Reading as a Whole

Underlying virtually all of the basal reading series available in the United States today is the assumption that learning to read is a skill-by-skill and word-by-word process. This part-to-whole approach to teaching reading is based on principles of behavioral psychology and "scientific management" developed a half century ago and treats meaning as merely an end to be attained after words are identified and sounded out. More recent research by Frank Smith, Kenneth Goodman (1973), and others indicates reading is a process of constructing meaning rather than merely obtaining meaning. Similarly, Jean Piaget and cognitive psychologists like Lev Vygotsky have advanced the concept that children learn best when what is to be learned is functional and concrete rather than dysfunctional and abstract, indicating that learning to read should be approached as a whole-to-part, whole language process which replaces dull and often frustrating drills with opportunities to develop an understanding of and pleasure in the written word. This approach has been adopted in New Zealand, in parts of Australia and Canada, and in a number of schools and classrooms in the United States. (Examples of each approach are presented, and three pages of references are attached.)
READING AS A WHOLE

Constance Weaver
Western Michigan University

Session on
"Connections and Misconnections: Linguistics in the Classroom"

National Council of Teachers of English
Los Angeles - November 22, 1987
Imagine, if you will, the following scenario (Weaver 1988, p. 176):

A young mother greets her husband enthusiastically as they sit down to dinner. "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 /st/--you know, like in dog and apple. First you teach the child to say these sounds in isolation and then you teach him to blend them together. Why, in a couple of weeks Johnny might be able to say 'dada.'"

Fortunately, in this scenario, the woman's husband is not impressed. He dismisses his wife's suggestion by commenting that he never heard of a child being "taught" to talk that way, one sound at a time, blending sounds to make words. Neither have I--and neither, probably, have most of you.

We do not directly teach children to talk. We do not teach them rules for putting sounds together to form words and words together to form sentences, partly because we do not consciously know most of the rules ourselves, partly because it would be futile to try to teach these rules directly if we did know them, but mainly because children do not need to be taught these rules directly. Over a span of several years, children induce these rules themselves, forming increasingly sophisticated hypotheses about how language is structured, and representing increasingly more of the "deep" structure of their utterances, the meaning, in the surface structure of what they utter. We adults facilitate language growth by modeling adult language for children, by transacting with them verbally in functional and meaningful contexts, by focusing on the meaning of children's utterances rather than
the form, and by generally ignoring "errors" of form rather than fact, since we realize that most children's language will gradually come to resemble that of the adults in their environment (Lindfors 1980; Genishi and Dyson 1984).

What a difference, though, when children come to school eager to learn to read. In the majority of schools and classrooms, we treat children as if they have suddenly become unable to learn through the modes that have served so well in their earliest years of life. Instruction in reading all too often reflects a totally different view of how children learn, a view that is characterized by assumptions such as the following (Weaver 1988):

1. The learner is passive.
2. Children will learn only what they are directly taught.
3. Knowledge is constructed "bottom up" from elemental building blocks, from the smallest parts to increasingly larger wholes.
4. Errors reflect a learner's failure to learn and/or apply what has been taught.
5. What's important is the measurable product of instruction, not the process of learning.

These are some of the basic tenets of what is sometimes called a mechanistic view of learning (e.g. Weaver 1985). According to the Report Card on Basal Readers prepared by the NCTE's Commission on Reading, and currently in draft form, "In this view, learning is the result of teaching, piece by piece, item by item. The whole, reading, is the sum of the parts, words and skills. The learners are passive and controlled" (p. 59).

What this means in the teaching of reading is not only that children
are directly taught much of what they can learn in ways analogous to the way they learned to talk, but that children are taught as if reading actually could be developed from part to whole, starting with smaller units and building to larger.

Underlying virtually all of the basal reading series available in the United States today is the assumption "that the learning of reading can happen skill by skill and word by word and that learning is the direct result of teaching" (Report Card, p. 79). Some series make this assumption explicit. For example, the Lippincott Basic Reading series ("subtitled "APhonic/Linguistic Series") identifies three meanings for "reading": first, learning basic letter/sound patterns to decode familiar words, then expanding their reading vocabulary as decoding becomes more automatic, and then using literal, inferential, and evaluative skills to develop understanding. Finally, readers can use their decoding, word recognition, and comprehension skills to appreciate literature. Such a part-to-whole approach to meaning is not as explicitly asserted in most other basals, but it is implicit "in how they organize their lessons and how they list their objectives and priorities" (Report Card, p. 44).

Such a part-to-whole approach would be laudable if it reflected how people read, or even how children learn to read, but in fact it reflects neither.

Some examples should help to demonstrate that proficient readers do not build meaning by decoding words letter-by-letter, or by determining the meanings of sentences word by word. Try, first, to read the following paragraph of a version of "Little Red Riding Hood," told from the wolf's point of view (Weaver 1988, p. 63):
Surely it is clear from even this brief example that when we can use semantic and syntactic cues, we do not decode words letter by letter as we read. It should be equally clear that we do not need nearly all the graphic clues normally available to us in order to read.

What, then, of building the meaning of sentences word-by-word? A brief example should again suggest the impossibility of such a procedure. Take, for instance, the word "run." How would you define it? See if your definition or definitions are appropriate for the following sentences (Weaver 1988, p. 16):

1. Can you run the store for an hour?
2. Can you run the word processor?
3. Can you run the 500-yard dash?
4. Can you run in the next election?
5. Can you run next year's marathon?
6. I helped Samuel with his milk run.
7. They'll print 5,000 copies in the first run.
8. Sherry has a run in her hose.
9. There was a run on snow shovels yesterday morning.
10. It was a long run.
In how many of these sentences did your definition, or definitions, fit? Clearly we cannot take meanings for words out of our mental dictionaries and simply fit them into sentences we’re reading; we have to determine what each word means in combination with the other words.

Furthermore, determining what the words mean in combination with one another is not enough, either. We may be able to determine appropriate meanings for the words, but still be able to make little sense of the whole. You may have encountered such examples when trying to read directions for putting together a child’s toy or bicycle at Christmas, or when trying to connect and operate a new piece of electronic equipment, such as a VCR or a computer. If you lack experience with such procedures, if your cognitive schemas are not adequate to the task, merely identifying the words and attaching appropriate meanings to them may not be enough. You cannot get from the part to the whole, but need first to develop an understanding of the whole—how, in general, to do what you want to do—in order to understand the parts, the words and sentences of the directions. In order to construct meaning as we read, we must have and use adequate background knowledge, we must continually apply various strategies to make sense of the sentences and words on the page. Meaning is not merely the end of reading, the product, but the beginning and the means as well.

This is one of the major reasons why our part-to-whole instruction is less than successful: meaning is treated as merely an end, to be attained after words are identified and sounded out, rather than a means which makes that end possible. Worse yet, in a part-to-whole approach, reading itself becomes a means, rather than an end: it is a means of practicing word identification and decoding skills.

This reduction of reading to skills is exemplified not only by
activities for teaching decoding skills, but by activities for teaching separate comprehension "skills." The irony of such teaching is that it is by no means clear that such skills are indeed separate. While some factor analysis studies of reading comprehension skills have identified four or five factors as separate (Davis 1968, 1972), others have distinguished only two: "word knowledge," and "reasoning in reading" (Spearritt 1972), or understanding explicitly stated facts versus drawing inferences from what is stated (MacGinitie 1973). However, other studies have found no clear distinction even between word meaning and paragraph comprehension, or between deriving explicit and implicit meaning (Thorndike 1973; MacGinitie 1973). Even Robert Gagne, who has suggested the existence of learning hierarchies in decoding, is quick to deny the existence of such hierarchies in reading comprehension. According to Gagne (1970), principles of reading comprehension "are quite complex and are typically learned not as formally stated rules but by a process of discovery from the act of reading (1970, p. 273).

One might suspect, then, that perhaps the main reason for introducing separate comprehension skills in basal reading series is simply to have something to isolate and teach, day after day, week after week. Such separately taught skills help give the basal reading series a raison d'être and provide teachers and schools with evidence that they have "taught" reading comprehension, whether or not the children have learned strategies for comprehending and critiquing what they have read (e.g. Report Card, p. 36, p. 1).

The fact that students have all too often not learned such strategies is amply documented. The difficulty of going from the part to the whole is perhaps most readily illustrated by the latest NAEP (National Assessment of
Educational Progress) study of reading comprehension, which indicated that many of our teenagers have difficulty in drawing inferences from extended text and in critically evaluating what they have read (The Reading Report Card, 1985). Yet if our young people are to be more than minimally literate, these abilities are what we must help children develop. Literal comprehension and low-level inferencing are not enough.

The part-to-whole instruction that often leaves students less than fully literate is based upon outmoded ideas from business, industry, and psychology, as explained in detail in the Report Card on Basals (1987). Such outmoded concepts underlie the mechanistic paradigm of education sketched earlier.

However, in the half century since the principles of behavioral psychology and "scientific management" were adopted as the basis for basal readers, we have learned much about how people read, how children learn, and how children learn to read (see, for example, Newman 1985):

1. As previously demonstrated, we have learned from Frank Smith (1971, 1979), Kenneth Goodman (1973) and many others that reading is a process of constructing meaning rather than merely obtaining meaning "from" the page, and that the process of constructing meaning depends in large measure upon what knowledge and experiences and strategies the reader brings to the task of reading. Thus reading is perhaps even more a whole-to-part process than a part-to-whole process.

2. We have learned from Jean Piaget, for example, that children learn best when they are active in their own learning, that they formulate and test hypotheses about their world, refining them on
the basis of experience. We have learned that taking risks and making what appear (from an adult perspective) to be errors are necessary and integral parts of such hypothesis-formation. From Piaget and from cognitive psychologists like Lev Vygotsky (1978, 1982), we have learned that children learn best when what is to be learned is functional and concrete, not dysfunctional and abstract, as in many beginning programs on phonics. Even *Becoming a Nation of Readers* (Anderson et al. 1985) cautions against teaching phonics before children understand the function of print; as the authors put it, "Children can be left huffing and puffing over the sounds that letters make with only the faintest idea of what they are doing;" (p. 33).

3. We have learned that children who learn to read in the home, or in whole language classrooms, typically learn to read in much the same way as they learned to talk (e.g. Holdaway 1979; Harste, Woodward, and Burke 1984; Teale and Sulzby 1986). Starting with an intention to make meaning, they tend first to read a book holistically, telling the story from the pictures or reciting the memorized story. Then, gradually, they fill in the parts: they learn to recognize the words (at first, only in familiar contexts) and begin to grasp some of the correspondences between letters and sounds. Often, these readers are also writers: they may begin with scribble writing and pre-phonemic writing of various sorts, then graduate to representing each word with, typically, its beginning sound. The writing and reading reinforce each other.
In sum, we have learned that reading and even learning to read are largely whole-to-part processes that begin with what the learner brings to the task, both in the way of cognitive processing strategies and specific knowledge and experience. The fact that we teach reading from part to whole does not mean that it is learned that way. Thus it seems that Janet Emig's summary of the teaching-learning relationship is particularly applicable to the direct teaching of reading: "That teachers teach and children learn no one will deny. But to believe that children learn because teachers teach and only what teachers explicitly teach is to engage in magical thinking" (Emig 1983, p. 135).

Perhaps the difference between a part-to-whole approach and a whole-to-part approach can be illustrated with examples of two very different kinds of reading materials. The first example is from the Economy Level C Pre-Primer. The underlined words are words used for the first time in the program. Though this is a program with a strong phonics emphasis, teachers are instructed to use word cards to drill children on these new words before reading the story (see Reading Report Card, p. 39):

The Dog in the Van?

Did I see a dog? I did not paint the dog.
I did! I did not paint Happy.
The dog went into the van. Happy went into the paint.
Did I see a red dog? The dog is red.
Is the dog red? The paint made it red.
Is a dog in the van? I did not see a red dog.
Is it red? It went into the van.
Is a red dog in the van? A red dog is in the van.
In sharp contrast is the storybook *Greedy Cat*, by Joy Cowley, one of the early books in the series *Ready to Read*, published by the Department of Education of New Zealand and imported by Richard C. Owen, Publisher. The story starts as follows:

Mum went shopping
and got some sausages.
Along came greedy cat.
He looked in the shopping bag.
Gobble, gobble, gobble
and that was the end of that.

The language of the following episodes repeats as Mum buys more and more groceries, and of course Greedy Cat eats one item after the other. Finally, Mum buys a pot of pepper— and that is the end of that!

Like the selection from the basal reader, this little story uses many simple words, but it favors natural language over artificially simple vocabulary and sentence structure. The story provides plenty of repetition, too. Instead of struggling to read an artificially difficult non-story, an emergent reader encountering this book might first tell the story from the pictures. Quickly the child would begin to chime in when the repetitive parts are read to her, or him, and soon the child would be able to "read" the whole story. Only after learning the whole would the child focus attention on the parts, the words and parts of words. What a difference from the kind of instruction so typically provided in our basal readers!
As parents, and educators, and the public, we say we want children to become adults who take pleasure in the written word, who voluntarily read for both pleasure and information, who can think independently and creatively. But we teach through dull and often frustrating drill; we teach them that what's important is sounding out and saying words, and answering questions that emphasize conformity rather than creativity. With a mechanistic approach, is it any wonder that many of our youth fail to achieve the goals we envision for them? With such instruction, is it really surprising that for many of our children and youth, reading for meaning and information and enjoyment is a dream perhaps permanently deferred?

The whole-to-part whole language approach that has been adopted in New Zealand, parts of Australia, and certain provinces of Canada, as well as in an increasing number of schools and classrooms in the U. S., illustrates how such goals can be accomplished not "someday," if ever, but here and now. In her recent book, When Writers Read (1987), Jane Hansen suggests that the crucial factors in attaining such goals are time, choice, responsibility, structure, and a sense of community. Children need time to grow and learn, rather than pressure to conform and perform; they need considerable choice of what to read, why, and how; and they need to learn to take responsibility for many aspects of their own learning. They also need structure and community, an environment that provides security, stability, and support for taking risks. Such are the means to the immediate end of making meaning from texts, a dream that can be realized from the very first day of school.
REFERENCES


Goodman, Kenneth. 1973. Theoretically Based Studies of Patterns of Miscues


Holdaway, Don. 1979. The Foundations of Literacy. Sydney: Ashton-Scholastic. Also available from Heinemann and, in Canada, from Scholastic-TAB.


Reading Report Card (see above under National Assessment of Educational Progress).


