

## **Introductory Notes on Jeanne Chall (March, 2023)**

The Science of Reading had its origins in the 1960s and 70s. The number of studies and research reviews expanded exponentially each decade from that time on. This series of posted studies will focus on Jeanne Chall's 1967 publication, *The Great Debate* and its role in this process.

Prior to the sharp increase in interest, two events took place in the 1950s that contributed to general concern about how reading was being taught in schools.

The first event came from a 1957 bold article in the weekly issues of the popular *Saturday Evening Post*, titled, "Why Johnny Can't Read- And What You Can Do About It". It created a furor among parents and educators. The author, Rudolph Flesch, assumed that "Johnny" couldn't read and gave his explanation. It was due to the lack of teaching phonics in the schools.

The second event that caught attention in the 50's occurred well above the planet earth. The news that the Soviet satellite, Sputnik, had circled the earth also created a stir. How were the Russians able to accomplish this before the U.S.?

How were these two events related? Flesch put them together by declaring that because Johnny Can't Read our country is falling behind, evidenced by Sputnik. This happened during a time of confusion and disagreement about the way reading had been taught. Many questioned their child's schooling in keeping up to the Soviet Union. These were scary thoughts.

Three coinciding events soon followed. They resulted in serious changes in the way reading was studied and understood.

1. A landmark analysis and synthesis was published on how reading had been taught since the beginning of the century, entitled, *Learning to Read: The Great Debate*. It was published in 1967 by the legendary Jeanne Chall, a professor at Harvard. In keeping with Flesch's article, the report called into question the theory and practice of the way reading had been taught during the century up to that time.
2. A new theory of reading, called "Whole-language", appeared in professional journals that promoted a new way of understanding reading and its teaching. Its diagnosis of the reading problem differed from Chall's analysis. It did not include an emphasis on phonics. Its influence soon overtook the previous "Look-say approach as the prevailing approach, and over-shadowed Chall's influence, for the next three decades.
3. A new kind of behavioral science called cognitive psychology, with its new brand of psychologists, emerged and set its sights on the study of reading. As a result, a large body of knowledge quickly accumulated that uncovered many mysteries of reading over the ages. It argued in favor of Chall's work and apposed the Whole-language view. While some adjustments were made in the "whole-language" viewpoint, as a result of challenges of cognitive psychologists, whole-language prevailed under the new label of "balanced literacy" well into the next century.

Jeanne Chall's original work makes up this series of postings on this website. The two updates, 1983 & 1996 are posted in a later group.

### **Learning to Read: The Great Debate, [Jeanne Chall \(1967\)](#)**

Chall's four-year study was sponsored by the Carnegie Corporation of New York. It included a "review of existing research, a description of methods of instruction, interviews with proponents of the various methods of instruction, and an analysis of different reading series or published programs".

Chall's first interest was in teaching, but she did express an interest in the underlying theoretical aspect as well, termed "basic research".

Chall stated that her study "sought to understand why there had been such consistent controversy in the United States on teaching beginners to read". (1996 p.2) Chall found that the research says nothing consistently. "For example, why did Flesch and Terman and Walcott (fellow critics) conclude that a strong phonic emphasis was the best beginning approach? And, Why did other researchers and the authors of most basal readers conclude from essentially the same body of evidence that the best way to start was with whole words (e.g., with a sight method), introducing phonics later and more slowly?" (p,5) By this time, the research was poorly done and shockingly inconclusive.

The report supported much of Flesch's contentions, but it was more than a look backwards. Chall "sought to determine the best methods for teaching beginning reading through an analysis of the research on phonics and look-say and **the effects of knowing the alphabet**". (A theoretical question) (1983)

Chall's analysis **defined phonics as the "relationship between letters and sounds they represent in words"**. Learning this relationship led to the importance of learning the alphabetic principle for identifying words in printed text. **This placed an importance on words as an important unit of study.** This is a critical point in future research. Her analysis helped set the direction for future inquire.

Chall's interest throughout the three editions was primarily on how much phonics was being taught for beginning reading. After grouping all studies in her survey into two classes, either "code-emphasis" with phonics or "meaning-emphasis" without phonics, she compared studies of both kinds. Of the two, the prevailing approach in use during the whole first half of the century had been with programs of "meaning-emphasis". **This represented an earlier turn of the century revolt against phonics that had been the prevailing method for generations.** The meaning-emphasis methods were labeled "look-say" because **they** relied on visual memorization of whole words and did not attempt to applied the alphabetic code at the start of learning to read.

It should not be assumed that no research on reading had been conducted prior to Chall's study. It had been very inconsistent. Chall makes a puzzling claim that "more than one thousand reading research studies are completed each year." When did this happen? She sites a major source of this information, the classic, reference book, [Handbook of Research on Teaching](#) (Gage, 1963). How she selected key studies from this enormous number is described in chapter 4. "The body of knowledge and practices now being attacked

is the first to claim validity on scientific grounds. Indeed, reading has been the most researched of the school subjects; for each study in arithmetic, there are probably three studies in reading.” The Gage reference Handbook is a major source of information on this topic.

A person would need to dig deep in the reference section of a library to find the Handbook. I was able to find an old copy that had been sitting, undisturbed, in some library for years, that I could buy. The chapter on reading research had plenty to report on. It provides a more thorough picture of the state of the Science of Reading before the rise in the 1960s and 70s. Chall certainly was aware of this source. I will comment more on it in later sections. Chall was more concerned about teaching methods and programs and less on theoretical questions.

The problem, however, was “Despite thousands of research studies and scholarly discussions on reading since the turn of the (20<sup>th</sup>) century, it has been difficult for researchers to state with any degree of confidence that one particular method or approach to beginning reading is really better than another... Neither do we have any evidence to date that one published code-emphasis program is superior to another, although some undoubtedly are.”

Chall noted that many of the comparative studies, of programs and methods, lacked scientific rigor. She also noted that studies during this time lacked theoretical ideas that helped explain how reading was done, what should be taught and why. **“In the original edition, we noted that the research on beginning reading was not generally grounded in a theory of learning or of the reading process.”** (1983) This was true in spite of the science that was reported on in the 1963 reference Handbook of Gage on reading. This became a major concern and interest of cognitive psychologists. Their work greatly improved the theoretic basis of reading. They answered questions like: If teaching phonics is more effective, then why? How does phonics work? These are questions that the science of reading sought to find better answers to.

Chall attempted to give the studies some order in spite of the problems to see if some valid generalizations could be made. “Most children in the United States are taught to read by what I have termed a meaning-emphasis method. Yet the research from 1912 to 1965 indicates that a code-emphasis method – i.e., one that views beginning reading as essentially different from mature reading and emphasizes learning of the printed code for the spoken language – produces better results.” (p. 307, 1967) Chall states that “in spite of the shortcomings of the individual research studies, if one examined them developmentally, the code-emphasis programs produced the better results.” (1983)

“Nor can I emphasize too strongly that I recommend a code emphasis only as a beginning reading method – a method to start the child on. ... Once the pupil has learned to recognize in print the words he knows (because they are part of his speaking and listening vocabulary), any additional work on decoding is a sheer waste of time.” This may be true, unless you consider word attack and spelling skills for more complicated spellings.

Chall summarized the findings of the original report.

“Based on these analyses, I found that beginning readers learn better when their instruction emphasizes learning the alphabetic code, one that places first importance at the beginning on learning the relationship between letters and their sounds” (that is learning the alphabetic

principle). “They learn less well when taught by a meaning-emphasis, that is, one that emphasizes, at the very beginning, how to understand what is read.” .....“Thus, it is the acquisition of the alphabetic code, the alphabetic principle, in the early grades that lead to quicker acquisition of reading skills than an emphasis on responding to the text meaning.” (quoted from 1996, p. 3)

Will this theoretical point, about the importance of learning the alphabetic principle, prove out in the science?

The Great Debate was “reviewed widely in scholarly, professional adult magazines and newspapers” for decades later. It was a lot easier to read and access than Gage’s Handbook. Chall “hoped that a detailed critical analysis and synthesis of the findings would help future experimenters design more crucial, meaningful studies.” Her work, along with the work of numerous other researchers across education, neuroscience, and psychology, did eventually become a part of the body of research known as the **science of reading**.

The two updates of her book monitored the increase in studies of theory and practice. Together, they tracked growth in the science of reading between these dates, which paralleled other major reports on this development, published during the same time.