#### The Search for Best Method

# Shifting political contexts and debates

In the 1960s, standard curriculum remained dominated by approaches to skill development that involved a diet of graded reading materials tied to a scope and sequence of skills to be mastered across the grades. The approach to reading research remained heavily influenced by psychologists who used various tests to explore the relationship between variables and overall reading achievement. Indeed, a testing regimen increasingly dominated research, resulting in correlational studies, studies exploring aspects of reading difficulties, and research and development on curriculum (including comparisons of different approaches to beginning reading that relied on test scores or testimonies to assess respective merits).

Shifting political contexts also motivated some of the research designs. Concerns for civil rights in different countries, the emergence of the Cold War, and the beginnings of the space race influenced an increased war-like fervor among educators and the public for certain beginning reading approaches over others. Students' reading performance became the focus, with books such as Rudolf Flesch's 1955 work, *Why Johnny Can't Read: And What You Can Do About It.* Flesch suggested that there was a decline in American reading scores at a time when countries around the world were touting the importance of education as fuel for economic, social, and political development. It should be noted, however, that the media and some books of the time overlooked the reality that the evidence for this decline was questionable; in fact, indicators were that students, including more students from diverse backgrounds, were doing better.

These developments coincided with the view that one of the keys to improving student achievement was preschool education and what became a widespread belief that we should begin the teaching of reading earlier. One report by Jerome Bruner (1960)— sponsored by the U.S. National Academy of Science—promoted a rethinking of teaching and development in science and more broadly. Appearing in Bruner's 1960 publication, *The Process of Education*, the report challenged Piagetian (see Piaget & Warden, 1926) maturational views and concepts of readiness and argued for a spiral curriculum, citing a very provocative hypothesis. The hypothesis was, as Bruner stated, "...that any subject can be taught effectively in some intellectually honest form to any child at any stage of development" (p. 33).

In terms of reading development, given recognition of the importance of home-school connections as a key foundations to reading development, reading readiness was touted as a

way to build stronger bridges between successful reading at home and through schooling. A 1966 study by Dolores Durkin, focused on children who read early, received a lot of attention confirming these views and reinforced the growing interest in beginning formal schooling at an earlier age (and finding the best methods to do so). Indeed, in the U.S. we saw the advent of Headstart along with the emergence of a competition over best method of teaching reading and other subject areas; there was, for instance, concern over the neglect of science teaching in the early grades, in addition to heated debates as to the merits of different approaches for teaching both reading and mathematics.

As we have suggested, commitments to different approaches for beginning reading involved what some have characterized as an ideological fervor that prompt the label, "the reading wars." As this debate over phonics versus meaning-centered approaches heated up, mathematics experienced a similar debate over how mathematics should be taught (i.e., skillbased or meaning-centered). On the one hand, these debates were useful in terms of advancing different approaches to research & development and engaging the public in these matters. On the other hand, their frequent alignment with political ideologies and the fervencies of the discussions seemed to contribute to a partisan-like divide with entrenched views.

# Developments in reading research methods and design

The increased interest in reading marked a period of an increased activity in reading research that became to dominate educational scholarship. In 1956 The International Reading Association, headed by its first president, William S. Gray (see: Gray, 1956), became the first U.S.-based professional organization focused upon reading; notably, ten years later, *Reading* Research Quarterly became the first research journal focused solely on reading research. The journal also included an annual summary of research in reading—initially by Helen Robinson, who was a student and colleague of W. S Gray. Overall, this research ranged from detailed studies of sub-skills—such as reading rate, visual and auditory discrimination, and the phonics generalizations thought to merit teaching—to readability studies of the stories enlisted to prompt teacher questioning or student grouping strategies (Side comment II 2b 1).

#### Side comment II 2b 1.

As Robinson and her colleagues (Robinson, Weintraub, & Smith, 1965; 1967) noted, in the 1960s we experienced a significant increase in reading research across an expanding number of areas, including: 1) Detailed examinations of predictors of reading achievement; 2) Studies of the effectiveness of programs (especially primary programs) for students in different settings; and 3) Research on study skills as well as secondary and college reading skills.

At the same time, there were significant developments expanding reading research focused on factors related to: 1) The reader (e.g., sub-abilities, interests, attitudes, personality, and behavior); 2) Text characteristics (e.g., readability, legibility); 3) Teachers (e.g., their pacing, questioning, and knowledge); 4) Tests (e.g., informal, such as IRI [Informal Reading Inventory] or cloze, and standardized tests); and 5) The role of preset curriculum (especially basal programs) and the effectiveness of variations of these programs (phonics or meaning-centered approaches) and their subcomponents. Robinson et al. (1965) also noted that three areas were more researched than others. They included: visual perception, reading disability and the beginning reading. As Robinson et al. (1965) stated:

The studies are divided into six major categories. Forty-three fall within the first category of summaries of specific topics. The second major category, relating to teacher preparation, reveals a marked increase in attention. The third category, sociology of reading, continues to be short with major contributions from other fields. Increased interest was shown in three aspects of the psychology of reading: 1] intellectual abilities included four studies of creativity; 2] personality and reading; and 3] readability, with major focus on the cloze procedure. Under the fifth category, teaching of reading, a marked increase in volume of research was found at the primary-grade level.

During this period there was also evidence of the emergence of an interest in critical reading, with the advent of the Watson-Glazer Critical Thinking Appraisal and a major study of the components of critical reading undertaken at the Ohio State University (King, Ellinger, & Wolf, 1967; Wolf, Huck, & King, 1967). Building on the work of Dolores Durkin, some scholars focused on early reading, or issues considered related to reading diagnosis and disability (e.g., the utility of different tests and the saliency of a reader's modal preferences, lateral dominance, and intelligence). With the exception of UNESCO survey and other occasional studies of illiteracy, most of the international research was undertaken in western nations, tied to various analyses of the aforementioned issues, and enlisted similar methods.

# Landmark studies of studies on reading

Befitting the interest in best methods, beginning approaches proliferated (see Aukerman, 1971) tied to a range of rationales and claims of their benefits. Some spurred a larg set of comparative studies. Unfortunately, as they represented a mix bag of pursuits and results, they made viable comparisons and syntheses across these studies difficult, if not impossible.

Nevertheless, the concern for some kind of winner in the competition over the best method contributed to a strong interest in convergence and, in turn, led to two landmark studies intent on addressing the potpourri of research findings in search of an answer to what might work best. The first was a study by Jean Chall (1967), conducted with funds from the Carnegie Corporation and later reported on in her work *Learning to Read: The Great Debate*. For this study, she and some of her colleagues reviewed beginning approaches to reading, detailing the histories of such approaches as well as analyzing the results of studies of these methods. Chall et al. also pursued observations in Great Britain and U.S. schools, interviewing teachers and advocates of various methods. Any acceptance of her discernments requires a leap of faith and a trust in the viability of extrapolations from an array of studies (i.e., studies that varied due to approaches, treatment conditions, and tests). While Chall acknowledged limitations (i.e., that correlational relationships were not causal; that some results were not comparable), she nonetheless offered pronouncements and generalizations of the merits of a code emphasis—regardless of the method used in the original study. Further, she made recommendations for curriculum developers, teacher educators, test makers, and researchers.

The second landmark study was the tied to the report of the Coordinating Center of the Cooperative Research Program in First Grade Reading Instruction (i.e., the Cooperative First Grade Reading Studies; see Bond & Dykstra, 1967). This involved an attempt to coordinate a large set of studies across the U.S. that examined different methods for teaching reading in order to compare their results across a range of pre-measures and outcome measures. The approaches under examination included Basal; Basal plus Phonics; initial teaching of the alphabet; Linguistic; Language Experience; and Phonic/Linguistic. While some projects administered more measures than others (e.g., in San Diego's language experience initiative, an attitude measure was enlisted as well), they were all committed to gathering and providing identical information for each project. Information ranged from test data on selected measures to teacher, school, and community characteristics. At the same time, they were committed to common experimental guidelines across all 27 studies. As is

always the case, perfect parallelism was not possible—either because of implementation drift or the reality that some projects were at different stages of development than others (and, in some cases, in purer forms that befit their label).

Given this study was conducted in an age of hard copy (i.e., data cards), one can only imagine the massive coordination required to analyze data that were generated across the 27 projects on several pre-measures, background variable measures, and outcome measures (administered approximately 140 days into the project).

Essentially, the cooperative study was a study of the studies of best methods. Its findings suggested that results will vary by settings, teachers, and other variables. Three questions were pursued:

- 1. To what extent are various pupil, teacher, class, school, and community characteristics related to pupil achievement in first grade reading and spelling?
- 2. Which of the many approaches to initial reading instruction produces superior reading and spelling achievement at the end of the first grade?
- 3. Is any program uniquely effective or ineffective for pupils with high or low readiness for reading? (Bond & Dykstra, 1967, p. 115)

For each approach, correlations between the various measures were pursued. Results of the correlation analysis revealed that the ability to recognize letters of the alphabet prior to the beginning of reading instruction was the single best predictor of first grade reading achievement. As shown for the Language Experience approach, the best predictor of reading performance was letter name knowledge, regardless of approach.

Table 1. The Cooperative First Grade Studies: Summary of correlations between key pre-measures and the Stanford Paragraph Meaning Test for each of the six treatments

Magazinas	Basal	Initial teaching	Basal + phonics	Language Experience	Linguistic	Phonic/Linguistic
Measures	4.6	alphabet		4.4	=0	
Murphy	.46	.53	.52	.41	.50	.57
Durrell						
phonemes						
Murphy	.52	.58	.55	.51	.55	.59
Durrell						
Letters						
Metropolitan	.30	.38	.44	.19	.27	.32
Word						
meaning						
Metropolitan	.23	.29	.38	.18	.27	.33
listening						

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Pitner-	.42	.52	.56	.43	.48	.52
Cunningham						
Intelligence						
Test						

In terms of the search for the best method, the results presented a mix of findings with regard to comparisons made to the traditional basal approach and moreover a tendency across studies to generate significant within-project difficulties. The analysis of differences in beginning approaches indicated that the various non-basal instructional programs tended to be superior to basal programs when measured by the word recognition skills of pupils after one year of reading instruction. However, differences between basal and non-basal programs were less consistent when measures of comprehension, spelling, rate of accuracy of reading, and word study skills constituted the criterion of reading achievement. The findings of the variance and covariance analysis suggested that there were effects of the approach on some measures but not others—as well as some gender differences and other differences tied to the project, such as where an approach was initiated. The analysis of treatments according to level of readiness for reading revealed that no method was especially effective or ineffective for pupils of high or low readiness as measured by tests of intelligence, auditory discrimination, and letter knowledge.

The cooperative study thus highlighted situational differences, underscoring how differences within projects or treatments are as substantial as differences across treatments. In other words, the effectiveness of a method will likely vary at the hands of different teachers, in different settings, with different students, and so on. The study pointed to two major implications:

- 1. The failure of a clear winner in the horse race suggests a one size fits all approach or the search for a best approach for all students in all setting may be misguided; and
- 2. "Eclecticism," or a mix of approaches, may be advisable (an suggestion that essentially displaces notions of theoretical purity).

According to some participants, one benefit of the research were the developments that occurred related to methods especially by those engaged in the development and implementation of the Language Experience Approach. Interestingly, a nugget within this work was a statement about writing. As reported by Bond and Dykstra (1967) in the Cooperative First Grade Studies, writing was highlighted as one of many advisable approaches to primary reading programs:

A writing component is likely to be an effective addition to a primary reading program. In the first place, the Language Experience approach, which involves considerable written expression, was an effective program of instruction. In addition, programs such as i.t.a. and Phonic/Linguistic, both of which were relatively effective, encourages pupils to write symbols as they learn to recognize them and to associate them with sounds. This appears helpful to the pupil in learning sound-symbol relationships. Furthermore, it is likely that writing such common, but irregular, words as the helps the child to commit them to his sight vocabulary. (p. 124)

In terms of an overall conclusion of the various studies, the researchers suggested a move away from a comparison of methods (akin to a horse race) and advocated a set of recommendations directed at other considerations. As they stated:

Future research might well center on teacher and learning situation characteristics rather than method and materials. The tremendous range among classrooms within any method points out the importance of elements in the learning situation over and above the methods employed. To improve reading instruction, it is necessary to train better teachers of reading rather than to expect a panacea in the form of materials. Children learn to read by a variety of materials and methods. Pupils become successful readers in such vastly different programs as the Language Experience approach with its relative lack of structure and vocabulary control and the various Linguistic programs with their relatively high degree of structure and vocabulary control. Furthermore, pupils experienced difficulty in each of the programs utilized. No one approach is so distinctly better in all situations and respects than the others that it should be considered the one best method and the one to be used exclusively. (Bond & Dykstra, 1967, p. 123)

# Subsequent paths of inquiry

To some extent, the search for best method in reading also spurred further work on teacher effectiveness—that is, the search for the characteristics (i.e., knowledge, behaviors, thought processes, attitudes, and preparation) of effective teachers. Numerous studies enlisted various observation procedures and other tools to delve into the behavior of teachers and the responses (e.g., cognitive, affective, and social) of students; specifically, they focused on the questioning practices of teachers in reading classrooms and the response patterns of students. In our estimation, the search for effective teaching in some ways fell into the same trap of the

search for best methods. In particular, the global search for an effective teacher based on achievement scores yielded little in the way of consistent results. On the other hand, it successfully avoided those traps. For instance, the closely scrutinized relationship between teaching behavior and the types of initiatives and responses of students revealed some interesting patterns.

We would argue that the most significant shift following the search for the best method was a new emphasis on comprehension development, especially for younger students in second grade and below. Contributing to this shift were studies of reading performance over time. These demonstrated that students' early successes in reading were not often sustained when the emphasis shifted to reading to learn. In a number of longitudinal studies, those students taught using a code versus more meaning-centered approaches often floundered as more emphasis was given to reading for understanding. They might have performed well on tests that emphasized word and letter level skills did poorly on passage level reading (see Tierney & Sheehy, 2003 for a review).

## **Conclusion**

Looking back and digesting the developments made during this period, we did witness some major advances as reading research received increased attention and careful study. Certainly, the number of studies focused on reading surpassed those on other skills or fields of study. But there were other significant advances as well. For example, research foci shifted away from a search for best method as attention turned to teacher research. At the same time, studies of early literacy became more developmental and open-ended as a new respect for the learner's own strategies and approach to learning developed. Interests in comprehension also began to appear—although these were still largely undersubscribed, as there remained an emphasis on reading comprehension as an outcome rather than as a process.

Across these new paths of inquiry, the limitations of correlation findings became more apparent. As intervention studies proceeded, they raised questions about causal hypotheses for different elements (e.g., teaching the alphabet, teaching vocabulary, etc.). Reading scholars became less prone to accept correlation as causality and became more interested in looking at reading development differentially. This period contributed to many of us seeking a closer examination of the interplay of teaching with student learning across different situations. For many of us, these developments contributed to a shift toward forms of formative studies of teaching and learning, as well as studies that examined less global

effects. While standardized tests continued to be used as one measure of student achievement, other measures were also employed—measures that were more focused, situated, and, in turn, more likely to show changes or effects.

One should not discount the merits of the search for the best method of teaching reading, despite its failure to identify the best method for all situations. The search yielded valuable insights about studying method, shifting researchers away from a horse race mentality and into studies that were more formative than summative. A student's performance on a standardized test was no longer viewed as the gold standard; indeed, most researchers recognized that the use of large-scale standardized testing would be unprofitable in the search for the effects of different approaches or reading experiences. Such tests appeared to be insensitive to the effects that researchers might be pursuing. Instead, researchers realized that the new gold standards were long-term effects, sustainable development, and students' ability to apply or transfer what they learned.

Lastly, it should be noted that the search for the best method of teaching reading was not the sole preoccupation of all reading researchers during this period. Many other pursuits in different areas continued as well, leading to other shifts including: the emergence of special education and a focus on adapting teaching to the specific learning needs of students (consistent with the emergence of the notion of learning disabilities); a major interest in language development and how students learn language (sophistication as a learner had been revered but not fully understood by linguists); and an interest in teaching reading in the content areas. Simultaneously with these developments, a number of scholars shifted their focus from learning to read to reading to learn—especially within the context of secondary education and content area learning. Most notably, the University of Syracuse with Harold Herber (e.g., Herber, 1970) and the University of Delaware (Stauffer, 1969) became epicenters for work regarding content area reading and study skills.

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