are a variety of things teachers can do during writing workshop to facilitate spelling development in their beginning writers. They can provide many opportunities for meaningful writing, help students develop a positive attitude toward spelling, promote students' writing independence, teach developmentally appropriate strategies, and teach proofreading strategies. Teachers need to take advantage of the many planned and

unplanned opportunities throughout the school day, and especially during writing workshop, to address spelling.

Hamer (1992) states,

Being able to identify when a child is ready for learning and what should be modeled is the mark of the experienced teacher. For some children a particular point may need to be modeled over and over again. For others, once shown never forgotten (p. 69).

ASSESSING SPELLING PROGRESS

The purpose of spelling assessment is to get to know individual students, what they know about spelling and what strategies they use, in order to provide them with appropriate instruction that enables them to become competent and confident writers. Since spelling is an integral part of writing, the best way to assess spelling is within the context of meaningful writing and as a natural part of the writing process, where students are rarely able to tell the difference between learning and evaluation.

A complete spelling assessment should be balanced, which includes assessing both the process and the products. Process assessment includes observing the spelling process during actual writing and asking students questions that provide insight into the strategies and knowledge they use. These questions might be, "What do you do when you want to spell a word?" or "How do you know if a word is spelled wrong?" Product assessment refers to the written texts that students produce. These texts show which words students are able to spell conventionally, which words are close approximations, and whether any spelling changes were made during the writing process. Both types of assessments are important in helping teachers learn about students' spelling knowledge.

Spelling assessment requires teachers to develop systems for finding out about their students. An efficient and popular data collection system for the writing workshop approach is portfolio assessment. A portfolio is a

collection of those items that show students' spelling growth over time. The collection can be saved in boxes, scrapbooks, binders, file folders, or anything that keeps the portfolio items together and easily accessible for review.

Writing Samples

There are a variety of assessment tools that teachers can use to learn about their students' spelling knowledge and keep in their portfolios. One assessment tool is the writing that students produce. Teachers can keep periodic samples of their students' writing in portfolios. Writing samples should be dated and include rough drafts as well as student-edited final drafts. Teachers can look at these samples and analyze them for the spelling strategies that were used to create them, for spelling patterns over time, for words that are spelled correctly or are close approximations, and for changes in spelling strategies.

Cumulative Word List

A second assessment tool is a cumulative word list (sample in Tools for Teachers), which can contain words that students know how to spell already, words that students learn each week, and/or words that students would like to learn. Teachers can keep a page for each student handy during writing workshop, or students can keep this list in their writing folders. Teachers can record words on this list when they walk among the students during work time, when they meet with students individually, or when they conduct a small group meeting. The list can be designed to organize words by their initial letters, and teachers can use this list to

document over time which words individual students are learning to spell conventionally. The words on this list can also be a starting point for new words to teach because new knowledge should build on existing knowledge. Students who can spell "is" already may be introduced to "it" and "in," which may soon be on the cumulative list as well.

Observation Checklist

A third assessment tool that can become part of a portfolio is an observation checklist (sample in Tools for Teachers), on which teachers can list certain spelling behaviors or spelling strategies that they may expect to see their students using over time. A column for comments can be used to write a key word that identifies the particular piece of writing that is connected to an observation, or it can be used to make a general statement about that spelling behavior. As teachers observe students during writing workshop, they check off which behaviors are observed and on what date. They may decide to select certain students on specific days to observe, in order to make sure that no student is accidentally left out, but it is also important to catch those unforeseeable moments when a student is exhibiting a major developmental change.

Anecdotal Records

A fourth assessment tool that is very popular during writing workshop is anecdotal records. Anecdotal records are brief narratives that can tell about students' spelling strategies, concepts of literacy, and attitudes. Teachers can take anecdotal records as they move among the writers and

observe without intervening. As with the checklist, they can plan whom to observe but should also be prepared for unexpected opportunities to observe any students who are doing something noteworthy. Teachers often carry around a clipboard with a label or index card for each student, or a notebook with a page for each student, on which they write and date their observations. The labels can be stuck on a folder inside the portfolio or on the back of the students' observation checklists, while index cards and notebook pages can just be dropped into the portfolio.

Self Assessment

A fifth assessment tool that teachers can include in students' portfolios is documentation of self assessment (sample in Tools for Teachers). Self assessment allows students to be part of the assessment process, and it gives teachers information about students' perceptions of their spelling abilities. Students can conduct a self assessment every three months or so by comparing an older piece of writing with a newer one and analyzing it for spelling changes. They can write periodically, or be interviewed, on topics such as "What I know about spelling" and "What do I do when I don't know how to spell a word?" Teachers will be able to find out what students' attitudes about spelling are and what kind of spelling strategies they believe they are using. This information is important because teachers can use it to help change negative attitudes and teach new strategies. The self assessment questions do not have to be used with all students. Teachers may want to use them with

just those students who are not progressing as expected.

Informal Spelling Test

One final assessment tool is an informal spelling test, which is one more piece of data that can add to the overall assessment. Teachers can dictate a short sentence or list of common words to students and analyze their miscues based on the number of correct phonemes instead of on the number of correct words. They can compare the spelling test spellings with context writing spellings and may find that some students can spell some words in isolation but not in context, and vice versa. Teachers who use spelling tests need to remember that they are not as authentic as a writing sample or some of the other assessment tools, and they should never be the only assessment tool used to show how students' spelling knowledge is progressing.

In conclusion, teachers of beginning writers have a variety of options regarding assessment tools. Writing samples, checklists, word lists, anecdotal records, and self assessments can all be collected during writing workshop and saved in a portfolio throughout the year. Teachers probably should not limit their spelling assessment to one or two tools, but use a variety of them. A combination of assessment tools will provide teachers, parents, and students with valuable information regarding the students' spelling attitudes, knowledge, and strategies. This information can then be used to determine future instructional needs, which is the main purpose of assessment and evaluation.

COMMUNICATING WITH PARENTS

Parents are an important link in the home-school connection, and when it comes to spelling instruction, teachers want parents on their side. This is especially true in classrooms where traditional approaches are being replaced by writing workshop approaches. Many parents expect that children will be given lists of spelling words to learn, and if such lists are not brought home, they may feel the school is failing in its job. It is the teachers' responsibility to inform parents how spelling is taught, to reassure them that children will develop standard spelling without lists, and to elicit their help at home. Without the support of parents, it is very difficult to implement a developmental spelling program.

There are several different ways of informing parents of the spelling program used at school. Teachers can inform parents at the beginning of the year of their program by sending them a letter (sample in Tools for Teachers), in which they make it clear that standard spelling is important and expected, but not for rough drafts. The letter might include a definition of invented spelling and what kinds of invented spelling parents might see in their children's writing, such as strings of random letters and phonetic spellings.

Open house is a perfect opportunity to share the spelling program with parents, where they can see spelling development in progress in displays around the room. Schools can organize a parent information session, where teachers

demonstrate spelling strategy lessons or compare the traditional approach with the workshop approach. Parents, most of whom probably learned to spell with the traditional spelling approach, would be able to see specifically how the two methods differ.

Spelling progress can be shared with parents in two ways. One way is by periodically sending home writing samples that are collecting in the students' writing folders. Not all of the students' rough drafts will be taken through the whole writing process and end up as a published book, so they do not need to stay at school forever. Teachers can collect rough drafts now and then, write brief comments on them for parents, and send them home. This way parents do not have to wait until a conference to receive information about their children's spelling.

The other way to share spelling progress with parents is at conferences. Parents can be asked to bring in evidence of their children's spelling growth in writing done at home. Teachers and parents can then compare it to the writing the children have done at school. Teachers can share the portfolio collections with parents, pointing out how their children's spelling has grown over time, which strategies they are using, and which words they can already spell conventionally. After seeing cumulative word lists, anecdotal records, and spelling checklists, parents will be reassured that teachers are not neglecting spelling.

Teachers can also involve parents by inviting them to observe the classroom during writing workshop time. Parents

can witness in person how students help themselves through spelling problems and what strategies teachers are teaching to various students. Parent volunteers who come on a regular basis can even assist during workshop time by encouraging students and helping reluctant writers with "Have-a-Go" sheets and proofreading. They can also conduct some of the small group meetings and individual conferences, providing the teacher has modeled exactly what should be done.

By keeping parents informed through letters, open house, conferences, and inviting them to the classroom, teachers are able to show them that it is possible to teach spelling while still focusing on meaning. Once parents realize that spelling can be taught successfully through the writing workshop approach and without weekly spelling lists and tests, they generally approve of the non-traditional spelling program. Teachers can send home a spelling survey near the end of the school year and ask parents to comment on the way spelling was taught that year, and if they believe that their children's spelling progressed over the course of the year. Having teachers and parents on the same side when it comes to spelling instruction provides beginning writers with all the support they need to develop effective spelling strategies and become competent spellers.

APPENDIX B
TOOLS FOR TEACHERS

Developmental Spelling Process

1. Scribbles:



2. Horizontal scribbles:



3. Letter-like characters:



4. Random letters (and numbers): B k t 3 H s C o V

5. Letter names: U = you, R = are, LFNT = elephant

6. Sound/symbol relationships and some automatic words:

- | | |
|---------------------------------------|-------------|
| - initial consonants | N = nest |
| - initial & final consonants | NT = nest |
| - initial & final & medial consonants | NST = nest |
| - consonants & vowel place holder | NAST = nest |
| - the, my, mom, like, is, go, etc. | |

(Spaces between words and ending punctuation may appear around this time.)

7. Phonetic writing and more automatic words:

- CHRUCK = truck
- TELEVISHUN = television
- they, she, jump, run, look, etc.

8. Visual strategy and familiar words to spell new words:

- | | |
|---------------------------|---------------|
| - reversing letter order | HUOSE = house |
| - silent letters included | KNOW, BRIGHT |
| - RISK+YOU = rescue | |

9. Conventional/standard/correct/independent spelling:

- morphemic knowledge (prefixes, suffixes, contractions, plurals, irregular words)
- proofreading skills

Cumulative Word List

Name _____ Grade _____

A	B	C	D	E
F	G	H	I	J
K	L	M	N	O
P	Q	R	S	T
U	V	W	X-Y	Z

Spelling Observation Checklist for Beginning Writers

Name _____ Grade _____

Behaviors/Strategies	Date(s)				Comments
Scribbles					
Letter-like characters					
Copies without comprehension					
Random letters					
Letter names as words					
Concept of word (Spaces between words)					
Initial consonants					
Final consonants					
Medial consonants					
Vowel place holders					
Inflectional endings (-s, -ed, -ing)					
Silent letters (e, gh, kn, wr)					
Digraphs (ch, sh, th, wh)					
Letter order reversed					
Vowel in every syllable					
Recognizes misspellings when proofreading					
Uses external resources (wall charts, books, peers, environment)					

Spelling Self Assessment

NAME _____ DATE _____

1. What is spelling?
2. When is correct spelling important?
3. What do you do when you don't know how to spell a word?
4. How do you know when a word is spelled correctly?
5. Has your spelling improved since the beginning of the school year? How do you know?

Sample Parent Letter

Dear Parents,

I would like to share with you a little bit about how I will help your child learn about writing and spelling this year. Our writing takes place during "writing workshop," and your child will be writing every day about topics that are self-chosen or selected by me. Beginning writers do not yet know how to spell words conventionally because spelling develops over many years, but they have much to say, and writing is one form of communicating their ideas.

I am encouraging your child to use "invented spelling," which is a spelling strategy that writers of all ages use when they are unsure of the standard spelling of a word. When children invent spellings, they write words by using the letters they know and by the way they sound. Your child's spelling will progress as he or she learns more about letters and words and the way they look and sound. When your child brings home samples of writing this year, you can expect to see some or all of the following types of spelling:

1. Scribbling (lines and shapes, but not letters yet)
2. Random letters (strings of letters unrelated to sounds)
3. Letter-name spellings (names of letters to represent sounds, such as "R" for "are" and "U" for you)
4. Sounded-out spellings (words that can be read or almost read because many of the letters match the sounds in the words, "lik" for "like" and "jup" for "jump")
5. Standard spellings (your child will learn many "correct" spellings along the way because he or she writes every day and remembers many words from seeing them in books and using them all the time)

I will arrange a conference sometime this year, and I will show you the writing your child has done in class. You will see the spelling growth your child has made over the months. Please let me know if you have any questions until then.

Sincerely yours,

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