The reading debates of the past decade are quite similar to the earlier ones. As in the past, the current debates are concerned mainly with beginning reading. There seems to be an important difference, however. The professional literature of the past decade appears to be less reasoned than that in earlier periods. This is an ironic twist since the research and theoretical evidence on beginning reading today is much stronger than it was in the earlier periods. The debates of 1983 to 1993 tend also to use stronger language, and seem to be grounded more in ideology and emotion than on available scientific and theoretical evidence. The strong rhetoric and ideological base have led more than one journalist to call the current debates "reading wars."

This section treats the debates of the 1980s and early 1990s from the standpoint of science (the available scientific evidence for the proposed reforms); art (the practice); and ideology (the values and attitudes that seem to lie behind

preferences).

I limit my analysis to the most heated of the new debates—whole language versus phonics. I am aware that other students of reading make different comparisons. For example, David Pearson views whole language in opposition to the use of basal readers (Pearson, 1989). Others place whole language on the side of reading whole books, particularly literature as opposed to short selections in basal reader texts; still others focus on the non-teaching of reading skills by whole language and that instead skills are to be inferred from reading connected texts. For others, whole language means empowering teachers to teach reading as they think best. For still others, it means integrating the teaching of reading with writing, speaking, and listening. For a growing number, it means a philosophy of education and of life, not merely a method of teaching reading.

It is, therefore, difficult to discuss whole language since its meaning may differ from person to person, and even includes, in some schools, teaching phonics

and using basal readers as components of a whole language program.

There is a further problem in discussing whole language—the tendency of its proponents to claim originality for procedures that have been in use for hundreds of years. For example, many whole language proponents claim that their use of "authentic" literature is a unique and original feature of their program. Yet, authentic literature has been a part of reading instruction since Noah Webster's

spelling book in the 1700s.

Whole language proponents tend to blame phonics instruction on the paucity of using literature in reading instruction. Yet, one should note that during the past two decades, the amount and quality of the literature included in reading textbooks were related to the amount of phonics taught. The more phonics, the heavier the literature in the book. This is possible because phonics leads to earlier and more advanced word recognition, which further makes possible the use of more advanced, quality literature. Further, the combined use of reading, writing, language, and speaking, claimed by many whole language enthusiasts as the discovery of whole language, has been the basis of remedial instruction since the early 1920s, when it was called a multisensory approach.

For my analysis, I will consider whole language in relation to early instruction in phonics. As will be seen, I think it is perhaps the essential distinction between whole language and traditional approaches to teaching reading. The whole language/phonics debate will be discussed first by considering the reading research and theory of the past twenty years, the instructional practices during the same period, and the accompanying rhetoric. Second, I will consider the effects of whole language and phonics on reading achievement—whether one or the other has had greater benefits for reading achievement. And finally, I will consider whether either conception can help explain the trends in the reading scores on the national assessments.

As noted earlier, whole language can be classified as a meaning-emphasis approach. In the 1970s, it was called a psycholinguistic guessing game. From its beginnings it focused on meaning and language as the primary components of reading—whether beginning or more mature reading.

According to whole language theory, it is through reading for meaning and communication that the beginner acquires the ability to recognize and decode words, not by learning the association between spoken and written words and the association between letters and sounds. Reading is learned best, whole language proponents claim, when learned as language is learned—naturally and in context.

Whole language also de-emphasizes teaching, and particularly direct teaching. It has a strong preference for viewing reading as meaning-gathering right from the start. And it puts little emphasis on phonological aspects of reading—even for beginners and for those with reading and learning disabilities. To prevent problems in reading, whole language focuses on the reader's language and thought.

What about recognizing and decoding words? Do they have a place in defining reading? Indeed, doesn't literacy itself depend on acquiring knowledge about print and skill in its use, since even preliterate peoples have language and thought, but do not read? And for those with severe problems in learning to read—those with learning disabilities or dyslexia—why do they seem to do well with language and thought, but not with reading?

In answering such questions, the whole language response has been that learning how to recognize print comes naturally from being read to and from the reading of connected texts; that reading, and particularly phonics, do not need to be taught. Indeed, if taught, some claim, it may interfere with reading comprehension.

THE ROOTS OF WHOLE LANGUAGE

Whole language has deep roots in the past. It very much resembles whole word and sight methods that began in the 1920s and that favored, for the early grades, experience charts (that is, the child's own language production) for reading in place of reading textbooks. Then, too, the child was expected to infer sound-symbol relations; the teaching of letter-sound relations directly was not favored. Instead, early emphasis was placed on learning to recognize words "at sight and as wholes" and on "reading for meaning." Similar to whole language proponents today, the proponents of whole word approaches claimed that the best route to accurate word recognition was through reading words, sentences, and stories right from the start.

From about 1920 to the late 1960s, the central conception of beginning reading was that it depends primarily on language and cognition. From the late 1960s through the early 1980s, there was a return, for a brief time, to an earlier conception that instruction in decoding-learning the relation between letters and sounds-enhanced reading achievement. Indeed, the research and theory that support this conception have been confirmed and reconfirmed over an eighty-year period (see Chall, 1967 and 1983a).

Evidence on Phonological Factors in Reading

During the past twenty years, the extensive data on the importance of the phonological component in reading has grown quite strong. Basing their work on theories of psycholinguistics, cognitive development, child development, and learning disabilities, many researchers have reported on the centrality of phonology (phonemic awareness, phonics, decoding, word analysis, word attack, and so forth) in beginning reading. If it is not acquired early, word recognition and reading comprehension suffer. For most beginners, difficulty with reading usually stems from phonological problems, and if not treated, it leads also to lack of fluency.

The research on very young children of the past two decades has confirmed the earlier findings that phonological awareness of words (detecting rhymes, alliteration, segmentation and blending of spoken words) tends to be a more potent predictor of beginning reading than word meaning and intelligence. Those holding such positions tend to view reading as developmental, with beginning reading characteristically different from more mature reading. By way of contrast, whole language proponents have tended to view beginning and later reading as using essentially the same process.

Thus, the conception of beginning reading that gained acceptance in the late 1960s through the 1970s included phonological as well as cognitive and linguistic factors. The conception of beginning reading that gained acceptance in the 1980s-whole language-focused primarily on linguistic and cognitive factors.

CHANGES IN PRACTICE

How have these conceptions played themselves out in practice? Did reading instruction change? If so, did the changes in practice lead to improvement or to declines in reading achievement?

Let me state at the outset that it is extremely difficult to know how reading instruction is practiced in the United States during given periods of time and in given places. One can only approximate and infer. Although there are surveys of how well children achieve, we do not have surveys of how they are taught.

Therefore, we must rely on indices that reflect practice. For Learning to Read: The Great Debate (1967 and 1983a), I made judgments about the use of 14 methods in classrooms by analyzing the major reading textbooks and their accompanying teacher's manuals. Others have since done the same.

Have the reading textbooks changed over the past twenty years? There is some evidence that they have. The most widely used basal readers of the 1970s, as compared with those of the early 1960s, taught phonics earlier and to a greater extent (Popp, 1975). They also used more extensive vocabularies grade for grade. The reading textbooks of the 1980s, on the other hand, taught less phonics than those of the 1970s, and they put a heavier emphasis on teaching reading comprehension and word meanings even in the first grade (Chall, 1991 and 1992). A recent analysis of first-grade readers by Hoffman et al. (1993) found significantly more words than in readers published in 1986–87, but the amount of instruction in phonics had further declined.

EFFECTS OF CHANGED PRACTICES ON READING ACHIEVEMENT

From 1971 to 1988 there were six national assessments of reading by the National Assessment of Educational Progress (NAEP). I use these NAEP findings for trends in reading achievement over the last twenty years and make inferences of the influences of the new reading conceptions on instructional practice and on student reading achievement.

From The Reading Report Card of 1971–1984, we learn that, from 1970 to 1980, there was a steady improvement in the reading comprehension of nine-year-olds. However, during the 1980s, the scores did not improve, and may have declined. Although nine-year-olds assessed in 1980 read significantly better than their counterparts in 1971, this progress was made during the 1970s, according to the NAEP report.

If we assume that practice followed the changing emphases as found in the basal readers, we may hypothesize that the reading improvements in the 1970s at age nine and the lack of improvement, and possible declines, in the 1980s stem from the change from a code-emphasis to a meaning-emphasis. The NAEP scores of nine-year-olds (fourth graders) increased during the 1970s when the children were exposed as first and second graders to the stronger code-emphasis programs of the 1970s. And they ceased to improve and possibly declined in the 1980s when the phonics component became weaker. Thus, although meaning-emphasis programs sought to improve reading comprehension by focusing on it from the first grade on, it would appear that this early meaning-emphasis may have led to a decrease, not an increase, in reading comprehension among nine-year-olds. In contrast, the reading comprehension scores of nine-year-olds during the 1970s, when they had experienced a stronger code-emphasis in the first and second grades (a greater emphasis on learning letter-sound relations and the alphabetic principle), increased.

Effects of beginning reading instruction on later reading achievement are also found in the NAEP data. Thus the higher reading scores in 1988 among seventeen-year-olds were explained by NAEP as due, at least in part, to the advantage

gained from their higher fourth-grade reading scores in the 1970s. Here again we have evidence that an increase in reading comprehension in later grades came from higher scores in the fourth grade, which seemed to stem from beginning reading programs that put a greater emphasis on early learning of the alphabetic principle.

Overall, the methods and materials used, the instructional emphases, and the time of these emphases do seem to have an effect on students' reading achievement scores. Indeed, there is considerable evidence from the NAEP scores for the 1970s and 1980s that by grade 4 an early code-emphasis for beginning readers produces higher scores in reading comprehension than a meaning-emphasis. The NAEP data also show that programs that put a greater emphasis from the start on reading comprehension tend to produce lower reading comprehension scores among nine-year-olds and older.

These findings from NAEP generally confirm earlier research findings reported above that different instructional emphases are needed for different stages of reading development. Beginning reading may look like mature reading, but it is quite different. Beginning reading has much to do with phonology and letter and word perception. As reading develops, it has more to do with language and reasoning.

What does all this mean? First, it points to the importance of basing practice on sound theory and research, confirmed and reconfirmed over many years. The accumulated knowledge on reading suggests that different aspects of reading be emphasized at different stages of reading development, and that success at the beginning is essential since it influences not only early reading achievement but also reading at subsequent stages of development. It demonstrates that a beginning reading program that does not give children knowledge and skill in recognizing and decoding words will ultimately produce poor results.

The most recent National Assessment of Educational Progress, the NAEP 1992 Reading Report Card for the Nation and the States (Mullis, Campbell, and Farstrup, 1993), included data on classroom instructional practices that were related to students' reading achievement. Unfortunately, the data were collected only for the fourth grade. "Teachers of the fourth graders in the national and state assessments were asked to characterize their reading instruction by describing the amount of emphasis they placed on various approaches to teaching reading—literature-based reading, integration of reading and writing, whole language, and phonics" (p. 30).

The findings were that at grade 4, fewer classes used a phonics emphasis as compared to classes using literature-based, integrated reading and writing, and whole language programs. The classes that emphasized phonics in the fourth grade were also the lowest achievers. The interpretation of these findings was correct as reported by NAEP—the use of phonics in grade 4 suggests lower reading achievement. Phonics is usually taught in grades 1 and 2 and possibly 3. If used in grade 4, it usually means that the students are functioning below expectancy. To determine the effects of phonics, it would be necessary to estimate the extent of phonics instruction in grades prior to grade 4.

WHY PRACTICE DOES NOT FOLLOW RESEARCH

Why do we seem not to accept research findings from the past and instead ask the same questions again and again, getting essentially the same answers? Why, one may ask, do we not base our methods on the available research—especially when there is so much of it?

Why did practice from 1910 to 1960 move toward a meaning-emphasis approach when the evidence was more favorable to a code-emphasis? Why in the 1980s, when the evidence had become even stronger for a code-emphasis, did practice move more toward a meaning emphasis?

Stanovich (1987) suggests a reason—the strong negative attitude until recently toward word recognition. This negative attitude was so strong that those studying word recognition were often accused of denying that the goal of reading was comprehension.

Joanna Williams (1985) suggested that code-emphasis approaches tended to be overlooked because they were thought to be insufficiently focused in cognitive psychology. Still other explanations have been that meaning-emphasis approaches suited child-centered and progressive education (see Chall, 1967, 1983a).

Stahl (1992) attributes at least part of the controversy to misinterpretations. Meaning-emphasis proponents, he writes, have erroneously attributed to code-emphasis a concern only for phonics with no concern for the meaningful reading of texts. This is a misconception since most decoding programs, from Noah Webster on, have combined decoding with the reading of literature and other connected texts. And most meaning-emphasis programs are improved with the addition of systematic instruction in phonics. See, for example, Watson (1989), Meyer (1983), Stahl, Osborn, & Pearson (1992), Eldridge and Butterfield (1988).

Why are past findings seldom cited? Indeed, most recent empirical studies on the meaning versus code-emphasis controversy do not seem to acknowledge that their findings generally confirm earlier findings that go back to 1910. Instead, the findings are usually presented as new discoveries. This is particularly noticeable in the phonemic awareness literature where little or no reference is made to similar, earlier findings. Perhaps it is because the older studies used different terms which are currently not in favor, such as phonic readiness. Yet the studies that go back to the 1920s and 1930s also found rhyming, alliteration, sound segmentation, and auditory blending to be highly related to beginning reading achievement.

The recent findings that phonics correlates higher with reading achievement in the early grades than in the later grades also seem to make no reference to studies that reported similar findings in the past.

One wonders why the research on beginning reading has not benefited from one of the strongest features of scientific investigation—the use of cumulative evidence in confirming or disconfirming new findings.

Perhaps researchers of beginning reading do not cite the classic studies of the past because they wish to disassociate themselves from the older research that is often not accepted and even maligned. To acknowledge that their new research came to essentially the same conclusions as the old may be opening themselves

to the same criticism and rejection. Would this also help explain the proliferation of new labels for old ones—for example, emergent literacy replacing reading readiness, phonemic awareness replacing phonic readiness; decoding replacing phonics; reading strategies replacing reading skills; word reading replacing word recognition, etc.

It is rare in the literature to find a statement such as the following.

The major conclusions of the program comparison studies are based on masses of data, gathered through formal experimental procedures, and scrutinized through relatively sophisticated statistical techniques. Yet they are—point for point—virtually identical to those at which Jeanne Chall had arrived on the basis of her class-room observations and interpretive review of the literature.

(Adams, 1990, p. 59)

There are still other factors that seem to be related to the return, again and again, to meaning-emphasis approaches for beginning reading when the research evidence is greater for a code-emphasis. Since the early 1920s, there has been a preference for meaning-emphasis approaches. These methods were adopted during the great educational reforms of the early 1900s, stemming from the early childhood education movement, progressive education, and the child-centered curriculum. Although meaning-emphasis methods can be traced back even earlier, it is during the 1920s that they gained widespread use and took on, as they do today, all of the qualities and values of love, care, and concern for children. These reforms claimed that reading for understanding from the start was the best way to learn to read. They abhorred rote learning. Concern with print and phonological aspects of reading were seen then, as they are by many now, as pulling the reader away from understanding toward rote learning, and therefore to be avoided.

The view in the 1920s was that concentrating on reading interesting stories (with little or no teaching of the forms and sounds of letters) will result in better reading comprehension. It was further held that this procedure will result in a lifetime love of reading, while learning with phonics, which was viewed as dull and dreary, would discourage the development of lifelong reading.

Although the research of the last eighty years has refuted these claims, they persist. Indeed, there seems to be no evidence on the greater love of reading from a given method of learning to read.

Why do the meaning-emphasis approaches to beginning reading return again and again? Why, when they are relinquished for a time, do they return as new discoveries under new labels? Why are they so persistent? I propose that they are persistent because they are deep in our American culture and therefore difficult to change. These conceptions promise a quick and easy solution to learning to read—reading without tears, reading full of joy. They are the magic bullet that is offered as a solution to the serious reading problems of our time and times past. Further, concern with phonological aspects of reading requires more

knowledge, effort, and work of teachers and children. The meaning-emphasis approaches have always promised more joy, more fun, and less work for the child—and for the teacher.

A one-stage theory of reading seems more attractive to Americans than a sequential, developmental theory. Since the meaning-emphasis theories claim that reading is the same at the beginning and at the end, teachers need to know less for a meaning-emphasis than a code-emphasis which assumes a developmental view of reading.

Whole language, in particular, seems to say that a good heart goes a long way, and that a desire to learn to read is the strongest factor in learning. Its major concern is that the child be motivated to want to learn to read and that the higher cognitive processes be used in reading right from the start. It flees from the idea that there may be "basics" to be learned first.

These views are being debated in other subjects as well. In math, the current thrust is toward concept learning and away from computation. In history, the concern is for teaching broad ideas, not facts. Although the National Assessments indicate that our children have grave deficiencies in the most basic learnings, the current focus is away from teaching these and toward teaching concepts and higher mental processes. Thus, as for reading, the preferred emphasis today in most areas of the curriculum is on the higher mental processes from the start.

I propose that it is these particular views of the child, of the teacher, and of learning—views that have been with us for about a century—that make us accept or reject a particular conception of reading and its research findings. These views attract many teachers to whole language. It is a romantic view of learning. It is imbued with love and hope. But, sadly, research has shown it to be less effective than a developmental view, and least effective for those who tend to be at risk for learning to read—disadvantaged, minority children, and those at risk for learning disability.

Since the 1920s, the prevailing ideology of reading has been one that views children as self-motivated and joyous. This view holds that they learn to read as naturally as they learn to speak, if only we "surround them with books," and we encourage them to use their language and cognition. The teaching of skills and tools, especially those related to print, is to be avoided since it distracts the learner from the naturalness of the process and the acquisition of meaning.

Very little is said about the children who have difficulty learning to read with this emphasis. Faced with higher incidence of failure, proponents of this approach answer that poor reading stems from weakness in language and inappropriate instruction—instruction that focuses on teaching the skills and tools.

The values and ideology I have briefly depicted can be found to underlie most reading programs from the 1920s to the late 1960s. From time to time there is a greater acceptance of the need for teaching skills and tools—when it is realized that many children are falling behind. Historically, however, these periods seem to be short-lived. Such a period existed during the 1970s, but by the 1980s

the thrust was again toward the more romantic, charismatic, and global methods—methods seen as natural and joyful.

Lately, there have been some increased signs of discontent with whole language and other meaning-emphasis approaches for beginning reading. The lower scores found when using these methods have resulted in a greater interest in teaching phonics. Newspapers have been reporting the complaints by parents, teachers and principals for about five years. There have also been heated controversies in England on the teaching of reading and they have gone back to phonics instruction. Still other signs of a coming change are found in the 1992 NAEP reading results (Mullis, Campbell, and Farstrup, 1993), which show declining scores. Another sign of a change to come is the increasing number of phonics programs published for use at home and in schools.

A Concluding Note

The research findings and theories on beginning reading during the last eighty years have grown ever stronger, with the newer research tending to confirm and refine the earlier research. Yet, the use of research and theory for improving practice has not been as consistent. While the research continues to produce findings in the same direction, practice seems to move back and forth. More often than not, it moves in a direction which is not supported by the research and theory.

It would seem that the time has come to give more serious attention to why practice has been so little influenced by existing research.

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