Chapter Three

Teaching Reading and Developing Literacy: Contrasting Perspectives

Too many adults act as if children "learn" literacy at school in pieces and stages. . . . Children make sense of print in the same way they make sense of anything else that's new to them. . . . As literacy emerges, it reshapes and redefines itself.
-Lester L. Laminack

In this chapter, teaching children to read is explicitly contrasted with what parents, teachers, and others can do to foster the development of children's literacy: not only their ability to read and write, but their inclination to value literature and literacy and to adopt the habits and attitudes of literate individuals.

The chapter begins with a section on methods of teaching children to read, followed by a section on how children develop language and literacy. Instructionally, these two sections reflect two contrasting models of education: a transmission model, and a transactional model. The latter leads into a focus on whole language, which has evolved into a philosophy of learning and teaching that contrasts significantly with the philosophy underlying a skills-oriented traditional basal reader approach. The final section contrasts a traditional model of teaching reading with a whole language model of developing literacy and fostering learning in the classroom.

METHODS OF TEACHING TO READ

For a history of reading instruction prior to the mid-1960s, I recommend Mitford Mathews' *Teaching to Read, Historically Considered* (1966) and Nila Banton Smith's *American Reading Instruction: Its Development and Its Significance in Gaining a Perspective on Current Practices in Reading* (1965). Patrick Shannon's *Broken Promises: Reading Instruction in Twentieth Century America* (1989a) and *The Struggle to Continue: Progressive Reading Instruction in the United States* (1990) reconsider earlier and more recent history from a particular viewpoint.

In her influential book *Learning to Read: The Great Debate* (1967), Jeanne Chall divided beginning reading approaches into two categories: *code-emphasis* approaches, which focus on "breaking" the alphabetic code; and *meaning-emphasis* approaches, which focus on meaningful units rather than the alphabetic principle and letter/sound correspondences. Among the general public and all too many teachers, though, these categories have typically been simplistically understood as either a phonics or a sight word approach. More recently, this dichotomy has been erroneously reframed as a choice between phonics and whole language.

PART-CENTERED SKILLS APPROACHES

Instead of dividing the universe of reading approaches as Chall has or as the public does, I would like to divide it into part-centered approaches, reflecting a part-to-whole concept of reading and reading instruction, and socio-psycholinguistic approaches, those emphasizing from the very outset the construction of meaning from connected sentences

and texts, drawing upon the individual's schemas and life contexts. Figure 3.1 reflects this division. What I consider part-centered approaches include a phonics approach, a "linguistic" approach, a sight word approach, and a basal reader (or eclectic) approach (Figure 3.1). Some of these approaches are rarely used in isolation from others, but considering them separately helps to clarify the logic behind much of what is done in traditional reading instruction today.

A phonics approach

Advocates of a phonics approach are concerned about helping beginners become independent readers as soon as possible. They feel the best way to do this is to help children learn letter/sound correspondences so that they can sound out, or "decode," words. Often, children are taught not only basic letter/sound correspondences but rules for pronouncing letters and combinations of letters and for sounding out words. An emphasis on phonics is typically part of "reading readiness" programs. See Figure 3.2 for examples of correspondences, patterns, and rules that are often taught in the earliest levels of phonics programs.

One current example of an extensive phonics program is called Explode the Code. It offers twelve workbooks, preceded by three primers. Book 1, for instance, introduces

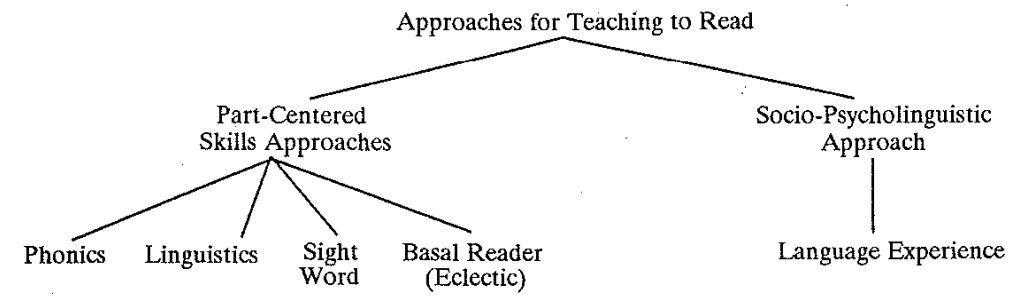


FIGURE 3.1 Approaches for teaching to read

Initial consonant blends: bl-, br-, cl-, cr-, dl-, dr-, fl-, fr-, sl-, sn-, sr-, st-, sw-

Final consonant blends: -ld, -nd, -nk, -sk, -lp, -mp, -sp, -ft, -lt, -st

Digraphs: two letters that combine to make one sound—for example:

- *ch* has one sound
- *sh* has one sound
- *qu* has one sound
- *th* has the sound of *th*is or *th*in

Diphthongs: two vowel letters that make one sound, as *ou, ea, ai, ui*

- *Rule:* These sometimes obey the "rule" that when two vowels go walking, the first one does the talking.
- *Another rule:* When a word has only two vowels and one is a final *e,* the *e* is usually silent and the other vowel has a long sound.

***FIGURE 3.2* Correspondences, patterns, and rules often taught in early levels of phonics programs (Note: These are offered only as examples, not as exhaustive lists.)**

short vowels; Book 1 and 1/2 offers additional exercises on short vowel sounds. Book 2 deals with initial and final consonant blends; Book 2 and 1/2 reviews these; and so forth. This program is distributed by Educators Publishing Service, which also sells several other phonics programs, including *Primary Phonics*, a six-workbook program, followed by *More Primary Phonics.* There's the famed *Distar* program (Engelmann & Bruner, 1975) and a home teaching version of it, *Teach Your Child to Read in 100 Easy Lessons* (Englemann, Haddox, & Bruner, 1983), which emphasizes sounding out words. Even better known in the early 1990's is *Hooked on Phonics*, a widely advertised program consisting of eight cassette tapes; nine decks of flash cards depicting letters, letter sequences, and words; four books of word lists corresponding to phonic features in the card decks; and one book of sentences corresponding with the word lists ("Reading educators. . .," 1991). *You Can Read!* is a still more recent phonics-based program, with two videocassettes and three accompanying workbooks.

A phonics approach was especially popular from about 1890 through the 1920s, when it was gradually superseded by a sight word approach. Phonics began a revival in the mid-1960s, with increased incorporation of phonics lessons and activities into basal reading programs (see "A Basal Reader Approach" below). The current existence of so many programs for teaching phonics extensively and intensively (the above programs are only examples) suggests that this revival has reached a new high.

The most extreme advocates of a phonics approach believe that learning to read means learning to pronounce words. As Rudolph Flesch put it, "Reading means getting meaning from certain combinations of letters. Teach the child what each letter stands for and he can read" (Flesch, 1955, p. 10).'Like Flesch, most proponents of a phonics approach emphasize rapid and fluent "decoding" rather than comprehension. Perhaps they think comprehension will take care of itself, once the words are decoded. In classrooms today, a phonics approach is likely to be incorporated into or included with a basal reader program, often via supplementary materials.

Chapter 5 offers arguments for rejecting a simplistic phonics approach and suggests other ways of helping children develop an understanding of the alphabetic principle and a functional knowledge of letter/sound relationships. Chapter 7 further critiques the arguments for extensive, intensive teaching of phonics and the research offered in support of teaching phonics systematically but less extensively and intensively.

A "linguistic" approach

The so-called linguistic approach is based upon the tenets of structural linguists, whose view of language and language learning was prominent in the 1950s. Unfortunately, the term "Linguistic" was appropriated to describe the reading approach advocated by this one school of linguistic thought, now largely superseded by other views. The founder of this approach was Leonard Bloomfield (1942), widely known as the founder of structural linguistics.

Those who advocate this particular approach are generally concerned with helping children internalize regular patterns of spelling/sound correspondence, on the assumption that this will enable them to read unfamiliar words without actually stopping to sound them out. The first example of this approach is Bloomfield and Barnhart's *Let's Read* (1961), after which their linguistic, or "spelling pattern," approach was embodied in several reading series of the late 1960s and early 1970s.

The linguistic approach is like a phonics approach in its emphasis on learning letter/sound patterns, with no specific attention to comprehension. But in another respect, the linguistic approach differs sharply from a phonics approach. Whereas a phonics approach emphasizes the direct teaching of patterns and often conscious learning of rules, the linguistic approach advocates exposing children to regularly spelled words from which children can unconsciously infer common spelling/sound patterns (see Figure 3.3 for some examples). A typical sentence from an early lesson in a linguistic reader might be something like "Nan can fan Dan." A current example of a "linguistics" program is Samuel Blumenfeld's *Alpha-Phonics: A Primer* fur *Beginning Readers* (Blumenfeld, 1983), a book of 129 Lessons for home or school use, with brief teacher's manual at the back. Though Blumenfeld calls it a phonics program, *Alpha-Phonics* is basically a linguistic program because it does not directly teach letter/sound correspondences so much as provide lists of words (and then some sentences) exemplifying regular letter/sound patterns. For example, Lesson 3 includes lists of words with the short *a* sound: *am, Sam, an, man, as, has, at, hat, ax, tax;* this list is followed by two sentences constructed from some of these words. Lesson 121 includes lists of words with the following letter combinations in the middle: the letter combinations *ce, sc, ci, si, ti, xi, su,* and *tu,* when pronounced as */sh/, /ch/,* or */zh/.* Not surprisingly, research has demonstrated that texts with a high proportion of words having similar letterlsound patterns are inordinately difficult to process (e.g., Baddeley & Lewis, 1981, and PerEetti & McCutcheon, 1982, as cited by Adams, 1990~1p,. 322).

Common letter-sound patterns in words

bake, cake, fake, Jake, lake, make, rake, sake, take, wake
blight, flight, light, might, night, slight, tight
bent, cent, dent, lent, pent, sent, tent, went

Common rime patterns in English

-ack	-aw	-ing
-ail	-ay	-ink
-ain	-eat	-ip
-ake	-ell	-ir
-ale	-est	-ock
-ame	-ice	-oke
-an	-ick	-op
-ank	-ide	-ore
-ap	-ight	-or
-ash	-ill	-uck
-at	-in	-ug
-ate	-ine	-ump
		-unk

Nearly 500 "primary-grade words" can be derived from this set of only 37 rimes (Wylie & Durrell, 1970).

FIGURE 3.3 Common letter/sound patterns: sample word families and rime patterns

In assuming that children will infer patterns of letter/sound relationships from what they read, the linguistic approach reflects one tenet of a psycholinguistic model of reading, yet it differs significantly from that model. A linguistic approach involves inferring

letter/sound patterns from exposure to sets of regularly patterned words, whereas a psycholinguistic model of reading predicts that these patterns can and will he inferred from extensive exposure to normal texts (e.g., predictable hooks read to and with children) without the necessity of organizing words in patterned lists. (A later section in this chapter suggests ways of supplementing such exposure with discussion and writing; Chapter 6 offers research evidence that supports this aspect of a psycholinguistic model.)

A sight word, or "look-say," approach

Those who advocate a sight word approach, in contrast to phonics, claim to be concerned that meaning be emphasized from the very outset of reading instruction. They stress helping children develop a stock of words that the children can recognize on sight. Thus instead of stressing letter/sound correspondences and phonics rules, teachers might use flash cards and other devices to help children learn to recognize basic words like *I, and,* and *the.* Advocates of a sight word approach argue that if children can begin with a stock of about one hundred basic sight words, they will be able to read about half the words in any text they might ordinarily encounter.

This approach was widely used from about 1930 until about the mid-1960s, when it became increasingly intertwined with (or permeated by) a phonics approach. Although prominent advocates of the sight word approach (e.g. William Gray, 1948, 1960) commonly expressed concern with meaning, during the heyday of the sight word approach actual classroom instruction came to focus heavily on the identification of words, and this emphasis continues implicitly in many of today's basal readers. Thus, like advocates of phonics, practitioners of sight word instruction as well as the general public reflect the "commonsense" assumption that once words are identified, meaning will take care of itself. The sight word, or "look-say," approach differs from a phonics approach in that it focuses on whole words rather than on parts of words, but in practice, both are concerned more with word identification than with meaning.

Today, the sight word approach survives primarily as part of a basal reader program, as a supplement to a basal program (e.g., *Developing a Basic Sight Vocabulary),* and/or as the labeling of objects in children's homes or the classroom environment. A whole language approach to education is sometimes claimed to be nothing more than a new name for the sight word approach (e.g., "Illiteracy," 1989; for more on this document, see Chapter 7). This is simply untrue, as we shall begin to see toward the end of this chapter.

A basal reader approach

Basal reading programs have their roots in the early 1900s, when there was a growing concern for developing "teacher-proor' materials for instruction and an interest in reconceptualizing education according to an industrial model, with schooling the assembly line, administrators the suppliers of curriculum and the monitorslmanagers of the process, teachers the technicians applying the curriculum to students, and educated individuals the intended end product (e.g., K. S. Goodman, Shannon, Freeman, & Murphy, 1988, especially Chapter 1).

Basal reading programs were-and typically are-designed to reflect Edward Thorndike's "Laws of Learning," derived from behavioral psychology and his own laboratory experiments with animals (K. S. Goodman et al., 1988, pp. 11-13):

> 1. The law of readiness: *Learning is ordered; efficient learning follows one best sequence.* This law results in readiness materials and the tight sequencing of skills in basal programs.
> 2. The law of exercise: *Practice strengthens the bond between a stimulcrs and a response.* This law results in drills and exercises through direct instruction, workbooks, and

skill sheets.

3. The law of effect: *Rewards infi~lenceth e stimulus-response connection.* This supports fhe idea of first learning words and skills and then "rewarding" the learner with the reading of more complete, more meaningful texts.

4. The law of identical elements: *The learning of apartic~ilarst imulus-response connection should be tested separately and under the same conditions in which it was learned.* This law results in the focus on isolated skills in testing, and in the close match between items in the exercises and items in the tests.

Together, Thorndike's "laws" suggest the need for careful control: control of the reading curriculum and its sequencing; control of the language within the reading selections; control of what's tested and how it's tested; and, most of all, control of what teachers and students do in the classroom. Implicitly, these behavioral laws also define reading as skills work, and learning to read as completing set after set of skills activities (K. S. Goodman et al., 1988; seep. 383). See Figure 3.4 for recent books and articles on basal reading programs; some, but not all, reflect the perspective of this book.

In the late 1960s and early 1970s, the development of basal reading series became a multimillion-dollar business. Today's basal reading series typically include pupil texts with a variety of reading selections for grades K-6 or K-8, accompanied by teacher's manuals, pupil workbooks, tests, and often a considerable array of supplemental materials. But with all of their glitzy appeal, their claims to be a total reading approach, and their insistence that they have responded to criticisms like those in *The Report Card on Basal Readers (K.* S. Goodman et a]., 1988), most basal reading programs are still basically the same (Durkin, 1990, all references). Often, they still include mere excerpts from and adaptations of literary works, rather than unmodified originals in their entirety. They still implicitly define reading as the mastery of skills, and they still exercise tight control over how those skills will be taught, practiced, and tested. Unfortunately, there is no solid research basis for their sequencing of skills-an interesting point of agreement among those who critique basals from widely differing viewpoints (e.g., K. S. Goodman et al., 1988; Durkin, 1990, Groff, 1989).

Basal reading programs are currently "eclectic," meaning they include various approaches to mastering the alleged skill or skills of reading. They include phonics,

The basal reader in American reading instruction. (1987). Themed issue of *The Elementary School Journal, 87*(3) (January).

Goodman, K. S. and Shannon, P. (Forthcoming). *Basal readers: A second look.* Katonah, NY: Richard C. Owen.

Goodman, K. S., Shannon, P., Freeman, Y., & Murphy, S. (1988). *The report card on basal readers.* Katonah, NY: Richard C. Owen.

Perspectives on basal readers. (1989). Themed issue of *Theory into Practice, 28*(4) (Autumn).

Weaver, C., & Groff, P. (1989). *Two responses to* The report card on basal readers. Bloomington, IN: ERIC Clearinghouse on Reading and Comunication Skills.

Winograd, P. N., Wixson, K. K., & Lipson, M. Y. (Eds.). (1989). *Improving basal reading instruction.* New York: Teachers College Press.

FIGURE 3.4 References on basal reading programs

explicit teaching of letter/sound relationships, patterns, and rules; they may include emphasis on regularly patterned words, as in the linguistic approach; and they typically include elements of the sight word approach, in several or all of these ways:

1. By emphasizing correct word identification, as if word-perfect reading were a prerequisite for comprehension.
2. By limiting the vocabulary in the primers and early readers, with an emphasis on so-called basic sight words (especially pronouns and those words described as function words in Chapter 2: words like *a, an, the; can, will, may; in, on, at; and, but;* and so forth).
3. By explicitly teaching such basic sight words in isolation.
4. By repeating new vocabulary words several times when they're first introduced.
5. By encouraging teachers to preteach new vocabulary before children read a selection.

An example of a program incorporating phonic, linguistic, and some sight word principles is *Lippincott's Basic Reading.* Here is the first story in the first preprimer of that program, Book A:

Pam and the Pup
Pam ran up the ramp.
Up the ramp ran the pup.
The pup and Pam nap.

The following example is a concocted one rather than an actual excerpt, but it resembles (all too closely) the language found in the beginning levels of many basal programs, at least through the late 1980s. Italics are used here to indicate a different speaker within each verbal exchange:

Play!
Can I play?
Yes, you can play.
I can play!
Can I play?
Yes, you can play.
I can play too!
Can I play?
No, you cannot play.
I am not happy.
I can not play.

Notice how impoverished the text is without pictures to accompany it. This hypothetical example is actually more typical than the real one above, because it doesn't include an emphasis on using words with regular letter/sound patterns. The impoverished language of many basal reading primers and beginning readers is often called "primerese," to emphasize the stilted, unnatural sentences and stories, which actually make reading harder rather than easier (Simons & Ammon, 1989). Even the Canadian basals of the late 1980s, widely reputed to be less controlling than their American counterparts, nevertheless exercised significant control over vocabulary and sentence patterns at grade 1 (Murphy, 1991).

Of course, basal reading programs attend to meaning, too, most typically by asking comprehension questions during reading and after the selection has been read-with way too much emphasis on literal comprehension questions, at least until more recently. The other major ways of teaching comprehension are through discussion prior to reading of the text, and through workbooks providing practice on comprehension skills like finding the main idea, drawing inferences, recognizing cause and effect, and so forth. In other words, comprehension itself is taught as a set of hierarchical skills to

be mastered in isolation. And now that it has become increasingly clear that meaning does not take care of itself automatically even when words are identified, basal reading programs are incorporating still more instruction in skills: skills for developing "higher order reasoning." But the emphasis on skills still reflects a part-to-whole conceptualization of teaching children to read.

Some of the most recent basal reading series have moved away from some of the aforementioned guiding laws and principles, at least in some respects. Indeed, the teacher's manuals often emphasize constructing meaning, claim that the reading selections reflect natural language and/or unabridged literary selections, applaud whole language (or claim that the program *is* whole language), and in short say all the "right" things that a wide spectrum of today's reading experts might recommend and advocate. However, careful scrutiny of the pupil readers, workbooks, tests, and the suggestions for teaching may reveal quite a different orientation.

SOCIO-PSYCHOLINGUISTIC APPROACHES

Though the term "holistic" might be used to contrast with part-centered, I prefer the more technical *termsocio-psycholinguishc* to characterize any approach that emphasizes the *construction* of meaning, drawing upon the individual's unique constellation of prior knowledge, experience, background, and social contexts. I do not mean simply "getting" meaning that has traditionally but mistakenly been thought of as inherent in the text.

One approach clearly reflecting this socio-psycholinguistic concept of reading is the *language experience* approach. What about whole language? We shall see in the subsequent section that it is not accurate to characterize it as an approach to reading instruction.

A language experience approach

The approach known as language experience (commonly abbreviated L.E.A) is associated with the name of Roach Van Allen (see his *Language Experiences* in *Education*, 1976). Those who advocate a language experience approach are concerned with helping beginners learn to bring their own knowledge and experience to bear in constructing meaning from the printed word. The importance of relating the individual's oral

language to written language and of relating reading to writing is emphasized in the motto "Anything I can say, I can write; anything I can write, I can read."

Thus the teacher begins with the language and experiences of the children-not only the experiences they may have had individually, but experiences they have had together in the classroom or on field trips: in raising guinea pigs or rabbits or plants, in cooking or conducting science experiments, in role-playing situations or acting out literature (see Chapter l0), in visiting a local farm or business or post office, and so forth. With an individual child, the teacher or other scribe typically writes a word or sentence that the child has dictated under a picture that the child has drawn, or takes the child's dictation for a longer story. With a group, the children typically compose together a story, poem, report, or "all about" list ("all about" planets, for example), perhaps with each child contributing a line. On the chalkboard or on chart paper, the teacher writes what the children dictate.

Over several days, the teacher reads the group composition aloud and teacher and children then read and reread what the children have composed, until the children can read the lines alone and begin to associate written words with their own spoken words. The teacher's belief about how reading should be taught or literacy fostered typically determines how the text is used for extended study. If the teacher understands reading and the development of reading as socio-psycholinguistic processes, then as the children

become more proficient at reading the text, the teacher will increasingly help the children focus on recognizing individual words and learning letter/sound correspondences, particularly consonants at the beginnings of words, and rhyming elements. In effect, the teacher is incorporating elements of the sight word, phonics, and linguistic approaches, while emphasizing the construction of meaning and dealing with noteworthy parts within the context of the whole selection. (For more information on procedures and research, see M. Hall, 1976,1981).

The language experience approach and philosophically related approaches have had several peaks of popularity: from about 1909 to 1918; in the late 1920s and early 1930s; and again from about the mid-1960s into the early 1970s. Today, it is mainly used as only part of a total approach, though it has been particularly successful with older nonreaders or those whose reading is quite limited, as well as with both children and adults learning English as a second language (e.g., Meek, 1983; Rigg & Taylor, 1979; Rigg, 1989,1990).

What about whole language?

In the 1988 edition of *Reading Process* and *Practice I* reluctantly described whole language as another socio-psycholinguistic approach to the teaching of reading, partly because whole language developed most obviously from the work of reading researchers and educators like Frank Smith, Ken and Yetta Goodman, Dorothy Watson, Carolyn Burke, Jerry Harste, and others around the world. However, I can no longer settle for contributing to this misunderstanding of whole language.

Whole language has developed into a comprehensive (albeit evolving and incomplete) philosophy of education, drawing upon many more lines of research and encompassing far more than just the development of reading, or even literacy. And that raises another issue: whole language educators think not about teaching reading (dispensing a reading curriculum to students) but about *guiding and supporting students in developing as independent readers, writers, and learners*. Hence the implicit and intended contrast in the title of this chapter. We shall next consider the development of language and literacy in some detail, then examine the contrasting assumptions that underlie traditional reading instruction as compared with the events that facilitate literacy development in whole language classrooms.

DEVELOPMENT OF LANGUAGE AND LITERACY

In order to understand the basis for a learning emphasis in contrast to a teaching approach, it helps to have some background in how children develop language and how they become literate in relatively natural settings, whether homes or classrooms.

The Development of Language

How do children learn to talk-that is, how do they develop implicit understanding and control of their native language, in the oral mode?

Imagine this scene: A young mother greets her husband enthusiastically as they sit down to dinner (or reverse the roles, if you prefer). "Guess what, dear? I've found this marvelous program for teaching Johnny to talk. It's called 'Getting Back to Basics: Teaching Your Child to Talk.' It's a great program. It starts first with the basic sounds, like /d/ and /ae/ -you know, like in ***d***og and ***a***pple. First you teach the child to say these sounds in isolation, then to blend them together. Why, in a couple of weeks Johnny might be able to say 'daddy.'" Her husband looks at her dubiously. "Then what?"

"Well, then you teach him to put words together to make sentences. It's simple. You work from the smallest parts to larger and larger parts, until he can say whole sentences. It's just a matter of teaching him the rules."

"Sounds like a lot of nonsense to me," her husband frowns, winding his spaghetti

onto his fork. "That's certainly not how my nephews are learning to talk. You must be kidding."

Children Learning Language

This hypothetical father is right, of course, in implying that no one ever learned to talk this way. We do not *teach* children to talk, in any direct fashion. That is, we do not explain abstract rules for them to follow in order to create words and sentences appropriately. Take, for example, the "rule" for formulating the past tense of regular verbs.
What *sound* do we add in changing like to liked? A It /d/ sound. What sound do we add in changing love to loved? A /d/ sound. So what is the rule for forming the past tense of regular verbs? Add a /t/ sound when the word ends in an unvoiced consonant (for which the vocal chords are not vibrating); add a /d/ sound when the word ends in a voiced sound, whether consonant or vowel (with the vocal chords vibrating). The exception is regular verbs that themselves end in a It/ or /dl sound; these have their own pattern, taking the ending /d/.

How many adults consciously know this rule? And even if parents did know this rule, how could they possibly teach it to their toddlers?

We have clear evidence, however, that children do learn this rule, that they do not simply learn to imitate adult past tense forms. At a certain point in language development (commonly around ages 2 to 3), the child will begin to apply this rule to irregular verbs as well as to regular ones-to irregular verbs that the child used to say correctly. The child who formerly said "I ate it" and "Mommy bought it," apparently having learned *ate* and bought through imitation, will now begin to say "I eated it" or "I ated it," and "Mommy buyed it" or "Mommy boughted it." That is, the child will begin adding the regular past tense ending either to the present tense or (less often) to the irregular past, applying the rule for regular verbs. Something similar happens with nouns that form their plurals by irregular means in English. The child who formerly said "men" to refer to more than one man will now begin saying "mans" or "mens" (see, for example, Cazden, 1972, pp. 44-45).

Clearly the child has not learned regularized forms like *eated, ated, buyed, boughted, mans,* and *mens* through direct instruction by adults or through imitating them. Nor is it likely that the young child learns such forms from peers, since children begin using such forms even when they have had scarcely any contact with other children. Instead, it appears that on the basis of the language forms the child hears, the child abstracts the pattern at an unconscious level. Neither the adults nor the child could tell us the rule, but the child learns it and is able to apply it systematically-even to irregular verbs and to nonsense words like *rick* or *zib* (Berko, 1958).
Powerful evidence of the child's own rule-forming capacity comes from observation of the increasingly sophisticated rules that one can infer over time from their formation of negative sentences. Each set of sentences below reflects an increasingly more sophisticated rule for negation. See if you yourself can verbalize the rule for each set:

1. No money.
   No a boy bed.
   Not a teddy bear.
   Not . . . fit.
   Wear mitten no.

2. That no fish school.
   That no Mommy.
   He no bite you.
   I no want envelope.
   This not ice cream.
   They not hot.
   I not crying.
   He not taking the walls down.

3. I didn't did it.
   You didn't caught me.

I didn't caught it.

4. You didn't eat supper with us.
   I didn't see something.
   Paul didn't laugh.

(These examples are from Klima and Bellugi-Klima, 1966, pp. 192-196, with the stages simplified somewhat for the sake of the adults trying to determine the rules that characterize each set.)

For the first set, the rule is simply "Put *no* or *not* at the beginning of the entire utterance, or add *no* at the end." This is the simplest rule for making a sentence negative. A rule that accounts for the sentences in the second set is simply "Put *no* or *not* between the subject and predicate parts of the sentence." For the third set, the rule is "When the verb doesn't already have an auxiliary (helper verb), add the appropriate present or past tense form of *do* to carry the negative *n't,* and put this before the main verb." Since the tense marker is not "removed" from the main verb at this point, the child produces sentences with the tense marked twice: *didn't did* and *didn't caught.* Obviously (unless you're really confused by this time) the last set reflects the adult rule: add the appropriate form of *do* to carry the negative marker and simultaneously "remove" the tense marker from the main verb.

If these rules seem hard to grasp, much less to figure out for yourself, then you are certainly in a position to appreciate the task that the child accomplishes in formulating more and more sophisticated rules for creating sentences in the native language. Eventually the child formulates rules comparable to those of adults in the immediate environment. In other words, children *construct* rules for oral language that increasingly reflect or approximate those being used by the adults around them. In fact, the role of the child in constructing language rules is so critical that some observers refer to this process as *child language construction* rather than *language acquisition,* though the latter term is widely used.

Thus, one of the most important observations about language acquisition is that *we do not directly* teach *children how to talk. They* learn *to talk, by transacting with us in a language-rich environment.* In fact, in some cultures young children learning language transact with their peers more than with adults. Adults talk with other adults in the presence of children, and the children are meant to hear and to learn language structure in the process of learning how language is used in their communities. But the younger language learners participate relatively little in adult-child verbal interactions. (See the section later in this chapter on "Language and Literacy Development: Parallel Views.")

By saying that children learn language functions through verbal transactions, I mean at least two things: (1) they learn the functions for which language is used, and forms and formulas for these uses; and (2) they learn accepted and acceptable modes of transaction with others.

Halliday's research demonstrates many of the language functions and, along with them, various forms and formulas. For example (from Halliday, 1975, p. 28):

- *Instrumental language* for getting things, for satisfying needs ("I want . . . ," "May I . . . ?")
- *Regulatory language* for controlling others ("Don't do that!" "Go away!" "Let's do this!")
- *Interactional language* for maintaining personal relationships (names, greetings, etc.)
- *Personal language* for expressing personality or individuality ("I like reading stories," "I like milk")
- *Imaginative language* for creating a fantasy world ("Once upon a time," "Once there was a lonely monster")
- *Informative language* for conveying information (reports, observations about the experienced world)
- *Heuristic language* for finding things out, for wondering, for hyhpothesizing ("Why?" "What for?" "What makes it go?" "I wonder what would happen if . . . ?")

These and other uses of language are what children from most cultures (at least most Western cultures) learn at an early age, simply by participating in and listening to language transactions.

In addition, they learn ways of transacting with others: what is permitted, what is encouraged, what is forbidden. This includes far more than simply words. For example, six-year-old Elsey, who speaks both her native Torres Strait Creole and standard English, engages in a kind of verbal exchange with her grandmother that is permitted in her cultural community, but would rarely be found in cultures influenced by mainstream European values. While singing "Mary Had a Little Lamb," Elsey asks her grandmother about the correct pronunciation of "lamb." Her grandmother responds by shrugging her shoulders, and Elsey replies in their native language *"0* wane yu big fo?" ('What good is it your being an adult?'). She has learned that in her cultural community this kind of response is acceptable from a child. Unfortunately, most teachers might not know this, and would consider her reply impertinent in school (Kale & Luke, 1991). Somewhat similarly, Shirley Brice Heath reports that young children in the working class community she calls "Trackton" are allowed to take on any speaker role in the community: "They can boss, cuss, beg, cuddle, comfort, tend, and argue with those about them; they can be old men, old women, parents, or older children in the ways they communicate" (Heath, 1983, p. 82).

Clearly the young child is quite adept at learning not only the forms (sounds, words, grammar, rules) of language but a complex array of language functions, speaker roles, and social conventions for language use-all before attending school, and all without direct "sit-'em-down-and-tell-'em" instruction.

How adults facilitate language acquisition

How, then, do we adults facilitate the construction of such rich language structure and sociolinguistic knowledge? In a variety of ways:

1. We illustrate a variety of language functions and interactional styles, as just explained.

2. We model *adult* language for children. In some cultures, adult language is modeled by conversation among adults. In other cultures, it is modeled more through adult-'hild interaction (transactions), especially those between caregivers and the child. We do simplify our sentence structure and our vocabulary in talking to babies and toddlers, focusing on the here and now in our speech; in fact, the language that caregivers use in addressing young children is usually just six months or so in advance of the child's own developing language. However, the caregivers and other adults in most communities do not commonly imitate children's own "baby talk,"

saying, for example, "How's my widdle tweetheart?"

3. We model *whole* language, not isolated sounds or words devoid of contextual meaning. When we use single words like "Look," "Daddy," "Milk," or "No," these words are spoken in a situational context that makes our meaning clear.

4. We use language in naturalistic, real-life contexts-again, adult conversations and/or adult/child interactions. For example, many adults talk to or with the child in the process of feeding the baby, changing the baby's diapers, and so forth; in the process of acquainting the baby with his or her environment ("That's a dog," "Here's a ball"); and in the process of reciting nursery rhymes, reading to the baby, and engaging in other literacy events. While these events may occur particularly in middle-class homes, they are not limited to that social milieu.

5. We respond to the child's language-like utterances as if they were intended to mean something; that is, we *assume* an intent to mean. For example, we assume that 'da-da-da' is intended to mean "daddy," and respond accordingly. This is a strategy we adults employ when children are still quite young-often before an actual intent to communicate in words is clearly evident!

6. When interacting verbally with the child, we focus on the child's meaning, rather than on the form of the utterance. Until children approach school age, at the earliest, they are not usually corrected for immature grammar ("That no fish school") or for immature phonology ("Dass gweat" for "That's great"). Young children are typically corrected only for inappropriate meaning (calling a horse a dog) or for social inappropriateness (depending upon the culture, this might include using so-called four-letter words at Grandma's house, or sassing adults) (Slobin, 1971, pp. 58-59). For the most part, we accept the child's utterances without correction. That is, we attend to the deep structure, the meaning, assuming that the surface structure will gradually come to resemble that of adults in the language community.

7. We provide feedback to the child in his or her attempts to communicate. When the child's meaning is not clear, we may be unable to respond appropriately, thus indirectly encouraging the child to expand his or her utterances in the direction of the adult forms. When we do understand the child, we ourselves may expand the utterance, modeling a fuller adult form. Thus, when the child says, "Mommy home," her father may reply, "Yes, Mommy's coming home." Simply responding to the child's meaning seems to be even more effective in stimulating the child's language growth. Thus the father might respond by saying, "Yes, now we can all go out for supper."

8. We collaborate with children in constructing meanings and oral texts. In the following Mother/child exchange from Gordon Wells' *The Meaning Makers* (1986), young Mark's utterances consist mostly of one word or simple two-word "sentences." However, his mother carries on a conversation with him by checking her understanding of his utterance, offering the conventional word for what he is trying to describe, and offering information in the form of a question, to which Mark responds affirmatively, repeating her observation (pp. 24,47):

MARK: A man's fire, Mummy.
MOTHER: Mm?
MARK: A man's fire.
MOTHER: Mummy's flower?
MARK: NO.
MOTHER: What?

MARK(emphasizing each *word):* Mummy, the man . fire.
MOTHER: Man's fire?
MARK: Yeh.
MOTHER: Oh, yes, the bonfire.
MARK(i mitating): Bonfire.
MOTHER: Mm.
MARK: Bonfire. Oh, bonfire. Bonfire. Bon-a fire bo-bonfire. Oh, hot, Mummy. Oh, hot. It hot. It hot.
MOTHER: Mm. It will burn, won't it?
MARK: Yeh. Burn. It burn.

Together, mother and child construct meanings and texts that are significantly beyond what the child alone can create-texts from which the child can simultaneously learn language forms, functions, and real-world meanings. In such exchanges, parents are said to provide scaffolding for the child's language and cognitive development (e.g., Ninio & Bruner, 1978; Bruner, 1983a,1983b, 1986; Cazden, 1983).
9. We expect success. We assume that children will eventually learn to talk like adults, and we rarely try to push them into more sophisticated development (at least until they start school, when they're sometimes sent to a speech therapist for immature phonology). We do not expect failure, nor do we penalize children for not being on schedule.

In some respects, the last of these ways of encouraging language development may be the most important: matter-of-factly expecting success, and responding to children accordingly.

Child and adult roles: A brief summary

Briefly summarized, then, here are some of the most important observations about how children acquire their native language and, in the process, learn to talk:

1. Adults do not, indeed cannot, teach the rules of language structure directly.
2. Rather, children internalize rules for themselves, by transacting with others in a language-rich environment: an environment in which whole language is used for *authentic* purposes.
3. Children's focus of attention moves from the whole (the idea they are trying to communicate) to the parts, the forms. Gradually they are able to articulate more and more parts to convey that whole-by using more content words, more grammatical markers (inflectional endings and function words), and more and more complex sentence structures. They develop control of the parts in the context of the whole communicative situation.
4. We expect that the child will eventually succeed in learning the rules of language exemplified by adults in his or her language community, without direct instruction.
5. Accepting the fact that the acquisition of language is a process that will take several years (and, in the fullest sense, a lifetime), we do not usually correct the form of young children's utterances. In fact, we welcome new kinds of errors-such as *eated* and *buyed-as* evidence that children are making progress in acquiring language. We do not expect surface structure perfection for years-if ever.

Two particularly good discussions of child language acquisition are found in Lindfors (1987) and Genishi and Dyson (1984).

THE CONSTRUCTIVE NATURE OF LEARNING

A key principle in this discussion of language acquisition is that the child is necessarily in charge of his or her own learning: the child constructs increasingly sophisticated rules of language, unconsciously, abstracting rules from the language used in the child's language environment.

In discussing how people develop facility in a second (or subsequent) language, Stephen Krashen (1981, 1982,1985b, 1985c) has contrasted *language learning* with *language acquisition.* "Learning" a language is what many of us did in school. We memorized vocabulary, studied grammar, translated passages, perhaps rehearsed conversational phrases (all depending upon the instructional approach); in short, we studied the language, hut we may never have achieved much facility in listening to or speaking the language, or in reading or writing it for any authentic purposes outside of class. Such language learning involves "knowing about" a language, but it doesn't *necessarily* lead to knowing the language in the same sense as if it were truly acquired. I prefer to think of this as *leaming about* or studying a language, while reserving *leaming* hy itself to mean something akin to acquiring language. Thus, learning (i.e., truly acquiring) an additional language may or may not occur in schools.

In contrast to *leaming about* a language, then, *language acquisition* is a subconscious process that leads to functional command of the rules of language, but not necessarily to conscious knowledge about that language or its rules. What children do in the home is *acquire* their native language. A key ingredient is *comprehensible input* provided by adults and others, from which the child can abstract the patterns and rules of the language (Krashen, 1981, 1982, 1985b, 1985~)While learning about the world through language, the child simultaneously learns language and learns about language (Halliday, 1975,1984). However, the language must be rich enough to provide raw data for the abstraction of patterns and the construction of rules; an adult's imitation of baby talk will not do, nor will primerese. On the other hand, the language input must be sufficiently comprehensible for the language learner to connect meaning with form.

We have spent so much attention on the acquisition of language because it is an examplar of how humans construct knowledge (e.g., F. Smith, 1975, 1990). This constructive view of knowledge and learning underlies current efforts to reform content-area instruction in virtually every major discipline, including math, science, English and the language arts, and social studies. (See, for instance, my fuller treatment of this trend in Weaver, 1990a.)

Before turning to the development of literacy, we will consider two models of learning and literacy development that have significantly influenced whole language educators.

Holdaway's natural learning model

Drawing upon natural learning in a variety of everyday living situations, Don Holdaway has developed a model of learning-of how we construct knowledge, if by "knowledge" we include not only conscious learning but what we learn to do semiconsciously or unconsciously, like learn a language. Holdaway (1986) sees such natural learning as involving four major phases:

1. Observation of demonstrations.
2. Guided participation.
3. Unsupervised role-playing practice.
4. Performance: sharing and celebration of accomplishment.

Holdaway gives an extended example of a toddler learning to make a sandwich, but my own favorite example is learning to ride a bicycle. First, the child observes the bike-riding demonstrations of other children and possibly adults. When the child feels ready, he or she is guided in learning: often an adult or older child will take the handlebars and push the bike to give a running start. The situation is not radically different if the bike has

training wheels, which provide more support for a longer time. After a while, the learner can keep the bike upright well enough to wobble down the road or sidewalk a few feet or yards; this is the beginning of unsupervised practice. When the child becomes sufficiently skilled, the child will usually want to perform for others: "Look, Mom, I can ride a hike!" Together, they share and celebrate the child's accomplishment.

Today, even driver's training is not significantly different-at least, not where we live. Over the years, children and youth have observed many adult demonstrations of how to drive. On the very first day of driver's training, the learner is given guided and supported practice in actually driving on the streets (the instructor is the guide, while the dual controls offer support similar to training wheels on a bike). This guided practice continues until the learner receives a license to drive alone and can then engage in unsupervised practice. Finally the learner may volunteer to perform: "Hey, Mom, how about letting me show you how well I can drive now?" or "Could I drive us on the trip to Florida?" Though neither analogy is perfect, both illustrate key features of Holdaway's model. First, the learner observes others engaging naturally in the desired activity; this natural engagement provides *demonstrations* from which the process can be partially understood. Next, others usually help the learner in initial attempts to replicate the activity. After these initial attempts, the learner usually prefers to practice alone, in order to acquire greater proficiency, control, speed, self-confidence, and so forth. Finally, the learner is eager to share with others how well he or she can now perform, and together they celebrate the learner's accomplishment.

Like Learning a language, most of what a person learns outside of school is not learned-and cannot be learned-by studying or following a sequence of rules. Natural learning occurs through active participation: by actually trying to do something, and mastering the various aspects or parts of that activity in the process of attempting the whole. We don't spend days or weeks learning how to hold the handlebars of a bike, or how to pedal it, nor do we separately practice how to maintain balance; we learn both in actually trying to ride. There is no "readiness" period during which children practice different aspects of bike riding in isolation.

As we shall see in a later section, Holdaway offers this model derived from natural out-of-school learning as a framework for early literacy instruction in the schools.

Cambourne's model of learning

Also drawing upon what is known about natural learning in everyday contexts, Brian Cambourne (1988) has developed a similar but more expanded model of learning. Figure 3.5 shows Cambourne's model as it applies to literacy learning. He suggests that immersion in texts of all kinds and natural demonstrations of how texts are constructed and used (e.g., others actually writing and reading in the child's presence) can lead to the child's willing engagement in learning to read. However, this engagement will occur only if the child sees him- or herself as a potential writer and reader, if the child is convinced that writing and reading will further his or her own purposes in the here and now, and if the child has no reason to fear criticism or punishment when attempts to write and read are not fully correct. It should be noted that the term "engagement" implies mental and emotional commitment, not just perfunctory action.

Cambourne further explains that engagement is fostered by adults' expectation that "of course" children will learn to write and read; by the opportunity to take responsibility and ownership for when, how, and what they will learn from literacy events (whether they are conscious of taking this responsibility or not); by plenty of opportunities to practice and use what they are trying to learn, in authentic and nonpunitive situations; by acceptance of their rough but increasingly sophisticated approximations of adult control of writing and reading; and by appropriate and supportive feedback and response from more knowledgeable others. All of these principles stem from observations of natural learning in various contexts, including contexts in which children have

learned to write and read relatively naturally. (For a list of references on the acquisition of literacy, see Figure 3.6.)

The Development of Literacy

As the Holdaway and Cambourne models imply, acquisition of literacy can proceed in much the same fashion as the acquisition of language, in settings where children receive

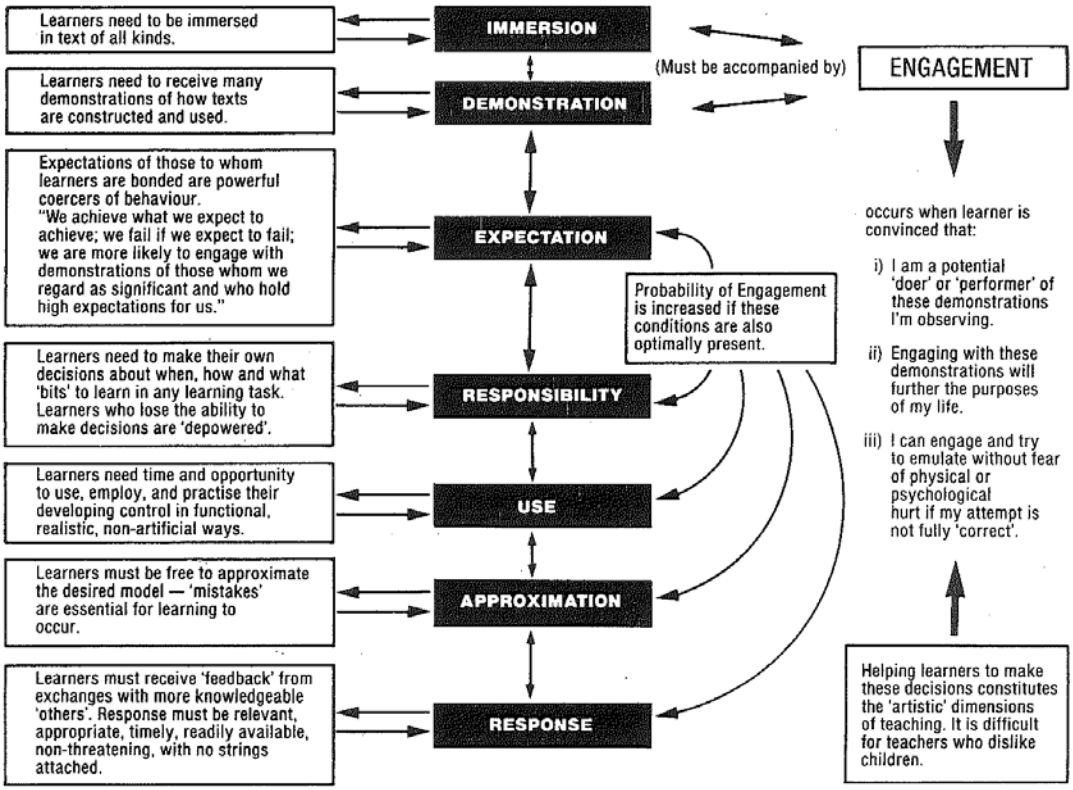


FIGURE 3.5 Brian Cambourne's model of learning, as applied to literacy learning (Cambourne, 1988, p. 33)

Articles

Fields, M. V. (1988). Talking and writing: Explaining the whole language approach to parents. *The Reading Teacher, 41,* 898–903.

Goodman, K. S. & Goodman, Y. M. (1979). Learning to read is natural. In L. B. Resnick & P. A. Weaver (Eds.), *Theory and practice of early reading,* Vol. 1 (pp. 137–154). Hillsdale, NJ: Erlbaum.

Holdaway, D. (1986). The structure of natural learning as a basis for literacy instruction. In M. R. Sampson (Ed.), *The pursuit of literacy: Early reading and writing* (pp. 56–72). Dubuque, IA: Kendall Hunt.

King, M. L. (1975). Language: Insights from acquisition. *Theory into Practice, 14,* 293–298.

Newman, J. M. (1985). Insights from recent reading and writing research and their implications for developing whole language curriculum. In J. Newman (Ed.), *Whole languge: Theory in use* (pp. 7–36). Portsmouth, NH: Heinemann.

Teale, W. H. (1982). Toward a theory of how children learn to read and write naturally. *Language Arts, 59,* 550–570.

Books

Clay, M. M. (1987). *Writing begins at home.* Portsmouth, NH: Heinemann.

Clay, M. M. (1991). *Becoming literate: The construction of inner control.* Portsmouth, NH: Heinemann.

Doake, D. (1988). *Reading begins at birth.* Richmond Hill, Ontario: Scholastic.

Hall, N. (1987). *The emergence of literacy.* Portsmouth, NH: Heinemann.

Harste, J. C., Woodward, V. A., & Burke, C. L. (1984). *Language stories and literacy lessons.* Portsmouth, NH: Heinemann.

Hill, M. W. (1989). *Home: Where reading and writing begin.* Portsmouth, NH: Heinemann.

Laminack, L. L. (1991). *Learning with Zachary.* Richmond Hill, Ontario: Scholastic.

Newman, J. M. (1984). *The craft of children's writing.* Richmond Hill, Ontario: Scholastic.

similar kinds of encouragement, support, and response, with similar expectations for gradual progress and eventual success.

Like learning to talk, both learning to read and learning to write involve the child in constructing increasingly sophisticated strategies or rules. We can see how children construct such strategies and rules in their development of written language by limiting our focus to very early writing and reading development. It is important to consider both together; not only because early writing promotes reading and vice versa, but also because they reflect similar developmental processes that have significant implications for teaching.

The constructive nature of writing development

In many homes, even where books do not abound, children are surrounded with print and frequently see adults and older siblings reading and writing for many purposes. They see literacy demonstrated and may try to imitate what more sophisticated language users do. This occurs in many low-income inner-city families as well as in more affluent suburban families (D. Taylor & Dorsey-Gaines, 1988).

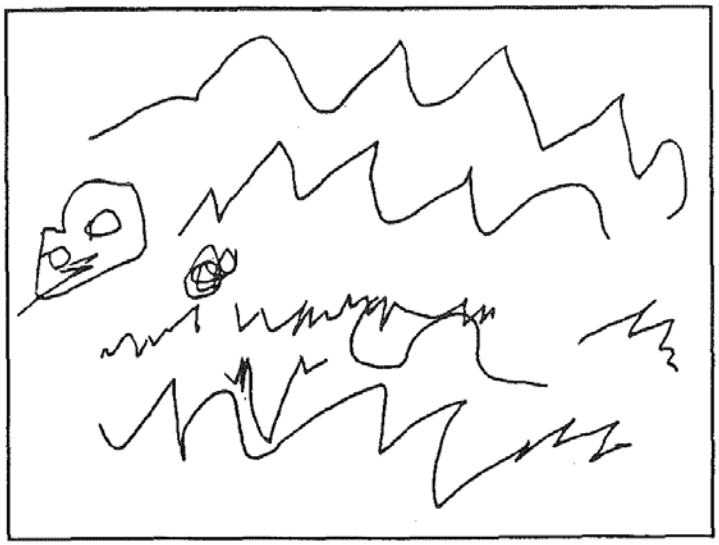
A child's earliest attempts at writing may be what has been termed "scribble writing." Usually, it looks significantly different from what the child claims is a drawing; in fact, there is often some resemblance to adults' cursive writing. Figure 3.7 presents part of a ghost story written by Jane (age 31%) one day while she was visiting researcher Judith Newman. To entertain the child, Newman handed her some paper and crayons for drawing. But Jane wanted to "'make a book'" instead. She took Newman's pencil and proceeded to write the story herself, composing aloud. While Jane wrote, Newman transcribed the story word for word. To her surprise, Jane "read" the text almost verbatim, and even two weeks later still approximated the text very closely when again reading her ghost book to Newman.

Newman's comments are insightful and instructive. She observes that as Jane wrote, she moved from left to right, top to bottom. She distinguished between drawing (the two ghosts on the left) and writing: the drawings are circular, the writing linear. Furthermore, Jane had some sense of what a sentence is-each complete idea in her story was represented by a continuous mark. The story also shows Jane's sophisticated grasp of story structure: It opens with an introduction to the characters, who are placed in a setting; it proceeds with a series of events involving an antagonist, the ghost; and it ends with a resolution, in which the ghost finally leaves-and, of course, the girls live happily ever after (Newman, 1984, p. 14).

Clearly, Jane has already learned some important concepts about the functions of language (to tell a story), story structure, and the conventions of print. Her mastery of the written forms of language is much less sophisticated, but even so she differentiates drawing from writing. With the kind of encouragement and response she has already received, Jane will deepen her understanding of the functions of language and concepts of print, while gaining increasing control over the forms of language.

One of these forms is spelling. A significant body of research enables us to demonstrate

some of the patterns that increasingly sophisticated control of spelling might take. (Children's writing samples with increasingly sophisticated spellings are provided in the appendix to this chapter.) However, neither Jane nor any other child will necessarily follow these patterns of development or go through these "stages" in constructing spellings and implicit rules for spelling. (Figure 3.8 suggests some valuable references on the



Mary Kate and Jane were playing outside.
Then they went inside to watch TV.
Then when they were watching TV
they saw a scary thing—a ghost.
So they hided under their covers.
Then the ghost couldn't see them.
The ghost felt sad
and he wrecked up the place.
Then the ghost finally leaved.
Then the girls lived happily ever after.

FIGURE 3.7 *Part of a ghost story by Jane, age 3½ (Newman, 1984, p. 13)*

development of spelling and strategies for spelling; see also the case studies listed in Figure 3.12, especially Bissex.)

If we remember that the following "stages" refer to increasingly sophisticated *spellings* rather than necessarily describing stages of development in any one child, we might hypothesize rules that would account for these stages in their purest (but seldomoccurring) forms:

1. *Prephonemic*: To spell a word, just put down some letters; the longer a word is, the more letters you should write. Example: TDOI, wherein the letters do not represent sounds (Temple, Nathan, Temple, & Burris, 1993). Writers operating upon this kind of rule will often write or lay out a sequence of letters (e.g., with magnetic

Emphasis on facilitating spelling development

Buchanan, E. (1989). *Spelling for whole language classrooms.* Katonah, NY: Richard C. Owen.

Gentry, J. R. (1987). *Spel . . . is a four-letter word.* Portsmouth, NH: Heinemann.

Temple, C., Nathan, R., Temple, F., & Burris, N. (1993). *The beginnings of writing* (3rd ed.). Boston: Allyn & Bacon.

Wilde, S. (1992). *You kan red this! Spelling and punctuation for whole language classrooms: K–6.* Portsmouth, NH: Heinemann.

Emphasis on understanding spelling development

Bissex, G. (1980). *Gnys at wrk: A child learns to write and read.* Cambridge: Harvard University Press.

Ferreiro, E., & Teberosky, A. (1982). *Literacy before schooling.* (K. G. Castro, Trans.). Portsmouth, NH: Heinemann.

Gentry, J. R. (1982). An analysis of developmental spelling in GNYS AT WRK. *The Reading Teacher, 36,* 192–200.

Henderson, E. H. & Beers, J. W. (Eds.). (1980). *Developmental and cognitive aspects of learning to spell.* Newark, DE: International Reading Association.

Hughes, M., & Searle, D. (1991). A longitudinal study of the growth of spelling abilities within the context of the development of literacy. In J. Zutell, S. McCormick, L. L. A. Caton, & P. O'Keefe (Eds.), *Learner factors/teacher factors: Issues in literacy research and instruction* (pp. 159–168). Chicago: National Reading Conference.

Read, C. (1986). *Children's creative spelling.* New York: Routledge.

Treiman, R. (1993). *Beginning to spell: A study of first-grade children.* New York: Oxford University Press.

Villiers, U. (1989). *Luk mume dade I kan rite.* New York: Scholastic. (Spanish version also available.)

Emphasis on the effect of invented spelling

Clarke, L. K. (1988). Invented versus traditional spelling in first graders' writings: Effects on learning to spell and read. *Research in the Teaching of English, 22,* 281–309.

Gunderson, L., & Shapiro, J. (1987). Some findings on whole language instruction. *Reading-Canada-Lecture, 5,* 22–26.

Gunderson, L., & Shapiro, J. (1988). Whole language instruction: Writing in 1st grade. *The Reading Teacher, 41,* 430–437.

FIGURE 3.8 *References on spelling and facilitating the development of spelling*

letters) and ask, "What does this say?" or "What did I write?" (Clay, 1975,1991a). They know that letters together can "say" something, but they haven't learned that there is a relationship between letters and sounds.

2. *Earlyphonemic:* To spell a word, use letters to represent the first sound of a word, and maybe the last sound. Example: RCRBKD for "Our car broke down," or MBEWWMLNT for "My baby was with me last night" (Temple et a]., 1993). Notice in the second example that the child has used a letter for the beginning of each vllnble she heard in "baby." This sometimes occurs as spellings become more sophisticated. As more of the sounds are represented, early phonemic spellings shade into what are more obviously "letter-name" spellings.

3. *Letter-name*: To spell a word, write letters for at least three of the sounds in the word (if there are three or more), and represent vowels as well as consonants. Use letters whose name sounds like the sound you're trying to represent. (This principle is operant in early phonemic spellings also, but it's not as obvious because children are representing only one or two sounds per word.) Example: YUTZ A LADE YET FEH EG AD HE KOT FLEPR for "Once a lady went fishing and she caught flipper" (C. Chomsky, 1971, p. 509). Notice, for instance, that the "wuh" sound in "once" is represented by the letter Y, whose name starts with that sound. Similarly, the E for the vowel in "Flipper" has a name that starts with the short /i/ sound in

"Flipper." (To reason your way through some of the other letter-name spellings, it may help to consult the appendix to this chapter, which explains consonant and vowel spellings reflecting the letter-name strategy.

4. *Transitional*: To spell a word, use what you remember from seeing the word in print. If you don't remember how a word is spelled, try using the rules for spelling that you've observed in print (e.g., final e to make a preceding vowel long, two vowel letters to represent a long vowel sound). Otherwise, continue to use letter-name spellings and anything else you know. Example: "He had a blue clth. It trd in to a brd" for He had a blue *cloth.* It turned into a bird. Another example: "At my house i have some dayseses they are flowers they growe in the spreing." And still another: "I have a ducke. I can drike wottre" forIhave a duck. It can drink water (Temple et al., 1993). Notice the overgeneralization of the finale in "ducke" and "drike." Such overgeneralization of rules is common when typical patterns of spelling are being learned.

These, then, are some of the rules that we might hypothesize to account for the increasingly more sophisticated spellings between scribble writing and more conventional spelling. Any one writing sample may reflect at least two or three of these different rules, or patterns. For example, a child may spell some high-frequency words correctly, demonstrate transitional spelling on some words, and use letter-name spellings on some of the other words. As children grow in their range of spelling strategies, we rarely find pure examples of one kind of spelling strategy. Indeed, growth in spelling may consist, in large part, of growth in the range of spelling strategies that the speller can use successfully (e.g., Wilde, 1992).

Keeping this in mind, we can nevertheless better understand spelling growth partly by understanding some increasingly sophisticated spelling strategies and becoming familiar with the kinds of spellings they produce. Examples of such increasingly sophisticated spellings of the same words, but from different children, are nicely summarized in a chart from Temple, Nathan, Temple, & Burris (1993, p. 101). (For slightly different treatment of spelling stages, see Bissex, 1980; Henderson & Beers, 1980; Ferreiro & Teberosky, 1982; Hughes & Searle, 1991.)

Prephonemic	*Early phonemic*	*Letter-name*	*Transitional*	*Standard*
MPRMRHM	J	GAGIN	DRAGUN	DRAGON
BDRNMPH	P	PRD	PURD	PURRED
Brian, Kindergarten	Angela, Kindergarten	Chris, 1st Grade	Joyce, Ist Grade	Lorraine, 2nd Grade

While these examples are from different children, they could have been from the same child in different phases of development. Cramer gives one such example of a child whose spontaneous spellings changed over the course of her first-grade year, as a result of transactions with a print-rich environment (Cramer, 1978, p. 107):

- October: lfnt
- December: elfnt
- February: elphnt
- June: elephant

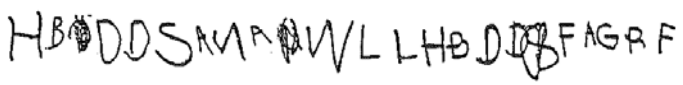
Though a child will not always produce increasingly sophisticated spellings of the same words over time, the general tendency to do so parallels the tendency to produce increasingly sophisticated spoken utterances. Furthermore, both the spellings of individual words and the construction of spoken sentences can be seen to reflect increasingly sophisticated rules, even though children are rarely if ever conscious of them.

To determine and document such growth in spelling, teachers have sometimes asked a child to write a memorized song or rhyme several months after first writing it, or asked the child to write again something the child wrote earlier, while the teacher dictates it. (See Figure 3.9.) In this way, children's spelling and writing growth can be easily captured and documented.

We need to remember that even with the natural encouragement of spelling development, no one child will necessarily adopt the rules hypothesized above, or go through the stages of spelling that these rules seem to imply. These are simply offered as evidence that, with appropriate opportunity and encouragement, children can construct increasingly sophisticated spellings and hypotheses about spelling for themselves in the process of becoming a competent adult speller.

There are many potential advantages to encouraging constructive spelling in early writing (and later, in rough or early drafts). One advantage is that children who construct their own spellings are not limited, in their writing, to words they can spell correctly or to words they have seen in basal reading materials (Gunderson and Shapiro, 1987). Another advantage is that they are encouraged to take risks in their writing, and encouraged to construct knowledge for themselves. Still another advantage is that constructive spellers more readily learn and apply phonics knowledge (letter-sound relationships). Finally, there is even evidence suggesting that constructive spellers may do better on standardized tests of spelling and reading (Clarke, 1988); this evidence can be used with administrators in describing the advantages of encouraging children in constructive spelling. (An outstanding resource on spelling development is Sandra Wilde's

In late September, Sandra produced this rendition of "Humpty Dumpty":



In late February, she produced this rendition:

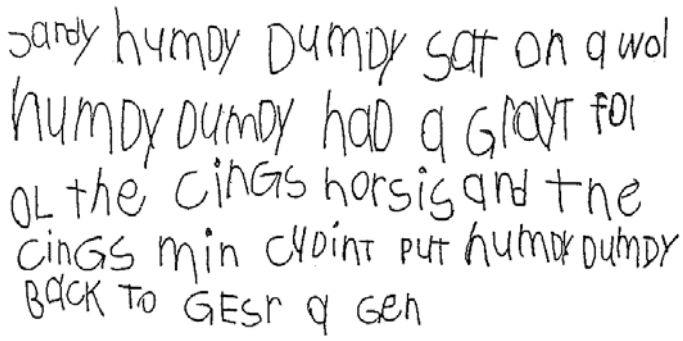


FIGURE 3.9 A first grader's renditions of "Humpty Dumpty" (Fitzgerald, 1984)

You Kan Red This! Spelling and Punctuation for Whole Language Classrooms, 1992. Wilde not only describes children's development in spelling and punctuation but gives specific suggestions for what aspects of spelling should be taught, along with examples of mini-lesssons for the elementary grades.)

Clay, M. M. (1975) *What did I write?* Portsmouth, NH: Heinemann.

Clay, M. M. (1987). *Writing begins at home.* Portsmouth, NH: Heinemann.

Clay, M. M. (1991). *Becoming literate: The construction of inner control.* Portsmouth, NH: Heinemann.

Newkirk, T. (1989). *More than stories: The range of children's writing.* Portsmouth, NH: Heinemann.

Newman, J. M. (1984). *The craft of children's writing.* Richmond Hill, Ontario: Scholastic. (Available in the U. S. from Heinemann.)

Robinson, A., Crawford, L., & Hall, N. (1990). *Some day you will no all about me: Young children's explorations in the world of letters.* Portsmouth, NH: Heinemann.

Temple, C., Nathan, R., Temple, F., & Burris, N. (1993). *The beginnings of writing* (3rd ed.). Boston: Allyn & Bacon.

FIGURE 3.10 References on the development of writing

Children's constructed spellings are often called invented spellings, functional spellings,or even *temporary* spellings. I prefer to call them constructive spellings (Laminack, 1992), to emphasize the fact that the child is operating upon self-constructed rules and strategies for spelling. The term *constructive spellings* appropriately reflects the child's mind at work in the process of constructing knowledge. Again, this is parallel to what we have observed about language acquisition: it is a *constructive* process.

The purpose of this section was not to present a complete explication of writing development, or even of spelling development, but merely to indicate that learning to write, like learning to talk, is a gradual, constructive process. For those interested in studying writing development in more detail, the references in Figure 3.10 offer some good starting points.

The constructive nature of reading development

Learning to read begins long before children are first exposed to formal instruction in school. It begins when children listen to stories read (perhaps while yet in the womb) and when they first begin to notice print in their environment: the print on packages, signs, T-shirts, and so forth.

Before they know exactly what words on signs and packages mean, children often know the gist of the meaning. While they may correctly read STOP on the octagonal red sign at the end of the street as stop, they may say that the red COLGATE on the white tube in the bathroom says toothpaste, or that CHICKEN NOODLE on the red-and-white can says soup. Like children engaging in prephonemic writing, they know that letters put together make words, even though they may not yet have grasped the fact that there is a relationship between letters and sounds.

Children do not necessarily proceed through set stages in reading development, any more than they proceed through set stages in oral language or writing development. But there is substantial evidence for the following recurring patterns, or emphases, particularly when children's early reading experiences include the reading of predictable and enjoyable picture books:

1. *Schema emphasis.* The child turns the pages of the book, telling the story essentially from memory and from the pictures. At this point, the child may be said to be conceiving of him- or herself as a reader. That is, the child is engaging in reading-like behavior, even though not yet matching written words to spoken words. Rather, the child is relying essentially upon prior knowledge of the story, upon his or her schemas, with pictures as a cue triggering the schemas.

2. *Early semantic/syntactic emphasis*. As the child begins to match his or her oral rendition with the language of the text, the child learns to pick out some individual words and letters, still using picture cues to supplement the print. Words read in one context may not be read in another; that is, the child's reading of words may depend on the situational context and/or on the semantic and syntactic cues in the text.

3. *Later semantic/syntactic emphasis.* As the child's oral reading becomes increasingly tied to the print on the page, the child may nevertheless make many miscues that fit the context semantically and syntactically, but do not visually resemble the word on the page. Reading "bird" for *canary* would be one example. Such miscues are typical of older proficient readers, too, but they are more frequent among emergent readers. Furthermore, at this point in his or her development as a reader, the child may not yet be *able* to correlate semantic/syntactic cues with grapho/phonemic cues very effectively, as the proficient reader can.

4. Grapho/phonemic emphasis. Gradually, the child evidences more and more concern for reading exactly what is on the page. The child who was formerly satisfied to read *canary* as "bird" may now struggle to sound the word out, perhaps even producing a non-word like "cainery" in the attempt. An important point to remember, though, is that the child growing through and beyond the other patterns will typically be getting the *meaning* of bird, while struggling to say the text word *canary.* This seeming overreliance upon the grapho/phonemic cueing system simply reflects the child's attempt to master that cueing system *in addition* to the others.

5. *Simultaneous use* . Eventually the child is able to use all three cueing systems simultaneously, using semantic and syntactic cues to predict what is coming next, sampling grapho/phonemic cues to confirm or correct that prediction and to make further and so forth. The child has become an independent reader

These patterns in reading development closely parallel the patterns of spelling development outlined previously.

Such abstraction of patterns from reality helps us understand how children gradually construct their own understanding of reading and writing (even though, for illustration, we've focused narrowly on the spelling aspect of writing). However, the day-today, child-by-child reality of literacy development is much messier and less clear-cut. Figure 3.11 gives some sense of this, as it derives from observations of children's early literacy development. However, it too is organized into "stages" that, in reality, are far from separate or discrete. Still, the greater wealth of detail should give some sense of the potential variability among children.

Language and Literacy Development: Parallel Views

Such variability is both cultural and individual. The foregoing descriptions of language and literacy development are based primarily on research that has focused on middleclass children from mainstream cultures. While many of the patterns that emerge from such research may be universal, or nearly so, there are nevertheless differences from culture to culture-differences that are relevant for teachers working with these children. Drawn mainly from Shirley Brice Heath's *Ways with Words* (1983), the following discussion only begins to suggest the differences of which teachers need to be aware. A more thorough summary of Heath's study can befound in Luke, Baty, & Stehbens (1989).

Acquisition of language. Heath (1983) focused her ethnographic research into language and literacy development on two working-class communities of mill worker families, one a white community and the other black. The former she called Roadville, the latter Trackton.

Pre-independent Reading Stages

1. *Magical Stage*
   - Displays an interest in handling books.
   - Sees the construction of meaning as magical or exterior to the print and imposed by others.
   - Listens to print read to him or her for extended periods of time.
   - Will play with letters or words.
   - Begins to notice print in environmental context (signs, labels).
   - Letters may appear in his or her drawings.
   - May mishandle books—observe them upside down or damage them due to misunderstanding the purpose of books.
   - Likes to name the pictures found in book.

2. *Self-Concepting Stage*
   - Self-concepts him- or herself as a reader, i.e., engages in readinglike activities.
   - Tries to magically impose meaning on new print.
   - "Reads" or reconstructs content of familiar storybooks.
   - Recognizes his or her name and some other words in high environmental context (signs, labels).
   - His or her other writing may display phonetic influence (e.g., wtbo = Wally, hr = her).
   - Can construct story meaning from pictorial clues.
   - Can not pick words out of print consistently.
   - Orally fills in many correct responses in oral cloze reading. [Completes sentences from which words have been selectively omitted.]
   - Rhymes words.
   - Increasing control over nonvisual cueing systems.
   - Gives words orally that begin similarly.
   - Displays increasing degree of book-handling knowledge.
   - Is able to recall *key words.*
   - Begins to internalize story grammar, knows how stories go together ("Once upon a time," "They lived happily ever after").

3. *Bridging Stage*
   - Can write and read back his or her own writing.
   - Can pick out individual words and letters.
   - Can read familiar books or poems that could not be totally repeated without the print.
   - Uses picture clues to supplement the print.
   - Words read in one context may not be read in another.
   - Increasing control over visual cueing system.
   - Enjoys chants and poems chorally read.
   - Can match or pick out words of poems or chants that have been internalized.

FIGURE 3.11 Observations for a reading development continuum (Cochrane, Cochrane, Scalena, & Buchanan, 1984) [adapted from original]

Independent Reading Stages

1. *Take-off Stage*
   Excitement about reading.
   Wants to read to you often.
   Realizes that print is the base for constructing meaning.
   Can process (read) words in new (alternate) print situations.
   Aware of and reads aloud much environmental print (signs, labels, etc.).
   Can conserve print from one contextual environment to another.
   May exhibit temporary tunnel vision (concentrates on words and letters).
   Oral reading may be word-centered rather than meaning-centered.
   Increasing control over the reading process.

2. *Independent Reading*
   Characterized by comprehension of author's message by reader.
   Reader's construction of meaning relies heavily on author's print or implied cues (schema).
   Desire to read books to him- or herself for pleasure.
   Brings own experiences (schemata) to the print.
   Reads orally with meaning and expression.
   Reads in word meaning clusters.
   May see print as literal truth: what the print says is right (legalized).
   Uses visual and nonvisual cueing systems simultaneously (cyclically).
   Has internalized several different print grammars (fairy tales, general problem-centered stories, simple expository).

3. *Skilled Reader*
   Processes material further and further removed from own experience.
   Reading content and vocabulary become a part of his or her experience.
   Can use a variety of print forms for pleasure.
   Can discuss several aspects of a story.
   Can read at varying and appropriate rates.
   Can make inferences from print.
   Challenges the validity of print content.
   Can focus on or utilize the appropriate grammar or structuring of varying forms of print (e.g., stories, science experiments, menus, diagrams, histories).

FIGURE 3.11 Continued

What differs most noticeably is parent expectations about how children will acquire language and literacy, patterns of adult-child interaction, and forms of oral and written discourse.

In Roadville, parents feel they bear primary responsibility for teaching children what they need to learn before school, including how to talk, how to behave (and to talk "right"), how to view their world, and how to interact with books. As the primary caregiver, the mother talks extensively to the baby, frequently using baby talk. Other adults address the baby in baby talk also:

Wha's a matter, Bobby, yo' widdle turn-tum all empty?
Don't fuss, don't fuss, we're home now. We put Bobby, go all-night-night.
Mommy get his bottle.

The use of childish pronunciations and vocabulary, not to mention the grammatical

simplification (omission of *will* from *Mommy* [will] *get his bottle)* all signal that these adults are addressing the child in baby talk.

When Roadville children begin to make sounds that adults can link to items in the environment, adults and older children often try to teach the baby the words for these objects. They may be more directive than typical middle-class parents in trying to guide their child's language development, telling the child and correcting the child instead of simply modeling adult language use in conversation with the child. In any case, their child-rearing practices differ sharply from those of Trackton.

As Heath puts it, "Any baby born into Trackton is born not to a family, but to the community" (1983, p. 146). Whereas the young child in Roadville spends much of the time amusing him- or herself in the crib or playing alone, the young child in Trackton is passed from lap to lap among adults and older children. Older children also carry the baby around, often on their hip, and introduce the infant to their games and other social interactions. The baby is surrounded by language, but during the first six months to a year of their lives, babies are seldom addressed directly by adults. Adults in Trackton expect their children to learn language by listening to others in their environment, not by having their utterances expanded and scaffolded by a caretaking adult. Of course, community members facilitate this learning by including the baby in all activities, many of which take place outdoors on the porches or in the plaza, where everyone interacts. The child is not isolated or left to play alone.

By about twelve to fourteen months, boys are encouraged to perform verbally. They are often teased and taunted, and expected to learn to respond by outwitting, outtalking, or out-acting their antagonists. They are expected to learn that different words and language routines may elicit different responses at different times, from the same person as well as from different people. In short, they are socialized to understand that language use is flexible and changing, and to adapt to the various verbal and nonverbal cues and responses in their environment. Girls have far fewer opportunities to interact verbally with adults in the community. However, all children are expected to learn language and language use through observation and participation, not by being explicitly taught. Which procedure works better, the teaching approach of Roadville parents or the learning approach of Trackton parents? By the time they go to school, children in both communities have learned the language functions, participant roles and interaction patterns, and discourse forms of their communities. And children from each community have learned "the sounds, words, and grammatical systems of the language spoken around them" (Heath, 1983, p. 145).

Oral and literate traditions in Trackton. While the forms of oral and written discourse in Roadville may not be radically different from those of mainstream cultures, the same cannot he said for Trackton. Some differences of particular significance for education are the following:

1. Storytelling is valued in Trackton. If the story is based upon an actual event, storytellers embellish or fictionalize the details-and the outcome may not even resemble what actually happened. Children-boys in particular-learn early to capture an audience's attention or win favors by telling such stories, often with exaggeration and humor.
2. An adult's accusation serves as an invitation for a child to tell a good story, presumably to avoid punishment. In such instances also, the story must he "highly exaggerated, skillful in language play, and full of satisfactory comparisons to redirect the adult's attention from the infraction provoking the accusation" (Heath, 1983, p. 167).
3. In Trackton, reading is typically a social event. When adults receive notices of meetings or forms to fill out, for example, their meaning and the advisability of action is typically discussed among friends. To read alone is frowned upon; those

who read magazines or books alone are accused of being antisocial.
4. In this community, adults do not read books to children, nor do children have their own books to read. Furthermore, adults do not create reading and writing tasks for children. They are left to find or create their own reading and writing tasks: "distinguishing one television channel from another, knowing the name brands of cars, motorcycles and bicycles, choosing one or another can of soup or cereal, reading price tags at Mr. Dorgan's store to he sure they do not pay more than they would at the supemarket," and reading the names and addresses of mail brought by the postman, who then may let the children deliver the mail to the appropriate person (Heath, 1983, p. 190).
5. Jointly or in groups, the children *read to learn* before they go to school to *learn to read.* Youngsters are sent to the store along with older children "almost as soon as they can walk," and they quickly learn to use context-location, color and shape of packaging, shape of logos, and so forth-to help them read critical information like product and brand names. From an early age they learn to read prices, in order to make sure they are not paying too much. Also, reading becomes a community event among the children when they work together to modify old toys and when they read directions. "Reading is almost always set within a context of immediate action" (Heath, 1983, pp. 191,192).

When we consider how to build upon children's strengths in the classroom, it is important to recognize the different strengths brought by children from differing cultural communities. Language and literacy development are not encouraged the same way everywhere.

Emergent Literacy: The Messiness of Literacy Development

We can best appreciate the "messiness" of each child's literacy development by considering some examples from individual children. Children's individual development reflects what is encouraged in their own home and school communities.

Zachary: From a parent's journal

Zachary comes readily to mind-doubtless because I have met and talked with him, as well as read *Learning with Zachary,* written by his father, Lester Laminack (1991). In his book, Laminack claims to have learned the principles of literacy development abstractly from my *Psycholinguistics and Reading* (1980), but it was learning them firsthand from Zachary that made a critical difference in his understanding.

Zachary's parents, Lester and Glenda, are atypical, in that Lester read fairy tales to Zachary for months before his birth, in addition to reading to him daily after his birth; they did more than most parents to assist him in processing written language in the environment; they responded positively to approximations of written words, when other parents might have corrected him instead; and, obviously, Lester spent a lot of time documenting Zachary's development of literacy. Zachary, while clearly very bright, was *not* necessarily atypical. Rather, his dramatic literacy growth illustrates what most children are probably capable of, if they are given the same kind of support for literacy development that we usually provide for children's initial language development.

To illustrate selected features of Zachary's literacy development through his transactions with environmental print, I'll excerpt a few of Lester's journal entries from *Learning with Zachary,* with comments.

December 24,1985: Age 1 year, 3 months

Today Zachary was playing with the buttons and knobs on his grandparents' dishwasher when I saw him rubbing the words Sears Best. I walked over to him,

trailed his finger across the letters and said, "Dishwasher. This is Maw-Maw's dishwasher." Just a few minutes later he had shifted his attention to the raised letters spelling Kenmore on the refrigerator. At that time I repeated my actions, saying, "Refrigerator. This is Maw-Maw's refrigerator." Each time he passed either appliance after that he would rub the letters and name the appliance. All of us were very pleased and thought this was quite cute.

Later Glenda, Zachary and I were unpacking when Zachary looked up at me and announced, "Daddy's suitcase." He was standing next to my suitcase with one hand on the handle and the other stroking the etched lettering: Samsonite. I was amazed! I walked him over to Glenda's suitcase and traced his index finger over the same etched logo. I asked, "Zachary, what does this say?" Without a pause he answered, "Mommy's suitcase!" He looked at me and grinned. I picked him up and gave him a big hug. "That's right, buddy, that's right."

Lester comments that he will never view literacy in quite the same way after that evening. I, in turn, will never view literacy development in quite the same way, having seen how Lester encouraged his young son's literacy development by teaching him that printed signs and logos have meaning that is signaled by the environment in which they occur. Lester was not merely accepting Zachary's approximations; he was actually demonstrating and encouraging them! He was showing Zachary how to use his schemas, his knowledge of the world, to make sense of environmental print.

December 26, 1985: Age 1 year, 3 months

Coming home today we stopped at McDonald's for lunch. After the Kenmore and Samsonite episodes I wondered what Zachary would do with the McDonald's logo, which is more familiar to him. As usual, he wanted "chicken nuggets, fries and orange drink." When we were seated with our food, I pointed to the logo on Zachary's cup and asked him what it said. "Orange," he responded. Glenda and I looked at each other and smiled. "Very good. You did a good job with that," I praised. I presented the same logo on both the french fries package and the Chicken McNuggets box and asked the same question, "What does this one say?" In both instances his response was to name the item in the packaging: "fries" and "chicken nuggets."

Clearly Zachary was applying the insight he had gained two days before: that labels on things tell what they are. He had developed a strategy for reading this kind of environmental print, and was not troubled by the fact (or did not notice) that the same visual information (Samsonite, McDonald's) seemed to "say" something different in different contexts. Zachary did not, of course, remain in this same early stage of understanding. He gradually came to know specific words and to use letter/sound knowledge along with schemas to name words in his environment.

June 1986: Age 1 year, 9 months

During a trip home to see my parents we stopped the McDonald's in Murphy, NC, our usual first pit stop. While there I showed Zachary the McDonald's logo on my coffee cup and asked him to read it for me. "McDonald's. It says McDonald's." His voice was confident, and he proved himself by pointing out every McDonald's logo in sight and announcing that it too said McDonald's. This print symbol has become a reliable representation for the word, one he has ownership over. Our next pit stop was in Ellajay, GA, where there was both a Hardee's and a new McDonald's that had been built since our last trip. We had lunch at Hardee's and again I decided to take advantage of the opportunity. I pointed to the Hardee's logo on my coffee cup and asked Zachary to read it for me. "Hot coffee" was his response. When I pointed to the same logo on the french fries packet, he read "Fries."

And his response was "Cheeseburger" when I asked about the logo on the sandwich wrapper. I praised all his efforts, telling him what a good reader he was and how proud I was.

Though Zachary had established "McDonald's" as a word he could identify in various contexts, he resorted to his tried-and-true strategy of using schemas and environmental context when confronted with the unfamiliar word "Hardee's." Interestingly, at age 3 years exactly, he gave his first evidence of trying to use a grapho/phonemic strategy: he asked if the written word *hairdresser* said "Hardee's," a similarly beginning word with which he was now familiar. He was beginning to use grapho/phonemic cues.

It is important, too, that as Zachary's strategies for making sense of print changed, so too did Lester's responses, as the following example illustrates.

May 10, 1989: Age 4 years, 8 months

Zachary has become very interested in environmental lettering beyond logos. "What does p-u-s-h say?" he asked today. "What do you think it says?" I asked. His response was, "Come in, right'!" I supported his attempt with, "That's a good idea because that's the door you go in, but it says 'push' so you know how to open the door." Pleased with the explanation, he replied, "Oh, I get it. You push the door if you want to come in." "Exactly right. Let's go in."

At the time of this journal entry, Zachary is now three years older than he was when Lester first encouraged him to "read" *Kenmore* as "Maw-Maw's refrigerator," or supported his reading of *Samsonite* as "Daddy's suitcase." Zachary has some knowledge now of letters and their sounds; he can also spell a few familiar words. Lester intuitively knows that it is no longer appropriate to agree that "p-u-s-h" spells "Come in"; he needs to support Zachary's growing use of grapho/phonemic knowledge along with context.

I have given such extensive examples of Zachary's literacy development because they indicate not only the naturalness of that growth in appropriately supportive environments, but also how the nature of that support must change with the child's changing strategies or "rules"-just as the nature of caregiver language remains in advance of children's oral language construction. *Learning with Zachary* also documents Zachary's growth as a writer, and how his reading and writing development were interrelated and intertwined. Other instructive case studies are listed in Figure 3.12. Together, such case studies clarify some typical commonalities in literacy development-the kinds of commonalities captured in the summaries of language acquisition on pp. 62-65; in the models of natural learning and literacy development articulated by Holdaway and by Cambourne (pp. 66-68); and in the trends in spelling and reading development on pp. 70-77. Separately, these case studies indicate each child's "messy" and unique development.

Rob: From a teacher's literacy biography

For me, this uniqueness is also strongly emphasized in the periodic literacy biographies that teachers in a New Hampshire literacy assessment project wrote to describe their students (D. Taylor, 1989,1990). Here is the October summary Kathy Matthews wrote for third grader Rob (D. Taylor, 1989, p. 189):

October

Rob's enthusiasm for our focus on prehistoric life has prompted him to create a new story titled "The Cave," a chapter book about the adventures and escapades which he and his peer-characters heroically survive. Much of the story occurs in the dialogue, which moves the characters and the action across time and space. ("When?" said Rob. "How about tomorrow?" said Adam. "Okay," said Rob. "Where?" "How about Hawaii?") Rob spends most of each writing period drawing and redrawing the illustrations or consulting with friends. He often reads his story to classmates, describes what he might do next, and then

actively role-plays the parts with his peers. Rob tends to subvocalize as he composes, particularly when sketching action scenes. He uses enlarged print for sound effects and for emphasis.

Rob wrote brief, often unfinished entries in both his reading journal and his daybook this month. His first entry in his new learning log reflected some of the new information he had acquired ("I never knew the knee was one of the fragilest spots") and included an illustration of a human skull with its parts appropriately labeled. Another time he speculated about being an archaeologist and still another time wistfully wrote, "I wish I knew more about rocks." Rob used written language to compose riddles, jokes, and letters which he sent to friends; to write notes to me requesting assistance or asking for specific information; to collect, organize, and describe data from a field experience (an archaeological dig); and to share his personal feelings with a classmate.

For most of this month, Rob has been reading *Chester Cricket's Pigeon Ride,* which in his reading journal he describes as being "good in one way and good in another way." The reading journal entries that he wrote were one- or two sentence descriptions of the main idea behind what he read.

Baghban, M. (1984). *Our daughter learns to read and write: A case study from birth to three.* Newark, DE: International Reading Association.

Bissex, G. (1980). GNYS AT WRK: *A child learns to write and read*. Cambridge, MA: Harvard University Press.

Doake, D. B. (1988). *Reading begins at birth*. Richmond Hill, Ontario: Scholastic.

Halliday, M. A. K. (1975). *Learning how to mean: Explorations in the development of language*. London: Edward Arnold.

Harste, J. C., Woodward, V. A., & Burke, C. L. (1984). *Language stories and literacy lessons*. Portsmouth, NH: Heinemann.

Laminack, L. L. (1991). *Learning with Zachary*. Richmond Hill, Ontario: Scholastic.

Taylor, D. (1991). *Learning denied*. Portsmouth, NH: Heinemann.

FIGURE 3.12 References on case studies of literacy and/or language development

When we read such biographies from different children, it becomes clear that any generalizations we might draw about patterns of literacy development are bound to be wrong in the particulars, if we try to apply them to individual children. Individual children do not progress neatly or obligingly through our abstracted "stages" of growth. They do not completely abandon the patterns of one stage when reaching toward another. They do not show steady progression, without plateaus and without what at least appear to he regressions. They just read and write in their own way, as they construct their knowledge about literacy over time.

The Development of Literacy: A Brief Summary

From observations of emergent literacy and the parallels between that and child language acquisition, we can draw such generalizations as these:

I. Children develop literacy most readily when they have daily opportunities to observe how others read and write, and when they can engage in guided participation in reading and writing or unsupervised practice (as appropriate) and then share and celebrate their accomplishments (Holdaway's natural learning model).

2. Children readily immerse themselves in literacy demonstrations and engage in reading and writing in whatever ways they can, but they are likely to do so only when the psychological conditions are favorable-for instance, when they see reading and writing as something they can do and something that furthers the purposes of their own lives in the here and now, and when they have confidence that they will not receive negative feedback from others for their attempts and approximations (Cambourne's model of learning).
3. In such favorable contexts and under such favorable conditions, children construct for themselves a sense of what it means to read and write, and how one goes about it. This sense may be viewed as a series of increasingly sophisticated hypotheses.
4. Adults cannot actually teach children how to read or write, though they can demonstrate or model reading and writing for them, collaborate with them, demonstrate and discuss reading and writing strategies with them, and guide them in reading and writing. In all of these ways, adults facilitate children's developing ability to read and to write. But they cannot effectively teach children to read and write, any more than they can effectively teach babies and toddlers the rules for putting sounds together to make words, and words together to make sentences. All of these are processes that children must develop for themselves, with (or in spite of) the help of those who are already proficient.
5. One of the most important ways adults can foster literacy development is simply by responding positively to children's attempts at reading and writing. We facilitate literacy growth when we treat children as already readers and writers, when we accept approximations and errors as necessary to growth, and when we convey the feeling that "of course" they will become proficient at reading and writing.
6. Children's focus of attention typically moves from the whole (getting and conveying meaning) to the parts (getting the actual words, writing more and more of the letters in a word). They develop understanding and control of the parts in the context of the whole literacy event.
In the next section, we shall see how these observations about emergent literacy lead to some nontraditional notions of how best to foster literacy in the classroom.

DIFFERENCES BETWEEN TEACHING READING AND DEVELOPING LITERACY

Teaching children to read and write is what we've traditionally tried to do in the schools. At least ***we*** have *taught*, regardless of what or how the children have learned. Still, the increasing numbers of children sent to resource rooms for help with reading, the small percentage of students able to read critically by their senior year in high school (Applebee, Langer, & Mullis, 1988b), and the allegedly illiterate and aliterate millions of adults in our country should make us question whether we have taught with or against the grain of children's natural learning strategies.

The assumptions underlying efforts to *teach* children to read differ from those in whole language classrooms, where teachers try to help children develop reading, writing, and literacy more naturally and easily. Some of these differences are signaled by differences in terminology; other differences derive from how the terms are used. What these differences typically add up to is a *transmission* concept of education, in contrast to a *transactional* concept: these extremes that might more appropriately be conceptualized as different points on a continuum. Figure 8.3 in Chapter 8 lists several key differences between the two concepts or models of education. Here, some of these will be briefly described, as an introduction to the contrast between "teaching reading" and "developing literacy."

TRANSMISSION VERSUS TRANSACTIONAL MODELS

In the *transmission model* of *education,* students are viewed as empty vessels into which knowledge is to he poured. This leads to curricula that require them to practice skills, memorize facts, and accumulate information, typically in isolation from the uses to which the skills and information might he put. Students do worksheets and workbooks on reading and writing skills, but spend little time reading or writing for enjoyment or other real-world purposes. Underlying this model are principles from behavioral psychology: principles such as Thorndike's laws of learning, outlined earlier in this chapter, which have specifically guided the development of basal reading programs. Errors are to be avoided and are therefore penalized, to discourage the formation of inappropriate habits. Learning is expected to be uniform; that is, students are treated and tested as if they are all expected to learn the same things at the same time. Furthermore, almost instant perfection is expected: what is taught today and practiced tomorrow will be tested for complete and accurate learning the next day. Therefore, many students will necessarily "fail," though in varying degrees. Many are labeled as needing remedial help.

In a *transactional model,* students are viewed as already having rich prior knowledge and background, with ample experience in using their schemas along with an innate ability and an inclination to construct their own knowledge (regardless of how they are taught). This view stems from what cognitive psychologists and psycholinguists have discovered about human learning, including the acquisition of language. Teachers operating out of this *constructivist* view of learning try to create rich environmental contexts and situations from which students can learn. Such teachers understand that taking risks, developing and refining hypotheses (often unconscious ones), and making errors are all necessary aspects of growth (I have yet to meet anyone who learned to ride a bicycle without falling a few times in the process). They know that the mastery of processes like speaking a language, reading, writing, spelling-to mention only the ones most obviously of concern here-takes years, and will never reach perfection. The learning (or acquisition) of such processes is expected to be individual and idiosyncratic.

TRANSMISSION VERSUS TRANSACTIONAL MODELS WITH RESPECT TO READING

The following table lists some differences between those who emphasize teaching to read, compared with those who emphasize helping children develop literacy:

Transmission Model (teaching to read)	*Transactional Model (developing literacy)*
Significant time spent teaching, practicing, and testing skills	Significant time spent actually reading and writing, and discussing literature
Reading is taught as a subject, separate from writing and other subjects	Reading and writing strategies and skills are discussed and explained in the context of reading and writing for real-life purposes, such as enjoyment and learning across the curriculum
Emphasis on stages of development across individuals	Emphasis on individual and idiosyncratic growth
Concern for developing "reading readiness" prior to reading instruction	No division between readiness for reading and learning to read; emergent reading (writing, literacy) seen as continuous process, without division into stages
The term "development" typically signals commitment to stage theory	The term "development" typically signals commitment to concept of emergent literacy

Those who adopt a transmission model of education typically talk about stages of development in reading. For example, Jeanne Chall (1983) has developed a stage theory of reading, in which all the stages except the first look suspiciously like the way instructional programs are organized over the years. The first stage, *Prereading: Birth to Age 6,* is significantly called Stage 0, rather than Stage 1; after all, it occurs prior to formal instruction. Chall is obviously conversant with the professional literature on emergent reading, but she characterizes this stage as one of "reading readiness"-preparation for "beginning reading," by which she really means beginning reading *instruction.* Marilyn Adams, in *Beginning to Read: Thinking and Learning About Print* (1990a), recognizes the developmental nature of emergent reading and writing, hut only until first grade, whereupon her recommendations reflect the typical transmission concept of reading instruction.

Thus, there is a vast difference between those who advocate traditional instruction in reading skills and those who advocate teaching designed to further children's emergent literacy, regardless of where they are in their reading development or what their grade placement might he. Those who adopt the emergent literacy perspective frequently think of themselves as whole language educators.

GETTING READY TO READ VERSUS READING

In preschools and kindergartens that reflect a transmission concept of learning, children are typically kept busy getting *ready* to read and to write: practicing letter shapes and forms, learning letter/sound correspondences, learning to distinguish one letter sound from another, and so forth. In whole language preschools and kindergartens, children are typically involved in actual reading and writing.

Kasten and Clarke (1989) have compared the effects of these two differing kinds of classrooms upon children's literacy development (see Chapter 7). The typical differences in procedures may be illustrated by observational notes from two classrooms in that research study.

Typical of a transmission concept of reading instruction, this first observation is from a private, well-funded, highly regarded preschool with an experienced, capable, highly regarded teacher (Kasten & Clarke, 1989, pp. 74-75):

> Ms. R. cheerfully welcomes her students and introduces us to them, reminding them of our names. Children gather in the carpeted area of the room around their teacher who is seated in a chair next to an easel. After some social conversation with the group, Ms. R. introduces the "special guest," who is a puppet named "Goofy Ghost." She announces they will talk about the letter G this day. The teacher elaborates that Goofy wears glasses and plays a guitar. She develops a story orally, preparing them to participate on a given signal with repeating phrases including *"/g/ - /g/ - /g/ -* /goo/," and "Goofy, good grief!" On the easel is paper with pockets which hold teacher prepared cards.
> As the story is completed, the teacher reviews "G" words with the children, and praises them at the end. She asks the children to give themselves a pat on the back, reviews the *" G* words again, and they say *"/g/ -* /g/ - /g/ - */g/"* a few more times. At the end, all children stand up to stretch, and are directed to pretend they are watering cans, and to make */g/* sound like water gushing from the watering cans with "/g/ - */g/ - /g/"* noises.
> Next, the teacher initiates a guessing game with questions to "fill in the blank" orally, such as "Something Mommy puts on your mashed potatoes is. . . ," and "You like to chew a stick of. . . ."

The preschoolers are then asked to do some "writing": to copy the design Ms. R. shows them on a flash card (circle, vertical line, etc.). She reminds them to do their own work and not look at anybody else's paper.

Teaching and learning are very different in whole language preschools and kindergartens. In the following anecdote from a preschool class, the paraprofessional teacher and all eight students are members of minority groups from very low socioeconomic neighborhoods (Kasten & Clarke, pp. 67-68):

> The teacher presents a DLM book [a Big Book from the DLM publishing company] and, before she can ask the title, children call out "Three Dogs at the Door." Together the children count aloud the dogs on the cover, discuss the author, Roach Van Allen (1986), and discuss what an "illustrator" means. The children curl at the teacher's feet in an organized formation. The teacher uses a pointer as the class reads chorally. The teacher points out that the word "mad" looks different from the word "disgusted." The teacher asks individuals to act out how they might look if they felt "disgusted." All eight children say "disgusted," making appropriate facial expressions as they do.

The children are extremely attentive, with all eyes on the book. They act out the next interesting word which is "upset," the same way they did with the word "disgusted." The teacher discusses with them how they can use these words when they have those feelings, labeling them for the children as "emotion words." They continue reading and come to the word "irritated." They discuss differences between "irritated," "mad," "upset," and "disgusted."

Teacher and children continue discussing the emotion words. The teacher then..

> flips back through the text to each emotion word and asks which, of the ones they discussed, this one is. Each time some children guess correctly, and seem to be using initial letters to assist in their guesses of "disgusted," "furious," etc.

Since the children are not yet tired of shared reading, they go on to read *I'm the King of the Mountain* (Cowley, 19S4h) together, with the children chiming in and singing the repeated refrain, "I'm the king of the mountain; I'm the king of the mountain." Finally, the children have the opportunity to choose books to read by themselves, in pairs, or to the teacher.

It is worth remembering that both of these were preschool classrooms, yet in the whole language classroom children were actually involved in reading and discussing a book, not simply in getting ready to read. They were engaging in a Shared Book Experience (which will be described in greater detail below). Though in this particular example the children's attention was focused on words, with other selections the teacher and children might focus instead on letter/sound relationships or other aspect of print.

GETTING READY TO WRITE VERSUS WRITING

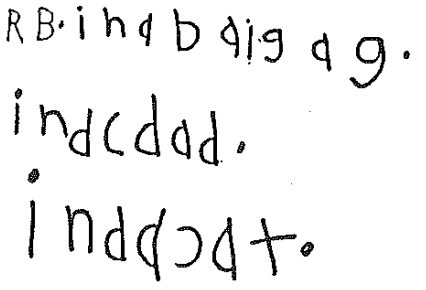
With respect to writing, the situation is similar: in traditional classrooms, young children's attention is often directed toward getting ready to write, or toward rehearsing words with regular letter/sound patterns or basic sight words. Much of the latter may occur without direct instruction, as children simply imitate the language to which they are exposed in their workbooks and their basal reading program.

Examples from a study by Diane DeFord (1981) are particularly instructive. DeFord compared the writings of children from three different classrooms: a phonics classroom, where the reading materials apparently emphasized basic letter/sound correspondences

(the "Nan can fan Dan" sort of fare); a skills classroom, where beginning reading instruction focused on the development of sight vocabulary using Aash cards and simple stories made up of these words; and a whole language classroom, where the children read and wrote various kinds of real material, such as stories, songs, poems, and informational text.

According to DeFord (1981), about a third of the children in the phonics classroom and about three-fourths of those in the skills ("look-say") classroom produced the limited kinds of writing illustrated for each group in Figure 3.13. DeFord implies that the majority of children in the whole language classroom produced writing more like Jason's in Figure 3.14, with variety and individuality used in a genuine communication

Reed: Phonics Room



Jeffrey and Amy: Skills Room

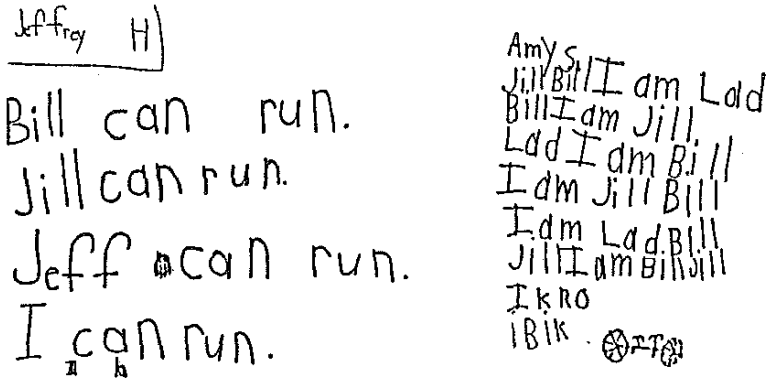


FIGURE 3.13 Typical writing of children in classrooms emphasizing phonics (top) and sight word recognition (bottom) (DeFord, 1981)

Jason: Whole-Language Room

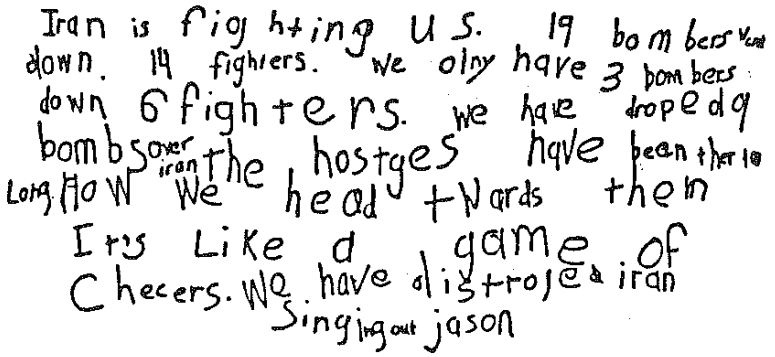


FIGURE 3.14 Typical writing of children in whole language classrooms (DeFord, 1981)

(see also Eckhoff, 1984). Given such examples, there can be little doubt that a print restricted environment inhibits children's writing growth, whereas a print-rich environment facilitates it. Nor can there be much doubt that primary children make less progress as writers when their time and attention is devoted to getting ready to write instead of actually writing.

WHOLE LANGUAGE AND EMERGENT LITERACY

Obviously the transmission model of education underlies typical basal reader instruction, which incorporates aspects of a phonics and sight word approach, while the transactional model underlies whole language education. See Figure 3.15 for a list of introductory readings on whole language.

Because it typifies the transactional model, the Shared Book Experience as developed by Don Holdaway (1979) will be described and discussed in some detail, followed by a section briefly describing other kinds of language experiences and activities that characterize whole language classrooms. Then, to conclude this chapter, we will compare different models of teaching reading and developing literacy.

Shared Book Experience, or Shared Reading Experience

The so-called Shared Book Experience was first developed in 1965 in New Zealand by Don Holdaway and a team of experienced teachers and consultants. They based their teaching procedures on observation of the ways that many children learn to read from the bedtime story experience in the home (Holdaway, 1979).

The teacher uses a Big Book that all the children in the group can see: a commercially published Big Book, a child/teacher-authored Big Book, or simply a chart of some sort, written in large print. This characterization of the Shared Book Experience (SBE) is derived from Andrea Butler (n.d.):

1. *Rereading favorite selections:* first rhymes, songs, and poems, then stories. During these rereadings, the teacher points to the words while reading.

Teaching predetermined concepts or strategies: Before using the selection, the teacher will have determined what aspects of print or what reading strategies he or she might want to emphasize-for example, using prior knowledge and context plus the initial consonant of a word to predict what 'the word might be, or using all of these plus rhyme to predict a rhyming word.

Capturing the teachable moment: In addition, the teacher capitalizes upon the children's needs and interests, taking advantage of the "teachable moment."

2. *Introducing a new story:* At least once a week, a new story is introduced in Big Book format. The primary aim upon a first reading is simply to enjoy the story. The teacher *introduces* the book by mentioning and perhaps commenting upon the author, title, and cover illustrations; *invites* children to predict, from this information, what the story will be about; *reads* the story; *engages the children* in discussing the story; and *reads it again.* The initial emphasis is simply upon reading the story for enjoyment.

3. *Rereading the story independently:* Though the children may engage in related arts, crafts, drama, music, writing, and other activities, the most important follow-up to the Shared Book Experience is independent rereading. Typically, children read a small version of the Big Book. Often, six or eight small books can be purchased as a set, along with a commercially prepared Big Book. Particularly with teacher-made and class-developed materials, ideally each child will have his or her own individual copy to read and reread. Often, the selection is made available for children to listen to on tape as they read. This significantly facilitates learning to read.

Articles

Altwerger, B. (1991). Whole language teachers: Empowered professionals. In J. Hydrick (Ed.), *Whole language: Empowerment at the chalkface* (pp. 15–29). New York: Scholastic.

Goodman, K. S. (1989). Whole-language research: Foundations and development. *The Elementary School Journal, 90,* 208–221.

Goodman, Y. M. (1989). Roots of the whole-language movement. *The Elementary School Journal, 90,* 113–127.

Gursky, D. (1991). After the reign of Dick and Jane. *Teacher Magazine,* (August), pp. 22–29.

Monson, R. J., & Pahl, M. M. (1991). Charting a new course with whole language. *Educational Leadership, 48,* 51–53.

Newman, J. M., & Church, S. M. (1990). Myths of whole language. *The Reading Teacher, 44,* 20–26.

Pace, G. (1991). When teachers use literature for literacy instruction: Ways that constrain, ways that free. *Language Arts, 68,* 12–25.

Watson, D. J. (1989). Defining and describing whole language. *The Elementary School Journal, 90,* 130–141.

Books

Cambourne, B. (1988). *The whole story: Natural learning and the acquisition of literacy in the classroom*. Auckland, New Zealand: Scholastic.

Edelsky, C., Altwerger, B., & Flores, B. (1991). *Whole language: What's the difference?* Portsmouth, NH: Heinemann.

Goodman, K. S. (1986). *What's whole in whole language?* Richmond Hill, Ontario: Scholastic. (Available in the U. S. from Heinemann.)

Goodman, K. S., Bird, L. B., & Goodman, Y. M. (1990). *The whole language catalog.* Chicago, IL: American School Publishers.

Manning, G., & Manning, D. (Eds.) (1989). *Whole language: Beliefs and practices, K–8.* Washington, DC: National Education Association.

Stephens, D. (1991). *Research on whole language: Support for a new curriculum.* Katonah, NY: Richard C. Owen.

Weaver, C. (1990). *Understanding whole language: From principles to practice*. Portsmouth, NH: Heinemann.

FIGURE 3.15 References on introductions to whole language

Many things can be learned through the Shared Book Experience. The following list is adapted from Andrea Butler, *The Story Box in the Classroom, Stage 1* (1984): see also Elfant (in progress). What can be learned includes:

1. Conventions of print, such as:
    - The fact that pages are read from top to bottom, left to right.
    - The fact that words, not pictures, are read.
    - What a word is.
    - What a letter is.
    - What punctuation does.
2. Strategies, such as:
    - Using meaning as the first and most important clue to getting words
    - Predicting
    - Self-correcting
3. Sight vocabulary
4. Letter/sound relationships

Children typically learn most of the concepts of print simply by observing how the teacher turns the pages of books, how the teacher's hand or pointer moves across and down the page, and how the teacher correlates the spoken word with the written word through the use of hand or pointer. The concepts of word and letter can likewise be learned incidentally as the teacher points to words and letters while talking about them.

The teacher is usually more direct in teaching other important concepts, such as effective reading strategies. By inviting students to predict what will happen next, for example, the teacher encourages them to adopt as their own the strategy of predicting (see Chapter 4 for a more detailed discussion). Sight words and letter/sound relationships are learned in part incidentally, and in part as teacher and children direct their attention to particular words and letter/sound relationships within the reading selections. (See Chapter 5 for more details on how whole language teachers help children develop phonics know-how, during a Shared Book Experience and in other ways.)

Several things about the Shared Book Experience are worth noting:

1. The classroom procedures and activities reflect, over time, the four phases of Holdaway's natural learning model: *demonstration* (the teacher reads the book); *guided parh'cipation* (the children participate in rereadings); *individual practice* (independent rereading); and *performance* (the child often volunteers to read aloud something he or she has become confident about reading).
2. Children aren't just getting ready to read. They are actually reading.
3. Children aren't expected to practice skills in isolation from real reading. The development of skills and strategies is fostered by discussion in the context of the literary selection.
4. Reading is an enjoyable social activity, not an individualized seatwork task.
5. Less proficient readers aren't segregated from their more proficient peers. Each child participates in the reading and discussion at his or her present level of competence, while having the opportunity to learn from others. Thus, every child experiences success while continuing to grow as a reader and language user.
6. 'The direct instruction within the Shared Book Experience is very different from what occurs in transmission-oriented classrooms. Within transmission classrooms, direct instruction is the major mode of teaching, based upon the behavioral premise that learning results from habit formation-whether the habit involves learning skills or remembering information. The learner is viewed as a receptacle for whatever the teacher or the textbook transmits, or teaches. In contrast, within transactional classrooms, even direct instruction is often inductive, involving the learners in noticing and thinking about phenomena for themselves. Furthermore, whenever the teacher engages in direct instruction within (for example) the Shared Book Experience, the underlying premise is still that learners construct knowledge for themselves. Thus, the teacher offers direct instruction mostly within the context of authentic reading, writing, and learning experiences, when the learners' interest and motivation are high and/or when they demonstrate a definite need for the instruction. Even under such favorable conditions, however, the transactional teacher does not assume that his or her teaching will necessarily result in learning for all students, much less in the same learning for all. Knowing that learning still depends upon each learner's constructing knowledge for him- or herself, the transactional teacher simply tries to provide comprehensible input and a supportive and motivating environment, in order to facilitate the construction of knowledge.
7. The Shared Book Experience succeeds because it meets the conditions articulated in Cambourne's model of natural learning. Children are treated in such a way that they feel they are potential "doers" of the activity of reading; engaging in such reading experiences typically furthers the purposes of their lives in the here and now (purposes like enjoyment and social interaction); and the children are free to take risks and make mistakes without these being viewed as wrong.

The Shared Book Experience can be thought of more broadly as a shared *reading* experience, since it need not involve books themselves, but the reading of anything written in large print for a whole group or class to read simultaneously. Thus, the shared reading experience seems to be suitable for all children. Ideally, however, many of the texts would reflect the oral and literate traditions of the children's own community, whatever that might be. In a community like Trackton, for example, children might talk a story (compose orally), to take advantage of the children's growing proficiency in developing stories orally; the teacher could write the stories on chart paper for shared Reading experiences. Classroom routines, rules, labels, and directions could also be written on chart paper and used for shared reading experiences, to take advantage of the children's expectation that reading he relevant for action. In short, the shared reading experience can take advantage of the oral and literate traditions in local communities, while introducing children to hooks and genres that are less often found in their homes and communities.

OTHER LITERACY EVENTS IN WHOLE LANGUAGE CLASSROOMS

This section will offer only a brief overview of some of the kinds of literacy events that commonly occur in whole language classrooms. I use the term "event" to suggest that these are not exercises, nor even activities undertaken just for the sake of learning some specific skill or strategy (Altwerger, 1991). They are acts of reading, writing, and oral language undertaken for their own sake: because they are enjoyable and offer opportunities for children to construct their own knowledge-to grow as readers, writers, speakers, listeners, and learners. Such acts have maximum potential for stimulating growth in language and literacy.

In addition to the Shared Book Experience and the guided reading that occurs within it, many whole language classrooms include the following (and other) literacy events regularly, if not daily:

Independent reading

In whole language classrooms, students have many opportunities to read independently, and often to choose what they will read. Sometimes these choices are constrained by the curriculum: for example, students may he able to choose from a number of books, hut all of the options must relate to the American Revolution or to some other topic, such as ecology and the environment. Or all of the options may be fairy tales, or hooks that could at least loosely be considered memoirs. Often, though, students will also have time during school when they will be completely free to choose what they read and/or to choose reading from among other learning alternatives. Even the least proficient of emergent readers is treated as a reader and is expected to read and enjoy at least the pictures of a book when time is specifically set aside for independent reading.

Paired reading

Paired reading, like independent reading, may take various forms. Students may choose buddies to read with, even if they're reading different books and mostly just reading silently together. They may he paired to read and discuss related but different books. A more proficient reader may be paired with a less proficient reader, to serve as consultant and perhaps even to help the less proficient reader develop more effective reading strategies. Students may read aloud to each other, or even in unison, perhaps with a less proficient reader echoing a more proficient reading buddy. These are just some of the possibilities.

Listening to literature read aloud

Many teachers read aloud to students daily-even to high school and college students!

This shared literature event creates a social bond as well as making reading enjoyable and meaningful. In addition, it helps develop listeners' grasp of syntax (Perera, 1986), vocabulary (Elley, 19S9), story structure, and genre. "A story a day keeps the remedial program away." If that's not already a classroom motto, perhaps it ought to be (see Trelease, 1989). Of course, students may read aloud, too, not to demonstrate how well they can or can't identify words, but for everyone's enjoyment. When reading aloud for this purpose, both adults and children may need to practice what they're going to read. Listening to literature on tape is a valuable complement to the live read-aloud. Nowadays, many book-tape combinations for all ages may be purchased at bookstores and borrowed from libraries. (Hundreds of books on tape are available from Recorded Books, Inc., 270 Skipjack Road, Prince Frederick, MD 20678,l-800-638-1304.)

Language experience

Language experience events (pp. 57-58) are not as common in whole language classrooms as independent writing, because dictation can all too easily convince children that they are not yet ready to write for themselves. However, teachers may occasionally "do" language experience with children. Whether the language experience writing is based on a shared classroom experience or an individual's experience, typically the teacher will write down a sentence dictated by each child-for example, "Aaron said, 'I put in peas and carrots'"; "Ye Jee said, 'I like tomatoes'" (seep. 201 for the context of these examples). Writing what the child dictates helps to give the child ownership over the writing, and makes the text easier to remember when rereading.

Guided writing

In whole language classrooms, group writing more often takes the form of guided writing, rather than student-by-student dictation of sentences. That is, teacher and students together brainstorm, select ideas, compose and shape sentences, then reread, reconsider, and revise. Finally, they may edit what they've written and publish it-by adding it to a collection of class writings, by displaying it on the bulletin board or in the hallway, or by including it in a class or school newspaper. Such guided writing may be based upon field trips, classroom experiments, a book the class has shared-in short, almost any communal experience.

Modeled writing

In modeled writing, the teacher demonstrates his or her own writing process by thinking out loud and writing a real piece as the children listen and observe. The kinds of writing that may be composed at the chalkboard (and copied by the children, if appropriate) include notices to go home, lists for parties, notes to lunchroom supervisors or janitors, and so forth. By writing in front of the children, the teacher can demonstrate not only the writing process but the relationship between spoken words and written words, key letter1 sound relationships, punctuation, and the like-as well as the concept that writing can serve various practical purposes.

Independent writing

In whole language classrooms, even the youngest children-preschoolers and kindergartners-are encouraged to write independently. At first, their writings may consist merely of drawings, demonstrating their understanding that a visual image conveys meaning. Then they may progress to scribble writing, or prephonemic writing. The point, however, is that all students, even the least proficient emergent writers, are

treated as writers. They become more proficient through exposure to books and print, through observing their more proficient peers' writing and adults' writing, and through direct help as well. As with reading, sometimes students are completely free to choose what they will write. At other times, they are expected to write in their dialogue journals, their reading journals or literature logs, or their learning logs; to experiment with certain forms and genres; and so forth. Nevertheless, choice plays a big part in what students write within whole language classrooms.

Journals and Learning Logs

Dialogue journals, reading journals, and learning logs are such important aspects of learning in whole language classrooms that they deserve separate mention. A *dialogue journal* is, ordinarily, a journal in which student and teacher write back and forth to each other. Nancie Atwell initiated dialogue journals with the eighth graders in her reading class. They wrote letters to Atwell in response to the books they were reading, and Atwell responded with letters of her own; together, they discussed these and other related books (Atwell, 1987). In other words, they held literature discussions via journals. Some teachers call these journals "reading journals" or "literature logs" when they focus specifically on literary works, using the term "dialogue journal" more broadly, to mean two people's writing back and forth about any subject. *Learning* logs are journals in which students respond to a certain subject, such as science or math. They become dialogue journals if they are used transactively between teacher and student (Fulwiler & Young, 1982).

Literature discussions

Increasingly, whole language teachers are discovering that perhaps the best way to develop children's reading strategies as well as their understanding and appreciation of literature is through discussion, particularly intensive small-group discussions. Teacher and students can share reactions to the literature; make connections with other books and their own lives; discuss such literary elements as characterization, symbol, and theme; and consider strategies for dealing with problem words and other elements of the text. Such discussion enriches understanding, as the group collaboratively constructs and reconstructs meaning. The group may read and discuss the same book, or they may read and share different, related books that constitute a text set. (See Chapter 9 for more details.)

Choral reading, readers theater, drama, storytelling

The oral and dramatic language arts also figure prominently in whole language classrooms (e.g. Heinig, 1993). Here are mentioned only some of the activities most obviously associated with literature and the literacy processes. Students have opportunities to perform literature through choral reading, with different parts of a literary selection assigned to different groups, who then read their part in unison, or chorus. Students may rehearse and read a script in readers theater format: The script is written much like a play, but the participants sit and read their parts (with appropriate facial expressions and perhaps gestures) instead of memorizing their lines and acting them out. Students may engage in drama, not only formal but informal: acting out key aspects of a story, for example, or acting out scenes in history, as the students think these events might have (or should have!) occurred. And they may engage in storytelling, after rehearsing a story for performance. (See MacDonald, 1993; Macguire, 1985; Bauer, 1977; Sawyer, 1962; and see Chapter 10.)

Observation and experimentation

Observation and experimentation become literacy events when children record what they have observed. They may document the growth of a plant or a rabbit, for example, complete with graphs and learning log entries. They may predict the results of an experiment, write out the procedures for conducting it, and describe the results, comparing these with their predictions. Even the youngest of learners can engage in such literate documentation and response, using pictures or pictures with labels.

Research

Research involves reading, writing, speaking, and listening. In whole language classrooms, language and literacy are developed through and across the entire curriculum (Halliday, 1975). Even very young learners are capable of engaging in simple kinds of data gathering and recording.

Obviously, research as a regular part of classroom activity can and does encompass many of the other kinds of literacy events listed above. And clearly, these do not exhaust the kinds of literacy events found in whole language classrooms; they are merely indicative of what often occurs.

Theme Study

Though the aforementioned literacy events can occur as separate experiences within the curriculum, many of them may naturally become part of *theme study*. Whole language classrooms are often characterized by in-depth exploration of a topic or theme, which naturally involves various reading and writing experiences as well as reading and the in-depth study of literature, research, the oral and dramatic language arts, and other arts (music, movement and/or dance, the visual arts). Topics typically derive from social studies and/or science. Depending upon the teacher's and students' purposes and interests, the topics may be relatively narrow (weather, family and friends, electricity, ecology and the environment) or relatively broad (change, contrasts, conflicts, compromise, cooperation). The broader the topic, the more opportunities for integrating the humanities, arts, math and the sciences, and social studies-and the greater the chance for students to gain proficiency in using language and to become literate and independent learners. Also, the broader the topic, the more opportunities for engaging in cross-age or even whole school exploration of a common topic, or "theme."

Discussions of Reading, Writing, and Research Strategies and Skills

Within the context of children's reading, writing, and researching, teachers help them develop the skills and strategies they need. For example, when a child has difficulty reading a particular word, the teacher may remind the child to use context and the initial consonant(s) to predict what the word might be, then look at the rest of the word to confirm or correct. When a child's writing demonstrates the need for a particular editing skill, the teacher may take that opportunity to teach the skill and help the child apply it. When children are researching topics of interest, the teacher may conclude it would he relevant to teach certain skills for locating and using various kind of references that the children need. Whole language teachers know that children apply strategies and skills best when they have been learned in the context of their application (e.g., Freppon, 1988, 1991; Cunningham, 1990; DiStefano & Killion, 1984; Calkins, 1980). Therefore, they provide many opportunities to learn such strategies while the children are actually reading, writing, and researching: by demonstrating the teachers' own strategies; by providing mini-lessons for individuals, a small group, or the whole class; and by encouraging the sharing of strategies and skills as children discuss literature, each others' writings, and their ongoing research.

WHAT MAKES THESE LITERACY EVENTS "WHOLE LANGUAGE"?

It is critical to understand that what makes the aforementioned literacy events "whole language" is not their mere occurrence, but the spirit in which they are introduced, undertaken, and monitored, and the way in which the processes and results are assessed. Many of these could he assigned as activities in a highly teacher-directed way, with follow-up exercises and tests that reflect a transmission model rather than a transactional model of education and learning.

What makes them "whole language" is the underlying philosophy: commitment to promoting students' ownership over their learning, and a concomitant trust in students' ability to construct their own knowledge; facilitation and support of learning that is in large measure student-determined; direct instruction in the context of students' needs and interests; commitment to promoting individual growth rather than uniform mastery of a predetermined curriculum; and assessment that reflects these principles. When these literacy events reflect such a philosophy of learning and teaching, they can justifiably be considered "whole language."

DIFFERENT MODELS: READING INSTRUCTION VERSUS LITERACY DEVELOPMENT

By now it should be clear why whole language was not included in the first section of this chapter as a method of teaching children to read. It isn't a method, and it doesn't focus exclusively on reading, or even literacy. We shall come to see in later chapters that phonics is also inappropriately considered a method of teaching reading, though it's widely regarded as a method of reading instruction. Nevertheless, let us briefly contrast the so-called phonics approach to teaching reading, the eclectic skills approach typical of basal reading programs, and a whole language curriculum for developing literacy.

With phonics as a method, letter/sound relationships and "decoding" are taught as if nothing else were involved in learning to read. Basal reader programs typically teach not only phonics skills for decoding, but word analysis skills and comprehension skills, including critical thinking skills. The isolated and usually separate nature of these skills is depicted visually in Figure 3.16. Even with the skills taken collectively, these are all part-to-whole approaches to reading and learning to read, reflecting the behavioral laws of learning articulated by Thorndike but rejected by many educators today, including many who use materials based on such principles.

In contrast are whole language practices that foster literacy and learning-not by separating reading from writing, or oral language from written language, much less by teaching isolated skills. As a growing body of research suggests (see Chapter 7), much more can be learned in whole language classrooms than in skills classrooms, in the same amount of time. This is because everything is interrelated, with the learning of skills and strategies taking place within authentic literacy events, and literacy events taking place within the exploration of themes and topics in what have traditionally been considered curricular areas separate from reading and writing. Thus, the depiction of the whole language approach in Figure 3.17 shows literacy and learning at the heart of a circle that includes various kinds of literacy events and learning processes. What's learned includes not just reading and writing-that is, strategies for constructing and composing meaning through text, and metacognitive awareness of such strategies. In addition, what's learned includes (but is not limited to) such processes as collaborating, creating,

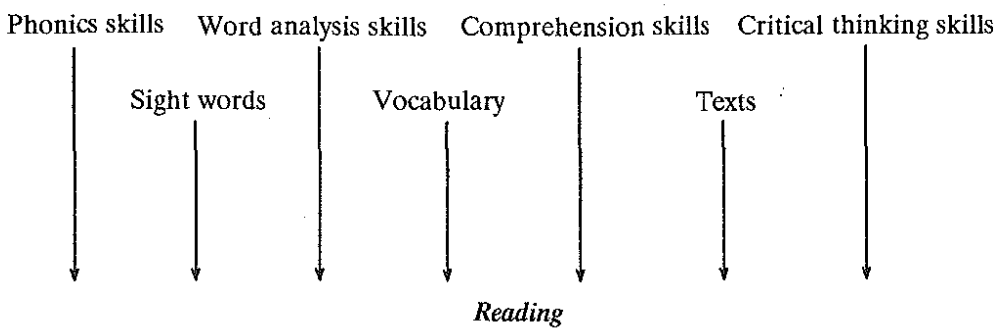


FIGURE 3.16 The skills approach to teaching reading

evaluating, self-monitoring, self-regulating, and self-evaluating-all with respect to learning in general as well as to reading and writing.

In actual classrooms, conflicting practices are sometimes adopted by individual teachers. Many teachers, understandably, consider themselves prudently "eclectic" because they draw upon a variety of methods and materials in teaching reading. For example, they may use only some of the stories in the basal, supplement the basal with

FIGURE 3.17 A whole language approach to developing literacy and facilitating learning

literature books, and perhaps use the basal as a guide to the skills they want their students to encounter and demonstrate during the school year. From one point of view, such enlightened skills teachers might be said to be theoryless or theory-confused, because their practices reflect conflicting assumptions about learning and teaching. However, they may simply be in the process of relinquishing a transmission model of education for the transactional model typified by whole language. (Chapter 8 will further discuss the nature of whole language learning and teaching, and Chapter 9 expands upon that discussion, further clarifying how teachers often grow toward and into whole language teaching.)

FOR FURTHER REFLECTION AND EXPLORATION

1. Compare Don Holdaway's natural learning model (p. 66) with the following sixstep version of Madeline Hunter's model of education (Hunter, 1982):

a. Anticipatory set and statement of objectives.
h. Instruction and modeling.
c. Checking understanding.
d. Guided practice.
e. Independent practice.
f. Assessment.

How are these models similar? How are they different? How are the typical outcomes similar and/or different? Which theory of learning and teaching does each reflect: the transmission, or the transactional?

2. Obtain a copy of the position statement prepared by the Commission on Reading of the National Council of Teachers of English, entitled "Basal Readers and the State of American Reading Instruction: A Call for Action." (Single copies are available free from the NCTE, 1111 Keynon Road, Urbana, IL 61801; the statement has been reprinted in my *Understanding Whole Language,* 1990% pp. 58-59.) Consider and discuss the alleged problems with basal reading programs, given current theory and research.

3. In *Three by the Sea,* by Edward Marshall (1981), Lolly first undertakes to entertain her two friends by reading a story from her basal reader. Not impressed, Sam tells a story that is only a little more sophisticated in its use of language. Finally, Spider tells a much more interesting story, with more sophisticated language and concepts. If possible, obtain a copy of this book and consider the probable effects of using the three different kinds of materials with emergent readers.

4. In what ways is learning to read similar to the processes of learning to talk and learning to write and spell? List some of the similarities or parallels, with examples as needed.

5. Patrick Hartwell has made some interesting comments on the issue of whether "formal" grammar (grammar isolated from other language activities, like writing and reading) should be taught in the schools. Read the following quote and consider whether much the same thing could he said about the issue of how children can best be taught to read. Discuss.

Seventy-five years of experimental research has for all practical purposes told us nothing. . .Studies are interpreted in terms of one's prior assumptions about the value of teaching grammar: their results seem not to change those assumptions. . . . It would seem unlikely, therefore, that further experimental research, in and of itself, will resolve the grammar issue. Any experimental design can be nitpicked, any experimental population can be criticized, and any experimental conclusion can be questioned or, more often, ignored. In

fact, it may well be that the grammar question is not open to resolution by experimental research. (Hartwell, 1985, pp. 106-7)

Do you think this is true of the teaching-to-read issue: that it is not open to resolution merely by experimental research? If you agree, then by what means do you think we should decide the nature of our beginning reading or emergent literacy programs? You may want to consider the conflicting paradigms that are involved.

6. For each group of questions below, try to determine the rule governing how they are formed. Then decide which rule you think would develop first, second, and third (Klima and Bellugi-Klima, 1966; Dale, 1972; Cazden, 1972). How feasible would it be to *teach* children these rules?

a. What he can ride in?
How he can be a doctor?
Why he don't know how to pretend?
Where my spoon goed?
b. Where's his other eye?
Why are you thirsty?
What did you doed?
c. Who that?
What cowboy doing?
Where Ann pencil?
Where milk go?
Where horsie go?

7. The following conversation took place when a psychologist tried to correct an immaturity in her daughter's speech (McNeill, 1966, p. 69):

CHILD: Nobody don't like me.
MOTHER: No, say, "Nobody likes me."
CHILD: Nobody don't like me.
(eight repetitions of this dialogue)
MOTHER: No. NOW listen carefully; say, "Nobody likes me."
CHILD: Oh! Nobody don't likes me!

What does this incident suggest about the feasibility of deliberately trying to accelerate children's language development? What are some possible implications for teaching?

8. The first part of Sandra Wilde's *You Kan Red This! Spelling and Punctuation for Whole Language Classrooms, K-6* (1992) deals mainly with understanding children's development in spelling and punctuation, while the second part deals with fostering the development of spelling and spelling strategies in the classroom (with a chapter on punctuation as well). You might try reading the first part and summarizing what you've learned, and/or reading the second part and implementing the ideas for conducting mini-lessons, communicating with parents and administrators, and so forth. Wilde's volume might well be billed "the last book you'll ever need on the teaching of spelling."

9. Despite my enthusiasm for Wilde's book, I must admit to thinking there is one major omission: sample lessons for teaching words with common bases or suffixes, which are typically of Latin or Greek origin. One of the easiest and best ways to develop such mini-lessons is to start with a word having a common element (such as *phone inphonograph, telephone,phonics,* etc.) and brainstorm for more words, then try to determine the meaning that the element has in all (or most) of the words. One book with collections of such words is *Words from the Romance Languages* (Danner,1980). Many of the words in each set of the Danner volume might be too

sophisticated for elementary and middle-school students, but the book is a valuable resource for the teacher. If you cannot locate this hook, another valuable resource currently in print is *Dictionaiy of English Word-Roots,* by Bob Kupa'a Smith (1966). Richard Gentry and Jean Gillet's *Teaching Kids to Spell* (1993) includes a useful appendix with Latin and Greek stems and prefixes.

10. To enhance your understanding of the patterns typical of letter-name spellings, write the following words, spelling them in accordance with the letter-name patterns explained in the appendix to this chapter. (This list could be used as a quick assessment of children's spelling development, too. If used in that way, it would be important to say the word, then use the word in a sentence, then repeat the word.)

a. cat as in *Our cat purrs a lot.*
b. wet as in *The dog got all wet.*
c. make as in *Let's make pizza.*
d. sent as in *I sent her a birthday card.*
e. water as in *Let's get a drink of water.*
f. why as in *Why did she do that?*
g. chip as in *We baked some chocolate chip cookies.*
h. band as in *Rob plays a trumpet in the band.*
i. clock as in *Look at the clock to see what time it is.*
j. train as in *Jimmy has a new electric train.*
k. once as in *"Once upon* a *time . . . "*
I. city as in *Molly lives in the city.*
m. dragon as in *It's* a *fire-breathing dragon.*
n. sheet as in *May I have a sheet of paper?*
o. kind as in *What kind of candy is it?*

Next, choose five of the words in the list above and write each of them as you think they might be written in prephonemic, early phonemic, and transitional spellings. Explain the typical differences among the stages.

11. The following "stories" (Cramer, 1978, p. 43) reflect the first writing attempts of four first graders (their spelling has been standardized).' Which writings impress you the most? Which writers do you think were most concerned about spelling words correctly, most afraid to take the risk of spelling words as best they could? Discuss.

I play in the grass.
And I play with my friends.
And I play with Debbie.
—Mary

My dad is nice.
My mom is nice.
My sisters are nice.
—Danielle

Winnie the Pooh

One evening Winnie went
out to get some honey.
He climbed and climbed
for honey. He found honey.
—John

I cracked my head. I fell
off the bed. My Mom
took me to the hospital.
—Nathalie

12. The following retelling of Shakespeare's *Romeo and Juliet* was written by nine-year-old Emily Joslin-Jeske, after watching the movie several times and reading the script of the movie. Without looking back at the script, Emily wrote the play at home, late in the evening, because she wanted the story in "plain English." Consider (and maybe analyze) the constructive spellings in this first draft.'

Romeo and Juliet

Secne in Verone

In the city of fair Verona a carnival was being held. Childeren were runing and screaming.Two of the servince of the house of Capulet and the house of Montague were passing by each other.The two familys had been bitter enimes. As they passed by one of the house of Montague mattered something unplesent under his bereth. "What did you say?"asked one of the Capulet suspishisly. "It's none of your bissnes." hissed the Capulet. "Well I'm making it my bissnes" hissed the Montague. Before another word was said they druw there swords and began to fight. Shortly the prince of Verona came in. He was apoled at what he saw. "WHAT IS THIS I SEE. DO MY EYES DESIVE ME! WHAT AM I SEEING. I AM SEEING YOU FIGHT LIKE FOOLS!"

(Every one looks guilty)

"I HOPE NEVER TO SEE THIS AGAIN"

(every one leaves)

sene In Juliets room

"Good news darling" cryed Lady Capulet.
Juliet looked up from underneth the bed. "What mother?" she asked. "The lordly paris has asked your hand in marigge" said lord Capulet. "You to would make the perfect cople" added Lady Capulet. "You shall meet at the masked ball tonight" said lord Capulet."But . . . But . . . I think I'm a little young to get marryed. I'm only 14 you know."
"Nonsence dear the younger the better!" said Lady Capulet

(They walk out of the room)

sene The masked ball

That night at the masked ball Juliet was waiting to see Paris. During the party Romeo and his fiends Benvolio and Mercutio all Montagues were passing by the party. "Lets go to the party. We can were masks since its a masked ball." "splended" cryed Romeo.

(They slip on outfits and masks)

When they got there Lord Paris had just been peresented to Juliet. When Paris desided he would go to sleep because he thought he had drank to much, Romeo desided to flurt with Juliet. They both fell in love emedetly.

sene At Juliet's window

After the party was over, Romeo desided to go see Juliet at her window. "I must see Juliet again" he said to himself. When he got there Juliet was on the balcone singing to herself. She did not see Romeo. Thinking she was alone she said outloud "Romeo oh Romeo I love you" "And I to" said Romeo. "Romeo what are you doing here, you might get killed" "I only come here to SEE YOU!" "Shhhhhhhhhhhhhhhhh leave I hear someone coming" "Good night Juliet" "Good night Romeo.

Sene At the friers chambers

Juliet went to see the frier for help.
"Why do you come to me Juliet" asked the frier. "Frier please Romeo and I wish to be marryed" said Juliet. "Please PLEASE marry us secretly". "Srtaly I stand by god. Bring Romeo and you will be marryed.

Sene Romeo and Juliet have just been marryed

"Oh Romeo I don't fell well I think I will go home".

(Juliet goes home)
"Hey Romeo" yelled benvolio. Lets go find Mercutio. when they found Mercutio it wasn't a pertty sight. He and Tybalt were fighting. Suddenly someone yelled, Mercutio

looked in that direction. With out anther word Tybalt slashed
Mercutio in the back. Mercutio fell to the ground. Romeo quickly
charged at Tybalt. Before Tybalt could turn to see what was
happening Romeos sword hit Tybalt in the heart. Tybalt fell
to the ground. The prince had seen it all. He stepped in "WAS
I EVER CLEAR. NO I SEE I WASN'T. Romeo will be banned. The prince
went away.

sene Juliet sees the frier

"Well I see your tragedy" said the frier thoughtfuly.
"Can you help I mean can you get Romeo back"? asked Juliet.
"No but I think I can get you two together. When you drink
this you go into a death like sleep. Send a message to Romeo.
You will be placed in the family tomb. He will meet you there.
The frier gave Juliet the poshin. When she got home she told
her parents she would marry Paris. She went to her room and
drank the poshin. She lay down on the bed and went to sleep.
Her parents came up to see her. When they found her she was
on her bed. When they realized she was dead they cryed and cryed.
Of course Juliet did not forget to send the messager. But the
messager gave the wrong message. "Juliet died" said the messager.

Sene Romeo at the tomb

"No. It couldn't be" cryed Romeo. "Life without Juliet"
"I'm as good as dead". Romeo pulled out some posin
and drank it. He droped down dead. Just then Juliet woke up.
She saw Romeo. "Romeo wake up wake up". His limp body rolled over.
When Juliet saw that he was dead she worled around. She grabbed
Romeos dagger and pushed in her chest. She sank to the floor.

THE END

REWRITTEN BY EMILY JOSLIN-JESKE

In your opinion, is Emily likely to have used such sophisticated vocabulary if she had been expected to spell everything correctly in a first draft? Indeed, would she have written this retelling at all, since she did it just because she wanted to? What might you respond to someone who asks, "When do you start demanding correct spelling?"

13. Should teachers "correct" children's writing? Consider the following quote:
Evidence is also clear on this point: Children who write frequently and receive no correction on their papers will write more, have more creative ideas, enjoy writing more, and-at worst-will make no more mechanical errors than do those who receive correction on their papers. According to most studies, those who do not receive corrections make even fewer errors in capitalization, punctuation, and spelling. (Hillerich, 1977, p. 306; he cites several sources)
Considering your own experience (as student, parent, teacher), would you agree with this assertion? What better ways might there be to help students write correctly?

Discuss how the issue of whether or not to correct children's writing reflects the two contrasting paradigms, transmission and transactional.

14. Below are questions that administrators andlor parents might ask about introducing a whole language program that encourages young children to write freely, using their own constructive or invented spellings as needed, and not worrying about mechanics as they first compose. You might organize a "public meeting" for discussion,

with one group representing doubters and another group representing enlightened teachers. (Originally raised by my students, these questions are arbitrarily grouped into four categories, for discussion by four groups; thus, there is some overlap in the questions.)

Goals/objectives-Rationale-Advantages

a. What goals/objectives do you expect to accomplish by encouraging children to write freely, without initially worrying about correct spelling and mechanics?

b. What are the principles upon which the approach is based?

c. What are the advantages of encouraging constructive spelling rather than insisting on correct spelling?

Feared disadvantages-More on advantages

d. Is there any evidence that this program won't succeed as well as a traditional approach to spelling and to mechanical correctness?

e. Won't this procedure harm children by getting them in the habit of spelling words incorrectly?

f. Is there any evidence that this approach will make children better writers? Better readers? Better spellers? Better in the use of other conventions of mechanics?

Fostering correctness

g. With this approach, how will children learn the rules for correct spelling, punctuation, and grammar?

h. When, if ever, will you correct the children's spelling errors and other mechanical errors?

i. How long do you recommend letting the children continue to use constructive spelling and their own conventions **of** punctuation and grammar?

Stimulating growth-Measuring progress-Introducing such a program

j. How can you help children begin to use constructive spellings? How do you help them use more sophisticated spellings?

k. How can you determine whether or not the children are making progress in learning to spell, if they don't have to spell correctly? How can you determine if the children are making progress in learning to punctuate?

1. Can you introduce this program without taking time away from other valuable activities? If so, how?

An outstanding hook that deals with such issues in the teaching of writing is Lucy Calkins' *The Art of Teaching Writing (1986).* With respect to spelling and punctuation in particular, see Sandra Wilde's *You Kan Red This!* (1992) and other references in Figure 3.8.

15. Assume you are a primary grade teacher. Write a letter to parents explaining your program for teaching reading and writing. Explain how it reflects what we know about how children initially acquire language and how it encourages children's natural reading and writing development. (You may first want to read Chapter 7 on research.) Be sure to include examples of children's real reading and writing.

16. Read the report *Becoming a Nation of Readers* (Anderson, Heibert, Scott, & Wilkinson, 1985). Then do one or more of the following:

a. Draw up a list of good points about basal reading programs and a list of bad points, based on the report. Add any other points you might think of. Be prepared to discuss.

b. From the report, make a list of ten statements or recommendations that you think socio-psycholinguists would agree with, and that also seem significant to you. Be prepared to discuss.

c. From the report, make a list of half a dozen statements that you think would, for one reason or another, make socio-psycholinguists uneasy. In several cases,

many socio-psycholinguists might agree with part of a sentence but be concerned about another part. Be prepared to explain why.

17. In order to better anticipate and participate in the discussion of Chapter 4, you might try the following activity: Cut a slit in a piece of paper so that the slit will expose just one of the following lines at a time. Then find someone to be your experimental subject. Tell the person you are going to expose some lines of print one at a time, each for only a fraction of a second. The person is to try to focus attention on the middle of the line and then to write down in order all of the print seen, after which you will then expose another line. Try, of course, to expose each line for the same amount of time as the others, ideally only long enough for one eye fixation (about a quarter of a second). See if the person is able to recall more print from some lines than from others. What do you think accounts for any observed differences in how many letters are recalled?

QLH WCGMZK PGTXW NBFJMSV
BAX GORPLE CHURK FRENTLY
ANGRY GROW TAXES BOY UGLY
SILLY WINDOWS HIT THE BOX
FUNNY CLOWNS MAKE ME LAUGH

18. Again in preparation for Chapter 4, have some of your friends, or some children, brainstorm for words that might reasonably come next in a sentence that begins "The cruel giant fell into the . . ."Encourage your brainstormers to be imaginative. (Some of my students have suggested such responses as *witches' cauldron, septic tank,* and *flour bin.)* When you are satisfied, tell the brainstormers that following the word or words they have supplied come the words "and drowned." Which of the suggested alternatives can you now eliminate as extremely unlikely? Discuss what enabled/ encouraged your brainstormers to make the predictions they did, and what enabled them to eliminate certain alternatives. What does this activity suggest about the kinds of contexts we use in reading?

Appendix: Development in Children's Invented Spellings

The best way to show the various stages in children's writing and spelling is with actual examples. Accordingly, the figures in this appendix depict writings by children at different levels of spelling development:

- Figure A3.1: Scribble Writing.
- Figure A3.2: Prephonemic Writing.
- Figure A3.3: Early Phonemic Writing.
- Figure A3.4: Early Letter-Name writing
- Figure A3.5: Letter-Name Writing
- Figure A3.6: Late Letter-Name Writing.
- Figure A3.7: Transitional Stage of Writing.

SCRIBBLE WRITING
Age 3

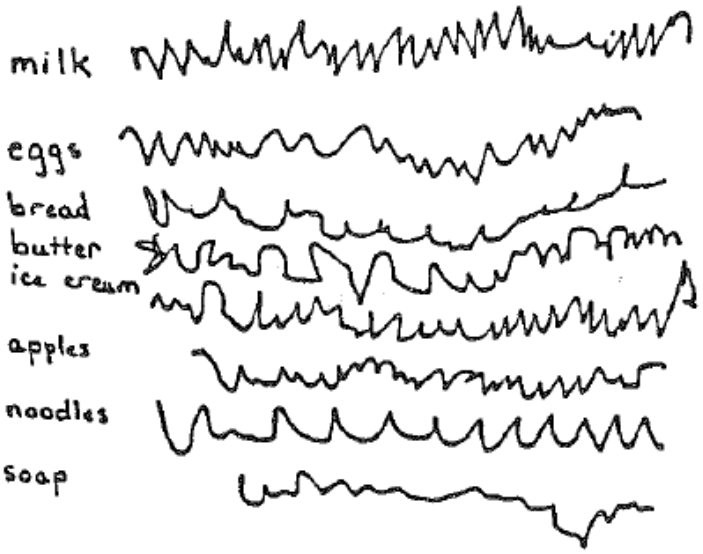


FIGURE A3.1 Three-year-old's scribble writing. She told her mother what each of these "words" meant (Temple, Nathan, Temple, & Burris, 1993)

PREPHONEMIC STAGE
Age 4

Kindergartener

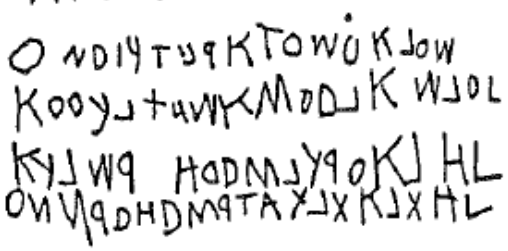
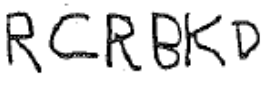


FIGURE A3.2 Four-year-old's and kindergartner's prephonemic writing: the letters do not represent sounds (Temple, Nathan, Temple, & Burris, 1993)

EARLY PHONEMIC STAGE
Age 5



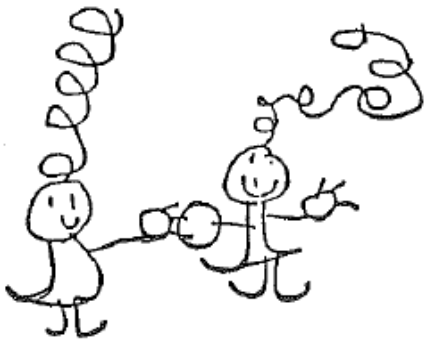
Our car broke down.

Kindergartener

My Baby was with me last night.

FIGURE A3.3 Children's early phonemic writing (Temple, Nathan, Temple, & Burris, 1993)

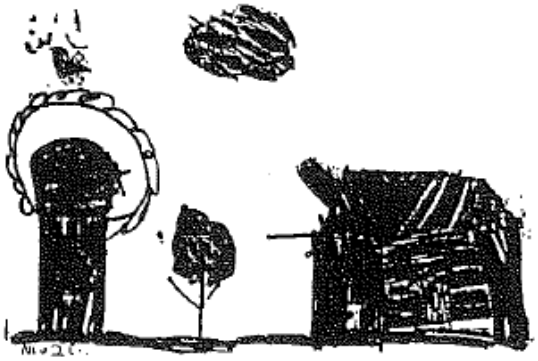
EARLY PHONEMIC STAGE
First Grader



INOU

I know you.

First Grader
The child represents each syllable with letters.



TR WS A
BT A FL HS

There was a beautiful house.

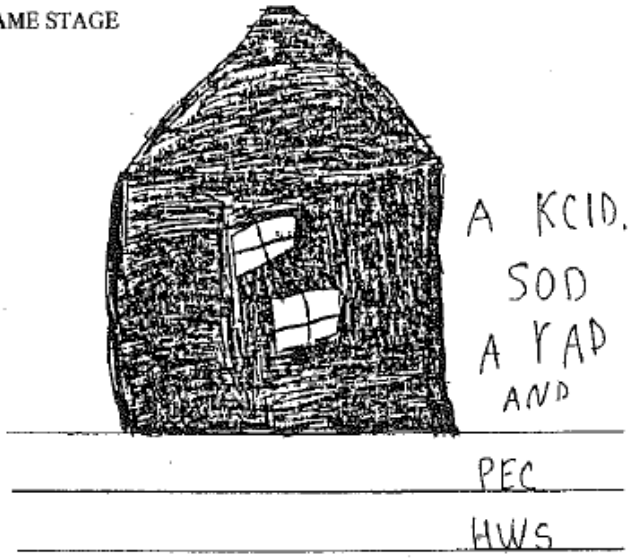
FIGURE A3.3 Children's early phonemic writing, continued. Notice the letter-name spelling of U for "you" in the first example, and the use of letters to represent each syllable in the second example (from Dobson, 1986b and 1986a respectively)

LETTER-NAME STAGE (early)
Age 4

Once a lady went fishing and she caught Flipper.

FIGURE A3.4 Four-year-old's early letter-name writing (C. Chomsky, 1971, p. 509)

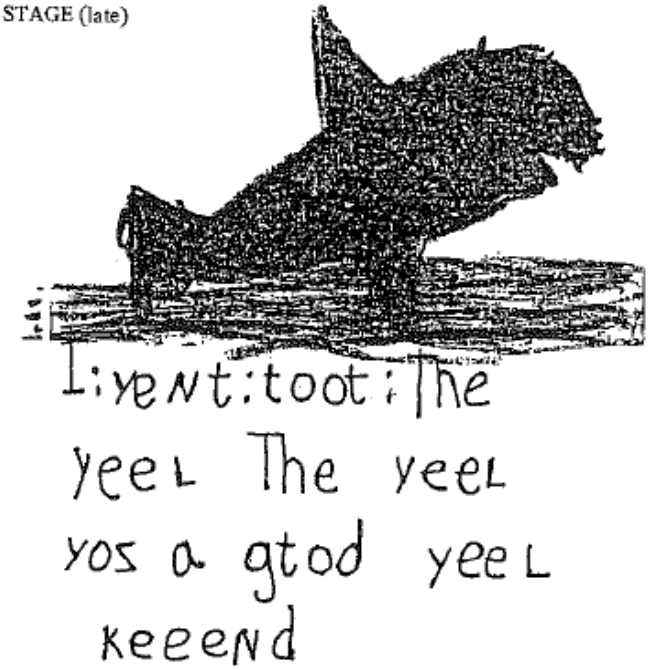
LETTER-NAME STAGE
First Grader



A kid sawed [saw] a red and pink house.

FIGURE A3.5 First grader's letter-name writing (Dobson, 1986a)

LETTER-NAME STAGE (late)
First Grader



LETTER-NAME STAGE (late)
Age 5

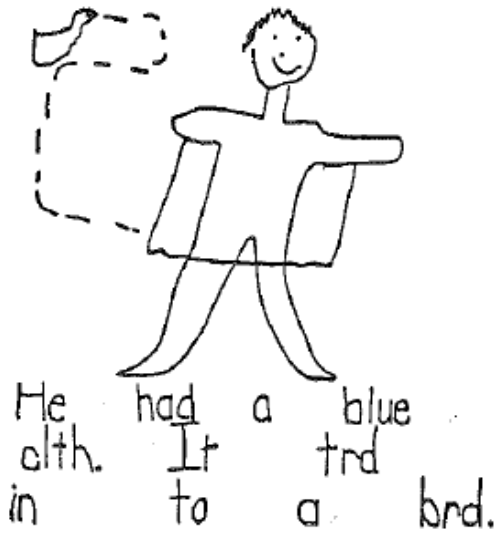


FIGURE A3.6 Letter-name spellings. Note how in the first example the use of Y for /w/ shows the letter-name strategy, while the use of double vowels shows the influence of environmental print. In the second example some of the spellings also show the influence of environmental print. (Top example from Dobson, 1986a; bottom, from Temple, Nathan, Temple, & Burris, 1993.)

TRANSITIONAL STAGE
First Grader

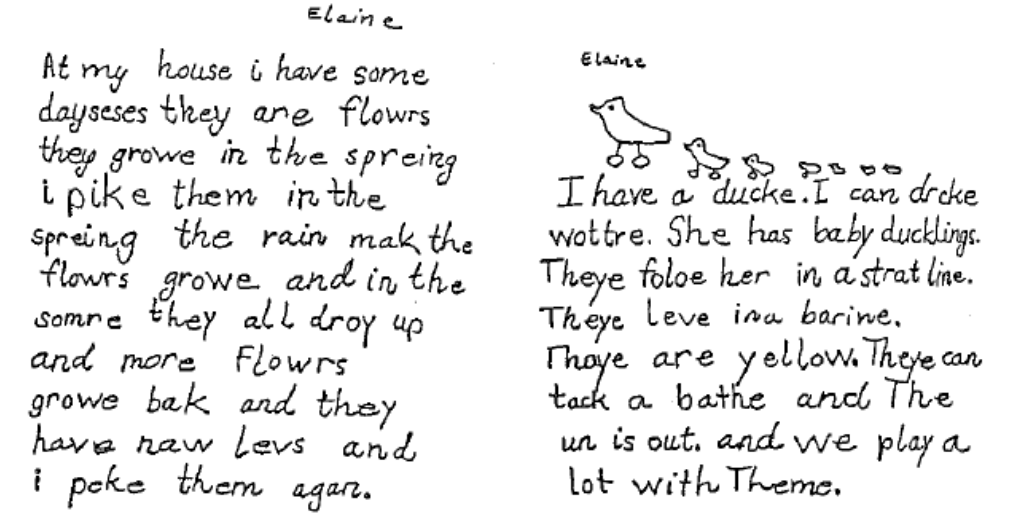


FIGURE A3.7 A first grader's transitional spelling (Temple, Nathan, Temple, & Burris, 1993)

Consonant Patterns Reflecting the Letter-name Strategy

Y for the /w/ sound, as in *we* and *went.* The *name* of the letter Y begins with a /w/ sound.
Examples: YUTS for *once* YENT or YET for *went*
YOZ for *was* YEEL for *whale*

V for the /ð/ sound, as in *the* and *mother.* The name of the letter V sounds a lot like the /ð/ sound in these words, and the sounds are made similarly. Thus V is sometimes used to represent the /ð/ sound.
Examples: IHOVR for *each other* VE for *the* VA for *they*
Note that in the former case, *each other,* a young child may actually pronounce the *th* as a /v/ sound, so this fact alone might account for the V used here. However, /v/ for *th* at the beginning of a word is not common; the sound is likely to be /ð/ or /d/. Thus we might expect initial *th* in such words to be spelled as V, if the child pronounces such words as /ð/ and is using a letter-name strategy, or as D, if the child pronounces these words with /d/ and is using a letter-name strategy.

H for the /č/ sound, as in *chip.* The *name* of the letter H, "aitch," ends in a /č/ sound.
Examples: BRENH for *branch* WHT for *watched*
NHR for *nature* IHOVR for *each other*

H for the /š/ sound, as in *ship*. The *name* of the letter H, "aitch," ends in a /č/ sound, but the /č/ sound itself consists of two sounds run together, /t/ plus /š/. Thus the name "aitch" actually ends in the /š/ sound.

Examples: FEHEG for *fishing* HE for *she*

Of course the /š/ sound is often represented by the letter S also, since the sounds are so similar.

Examples: SOS for *shoes* SES for *she's*

At the beginning of a word, CH is often used for /t/, when an /r/ follows. The /č/ sound actually consists of a /t/ sound followed by a /š/ sound, so again there is logic to the choice.

Examples: CHRAN for *train* CHRIBLS for *troubles* CHRAY for *tray*

At the beginning of a word, J is often used for /d/, when an /r/ follows. The /ǰ/ sound actually consists of a /d/ sound followed by a /ž/ sound (the first consonant in *azure*). Again, the choice is logical.

Examples: JRIV for *drive* JRAGN for *dragon*
JRAN for *drain* JREMS for *dreams*

Other Consonant Patterns Typical of the Letter-name Stage

The letters representing the nasal sounds /n/, /m/, and /ŋ/ (as in *think* or *finger*) are typically omitted before consonants.

Examples: MOSTR for *monster* NUBRS for *numbers* AGRE for *angry*
PLAT for *plant* ATTEPT for *attempt* SEK for *sink*
AD for *and* STAPS for *stamps* THEKCE for *thanks*
CAT for *can't*

The consonants /l/, /r/, /n/, and /m/ tend to "swallow up" the vowel associated with them in an unaccented syllable, particularly at the ends of words. Thus the vowel letter is often omitted before or after /l/ or before /r/, /n/, or /m/ in such syllables.

Examples: SPESHL for *special* BRATHR for *brother* OPN for *open*
LITL for *little* FETHR for *feather* WAGN for *wagon*
CANDL for *candle* GRANMOTR for *grandmother* EVN for *even*
GOBL for *gobble* SOPR for *supper* CRAN for *crayon*
FRM for *from*

Vowel Patterns Reflecting the Letter-name Strategy

A for the /e/ sound, as in *bet*. The *name* of the letter A (eh-ee) begins with an /e/-like sound. Thus A is frequently used to represent the /e/ sound.

Examples: PAN for *pen* PRTAND for *pretend*
FALL for *fell* DAVL for *devil*

E for the /i/ sound, as in *bit*. The *name* of the letter E (ih-ee) begins with an /i/-like sound. Thus E is sometimes used to represent the /i/ sound.

Examples: SEP for *ship* FES for *fish*
FLEPR for *Flipper* WEL for *will*

I for the /ɔ/ sound, as in *clock*. The *name* of the letter I (ah-ee) begins with an /ɔ/-like sound. Thus an I is occasionally used to represent the /ɔ/ sound.

Examples: GIT for *got* CLICK for *clock* DIKTR for *doctor* IR for *are*

O for the stressed /ə/ sound, as in *mud*. The *name* of the letter O (uh-oh) begins with an /ə/-like sound. Thus an O is occasionally used to represent the stressed /ə/ sound.

Examples: MOD for *mud* SOPR for *supper*
JOPT for *jumped* HOGZ for *hugs*

The preceding are examples of typical letter-name spellings, taken mostly from Read (1975), the pioneering study of children's letter-name spellings. Other examples are from C. Chomsky (1979); Temple, Nathan, Temple, & Burris (1993); and Dobson (1986a).