

**Why Reading Teachers Are Not Trained to Use a Research-Based Pedagogy:
Is Institutional Reform Possible?**

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Abstract: Reading instruction is one of the very few areas where it is not the case that “more research is needed.” Educational policy makers already have the theory and the evidence supporting it to guide the implementation of effective reading programs from K-12. In fact, they have had the theory and the evidence for decades. The central problem they face in providing effective reading instruction and a sound reading curriculum stems not from an absence of a research base but from willful indifference to what the research has consistently shown and to a theory that has been repeatedly confirmed. Using Jeanne Chall’s *The Academic Achievement Challenge* as a point of departure, I suggest why our education schools, through their influence on teachers, administrators, textbook publishers, and state and national assessments of students and teachers, have come to be the major obstacle to closing the “gap” in student achievement.

The repeatedly confirmed theory

Because of its foundational role for formal education and its central role in academic achievement at all educational levels, the nature, development, and teaching of reading have been the object of neurological, psychological, and educational research for over one hundred years. Indeed, reading has the longest and richest history of all the curricular areas researchers have studied. One of the classic works still examined by graduate students is Edmund Burke Huey’s study on eye movements during the act of reading published in 1908 as *The Psychology and Pedagogy of Reading*. What is remarkable is not that almost all the major questions in reading pedagogy have been resolved by a large body of credible and consistent evidence from this huge volume of research, but that they have had to be resolved repeatedly. And that is because the evidence has been willfully ignored by schools of education and all those they influence, from teachers, administrators, educational publishers, professional educational organizations, and testing companies to policy makers.

In *The Academic Achievement Challenge*, the last book she wrote before her death at the age of 78 in 1999, Jeanne Chall makes this point over and over again, with exasperation and sorrow. One of the world’s experts on reading research and instruction, Chall was a major contributor to this body of research through her work on readability, her analysis of the research on beginning reading instruction, and many other studies. Based on her own research, her work with hundreds of graduate students in the course of their dissertations or other research at the Harvard Graduate School of Education, and continuing contact with former students over the course of a long professional life, she was in a position to have a comprehensive inside understanding of the twists and turns in her field and in education in general. In one of my last conversations with her in 1998, I asked her what kind of reading research she thought was still necessary. Her answer was quick and cutting. We don’t need any more. It’s clear what we should do. It’s been clear for decades. The problem is that we don’t do what the research evidence supports, and in fact often do just the opposite.

Going beyond the confines of reading studies, her last work sets up a dichotomy that in her view captured the larger picture. Most of the issues in the curriculum could be seen, she suggested, as a reflection of the tensions between a teacher-centered and a student-centered approach to instruction and to education in general. Commentators on education over the years have come up with different terms for the dichotomy in approaches: traditional vs. progressive, direct vs. indirect, content vs. process, product vs. process, structured vs. open, or skills vs. conceptual understanding are just a few of them. But, they always reflected how one viewed the learning process and the role of the teacher.

From her examination of trends in national test scores and both quantitative and qualitative studies in all areas of the school curriculum, Chall concluded that teacher-centered approaches led to higher student achievement in all areas of the curriculum including reading, especially in the elementary grades and especially for low-income children. Yet, ironically, for the past 50 years the conflicts were almost all about what was best for these children. Which approach would do the most for these children? The research evidence was clear, but it didn't seem to matter to those who claimed that social justice for the children of the poor demanded nothing but "best practices." Why wouldn't those who professed to be their advocates draw on the studies that showed how they might best be taught?

As Chall noted, there have been two basic, competing theories about the development of reading skill. In one theory, repeatedly confirmed, its development takes place in a series of stages, with beginning reading differing from skilled reading (see Table 1.2 in her book for a description of the stages of reading development). Phonological factors play a major role at the beginning because beginners must learn the various relationships between spoken words and the written symbols for their sounds in order to become skilled readers. In other words, they must learn the alphabetical principle. This multi-stage theory predicts that a lack of success in the early stages—in sounding out and identifying words in print whose meanings they already know—retards success in later stages when they must, among other things, learn the meanings of words they may be able to sound out with ease but not understand.

In the other theory, known as whole language, a sight word approach, or a psycholinguistic guessing game, beginning reading does not differ as a process from skilled reading. Reading skill, its proponents claim, develops naturally as language and cognition develop, with language and cognition maturing together independently of direct instruction. Proponents of this one-stage theory analogize learning to read and write to the natural process of learning to listen and speak, asserting that beginning readers learn to read through their effort to derive meaning from written language just as they have with oral language.

Different pedagogical practices have been logically related to these two theories. To implement the multi-stage theory, children must receive systematic instruction in phonics for identifying printed words, regularly read aloud to demonstrate fluency, practice enough to acquire decoding skills to the point of automaticity, receive systematic instruction in vocabulary through the grades to develop their knowledge of word meanings, and use textbooks with vocabulary controlled by spelling patterns to practice the phonics skills they are taught from lesson to lesson.

On the other hand, to implement the one-stage theory, children must induce on their own the alphabetical principle underlying the written code (however idiosyncratic) in the same way they induce the syntactic structures of their native language, rely on a word's context to identify a word, acquire the meaning of difficult words naturally through multiple exposures to them in varied contexts, read independently and silently to concentrate on comprehension, and read only

“authentic” literature from the beginning. Proponents of the one-stage theory have drawn not only on the tenets of natural language learning but also on the assumptions of generative or transformational grammar, even though linguists themselves never applied this theory to the acquisition of written language. Indeed, they are on record in Massachusetts denouncing attempts by whole language advocates to promote the “myth that learning to read resembles learning to speak” and to claim that their view of reading somehow arises from research in linguistics.¹

As is well-known, the evidence has consistently supported the multi-stage theory and as implemented by a pedagogy emphasizing explicit instruction in skills and mastery to the point of automaticity. The evidence has clearly supported the superiority of highly structured teaching for children deemed “at risk.” Among other sources of evidence, Chall pointed out that teacher-centered approaches have always been characteristic of Catholic schools, whose urban students, though similar demographically to those in public schools, do much better on the average.

Why the confirmed theory has been ignored

Chall noted that “powerful forces” other than reason and common sense have kept us doing the same research and answering the same questions over and over again, with no end yet in sight. As she saw it, there has been a steady movement towards student-centered approaches to curriculum and instruction over the century despite the mounting evidence that its results were inferior to teacher-centered approaches, especially for the most vulnerable populations—low-income children and children with disabilities. Chall traced the root of the problem to conflicting philosophical beliefs about the child’s inherent nature and the goal of education in a democracy. One group of educators have viewed the child as someone whose intellectual growth needed careful adult-determined direction within a clear pedagogical structure, with the end result of informed citizenship. Their primary goals have been academic. Another group of educators have viewed the child as essentially good, motivated to learn and cooperate with others, and a unique individual whose creative talents needed to be tapped and allowed to unfold naturally—an image befitting children living in a democracy as they pictured it. No authority figures in charge of what children learn. For this group of educators, the primary goals of education have been social. There is little if anything teachers of beginning writing or reading need to teach, certainly not directly, since they are watching over a holistic, meaning-driven process that begins in kindergarten and extends to grade 12 and beyond.

—By reading educators

In her last book, Chall frankly noted that the problem today is the identification of each theory and the pedagogy that best implements it with a political preference. She is right, but she did not explain how this alignment took place in reading. Phonics instruction was not aligned with any political party or label until the late 1960s and early 1970s. Advocates of a subject-centered education like Richard Hofstadter, Albert Shanker, and E.D. Hirsch were political liberals, not conservatives. Phonics instruction was one of the first areas of pedagogy to be politicized, and by the author of *Reading: A Psycholinguistic Guessing Game*—Kenneth Goodman, with the help of

¹ In July 1995, the Commissioner of Education in Massachusetts received a letter signed by 40 linguists and psycholinguists, many of whom were in the Linguistics Department at MIT, expressing concerns about the whole language orientation of the first draft of the state’s English language arts curriculum framework. In an August 1995 follow-up letter, Professor David Pesetsky of MIT and Janis Melvold, Assistant in Psychology/Neurology at Massachusetts General Hospital, pointedly ask if a revised document will continue “to advocate teaching reading skills only in context...” to present reading as directly ‘constructing meaning’ .., and to present this view of reading as arising somehow from research in linguistics?” According to another follow-up letter from Pesetsky and Melvold dated December 1995, which expressed praise for the revised document, the first two communications preceded a “successful meeting” in October 1995 with the Commissioner and an Associate Commissioner.

his educator wife, Yetta Goodman. They were the founders of the whole language movement. In an attempt to ascribe the low reading achievement of low-income children to language differences, not language deficits, Goodman claimed that phonics instruction imposed standard forms of speech on dialect-speaking children through the teaching of conventional sound-letter correspondences and led to a lack of motivation to learn to read and the failure of these children to connect what they decoded with their native language. Because these children could not associate the words they identified with the language they spoke, he argued, they could not read with meaning. Phonics instruction, he also implied, was the preferred strategy of Christian fundamentalists, darkly hinting that it was favored by conservative parents because it fit in with attempts at controlled literal understandings of a text. In effect, Goodman made phonics instruction a civil rights issue and smeared it as a tool of both white middle class oppressors and white fanatics.

Goodman's colleagues in education schools across the country took up this argument with eagerness and further support from Paulo Freire's influential *Pedagogy for the Oppressed*, first published in 1970 and now available in a 30th anniversary edition. A Brazilian educator and a Marxist, Freire, too, ridiculed phonics instruction as an oppressive strategy for teaching illiterate Brazilian fishermen and farmers how to read, advocating instead a whole language approach. To a large extent, his teaching materials consisted of party slogans and Marxist propaganda, so far as I can determine. Although Freire has been judged one of the most influential educators of the 20th century, I have been unable to locate independent evaluations of his work in Brazil or elsewhere.

Did Goodman's ideas make sense at the theoretical level, or have empirical or practical support? No, his ideas were untenable as language theory. Dialect-speaking children in this and every other country can comprehend the standard dialect orally; thus there is no comprehension mismatch when children sound out a word according to its standard pronunciation. (Goodman himself later corrected his claims on this issue.) Nor could Goodman's ideas be implemented consistently by linguists because they could not agree on how to transcribe black dialect or indeed on which black dialect to use for a beginning reading textbook. His ideas were also unsupported by research; no peer-reviewed and published research found black children's reading skills improved by the use of reading textbooks written in dialect. Indeed, dialect readers were opposed in practice by black teachers who didn't want the stereotype of dialect-speaking blacks promoted in children's reading materials. But none of this mattered. Phonics instruction was a civil rights issue—beyond theory, research, and the scientific method. Moreover, the English language itself was now being portrayed as the language of imperialists—and even literacy was being dismissed as the tool of oppressors dating back thousands of years to the very inception of writing systems.

Just about every pedagogical strategy was lined up politically in the following decade. Also identified as "conservative" were a specified curriculum, direct teaching, assigned expository writing based on reading, assigned literary texts (especially if they were by dead white males), grammar study, specific writing skills, and indeed, anything requiring teaching, correction, or a teacher's judgment about content. In their place teachers were to use a variety of pseudo-teaching strategies. They were to encourage children to use context to guess what a word was or meant, to learn from the most able students in cooperative learning groups, and to create their own reading and literature curriculum. What is ironic is that the strategies damned as "conservative" tended to be supported by research as useful for low-income children.

In concluding her book, Chall noted how intractable ideological preferences are. But, rational being that she was, she still ended with the hope that scientific evidence would come to be more respected by educators. Here, I think, is where Chall underdeveloped a crucial piece of the problem she identified. She failed to note that scientific research in education—something the

early Progressives did want, John Dewey among them—has itself been consistently disparaged as “positivistic” and irrelevant by the major proponents of whole language since the early 1970s. They have cleverly argued from the start that their theory and its associated pedagogy could not be assessed by scientific methods.

Goodman, a professor at Arizona State University, has regularly and outspokenly disparaged the value of scientific research in education. In a 1996 article in *Education Week*, he is quoted as saying that “conventional research sets up artificial experiments. The research is skewed by its design.” Another prominent whole language advocate, Jerome Harste, a professor at Indiana University, is quoted as saying that “research is not innocent. It’s not the place to go to find truth. You’ve got to look at who did the research and what are the ideological beliefs of the person doing the research.” Other whole language advocates are quoted as charging that “researchers have become the unwitting pawns of the conservative and religious right.”

—By writing educators

Here the plot of this saga thickens. The reading process advocates were joined in their disparagement of experimental research very early on by Donald Graves, the first to emphasize a holistic writing process for teaching writing in the elementary school and the graduate school mentor at the University of New Hampshire of Lucy Calkins, his most prominent student. In 1980, for example, Graves dismissed writing research as “exercises for students to apply statistics to their dissertations.” In his view, most experimental research “wasn’t readable and was of limited value.” It was “devoid of context and concerned only with sterile and faceless data.” Indeed, he charged that “Persons using experimental designs have contributed least to the classroom teacher...” because teachers are unable to “transfer faceless data to the alive, inquiring faces of the children they teach the next morning.”

There is a grain of truth to Graves’s criticism of the usefulness of the details of an experimental study to a classroom teacher, and there is much value in well-done naturalistic (or ethnographic) studies of classrooms and children. But as experimental evidence kept piling up against the reading or writing process approach, their dismissal of the relevance of “positivistic” research may well be interpreted as self-serving. Especially since a study published in 1995 in a premier journal for reading research also found no evidence for the claim that whole language classrooms, in contrast to classrooms using basal readers, produced children who like to read for recreational or academic purposes. Increased motivation to read was one of the central claims of whole language advocates.

Not surprisingly, few proponents of the tenets of a writing process approach have subjected it to the fire of experimental study. A first-rate meta-analysis of the results of the relatively small number of sound experimental studies on writing that had been completed by the early to mid 1980s was published in 1986. It found that patterns of instruction characterized by clear and specific objectives as well as planned and structured whole class activity were by far more effective than patterns of instruction characterized by “non-directional” teaching, writing about whatever interests the students, writing for peers, and general or vague objectives. Despite the eminence of the researcher and the quality of the study, his findings and conclusions had no discernable effect on the field. Nor have there been other meta-analyses of the results of experimental studies on writing since then.

There are two other factors to keep in mind in understanding the devaluing of experimental research by the advocates of the writing process approach: the kind of doctoral research graduate students in education can realistically do, and their professors’ generally weak qualifications for guiding an experimental study (or even an ethnographic study). A study that pits instructional

methods related to competing theories against each other in real classrooms to test their validity has always been difficult to design and carry out. What graduate student in education—typically a full-time teacher—would prefer to undertake that kind of research for a dissertation rather than observe a small number of children writing, sometimes no more than one, for a study that can be satisfied by a 300-page narrative with little analysis but with “thick description,” a phrase popularized by anthropologist Clifford Geertz that educators latched onto.

Although no generalizations can be inferred from the naturalistic research that was conducted by writing process advocates, that didn’t deter ethnographic researchers in education, education faculty, and especially classroom teachers from inferring them anyway. Teachers loved reading stories about children learning to write and deeply believed that these stories, not experimental research, told them how to teach.

The proponents of a meaning-driven approach to the teaching of writing were connected to the proponents of a reading process approach by more than a dismissal of “conventional” research and their common assumptions about the nature of development in each area. They also did not believe in teaching reading skills directly at any educational level and claimed they could be taught through the writing process. For example, Mary Ellen Giacobbe, a former first grade teacher whose New Hampshire classroom served as the site for the research of Graves and his graduate students in the early 1980s and who has given workshops to thousands of elementary teachers, claimed children would induce phonics generalizations in their efforts at invented spelling and process writing. Nancie Atwell, another student of Donald Graves, dismissed the direct teaching of reading skills in her highly influential book on middle school teaching.

When a bankrupt theory can’t be discredited on rational grounds

If experimental research is declared inappropriate, no evaluation of the efficacy of the reading and writing process approach is possible. How convenient. Its advocates never have to admit that their theory is bankrupt and their pedagogical recommendations have little or no warrant. And because they are true believers, the bankrupt theory spreads. As we all know, it has influenced educators across the curriculum in tandem with another, related, unproved, and unprovable theory of learning called constructivism. Both new and experienced teachers are actively dissuaded from teaching discrete skills (except, possibly, in no more than 10-minute “mini-lessons”). Pseudo-teaching strategies like small peer-led group work are touted as ways to teach the content of any subject. But, borrowed theories, bankrupt or not, often lead to unexpected problems in the new domain (as happened when theoretical constructs from cognitive psychology about the role of planning in problem solving, based largely on chess-playing and mathematical problem-solving, were used by writing researchers to develop a theory explaining the composing processes in college composition).

For example, both mathematical and scientific terms have fixed meanings uninfluenced by context. But a theory that views contextual meaning or “prior knowledge” as determining word meanings leads to a pedagogy in mathematics and science that is potentially harmful, especially when there are many words whose everyday meaning differs from their precise scientific definition. More problematic is the notion that it matters little if students misread the exact words in a sentence if they have “constructed” an approximate “meaning” for the sentence. It is a short leap to the notion that students should be given more credit for spelling out their reasoning for solving a mathematical problem even if they come up with a wrong answer than for getting the correct answer without spelling out the reasoning. It’s also a short leap from pedagogical approaches that insist students should choose what they want to read and write about, ground their interpretations of what they read in their life experiences, and write mainly about their life experiences (all in the name of “ownership”) to the notion that children should be expected to

induce their own algorithms for basic arithmetical operations and engage chiefly in solving “real-world” problems.

The problems go deeper than Goodman’s and Graves’s indifference to a bankrupt theory and its misapplication to another domain. These two educators communicated their sarcastic dismissal of scientific research to their own graduate students and to other educators for decades. Spread by their students and colleagues in schools of education across the country, their views have kept thousands of graduate students and prospective teachers from studying methodologically sound research in their education courses and discouraged them from using it later in their own work. Indeed, they may have encouraged several generations of teachers to transmit a contemptuous attitude toward scientific research in general to their own students. We do not know because no researcher located in a school of education or a graduate student contemplating dissertation research in the past two decades would have had the courage or support to inquire.

The alternatives

Educational policy makers are in an unenviable position. Most of those who prepare new teachers and retrain experienced ones in our schools of education do not appear to accept the results of scientific research on the nature, development and teaching of reading and writing. They do not accept the results because they have declared scientific research irrelevant. They thus mistrain those who are preparing to teach in costly licensure programs and continue to mistrain them in even more costly professional development programs. Rational argument is not possible with those who maintain that evidence does not matter—or that evidence may be an opinion (or the “right” opinion) about an issue or an appealing anecdote.

A society cannot afford to continue funding teacher training institutions whose educational philosophy promotes a bankrupt theory and its associated pedagogy in the name of social justice (or “inquiry”) in order to disguise their own intellectual bankruptcy. Alternatives to dysfunctional institutions must be created. A civically healthy society needs a system for teacher preparation that respects and honors rational approaches to issues in curriculum and instruction.

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