What Research Tells Us About the Teaching of Reading

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ABSTRACT

A total of 39 research studies done during the period 1967 to 1970 are included in this review. Two of these are doctoral dissertations and the others are reported in journal articles. The overall concerns are the young child and elementary school children. The reviewed studies are divided into five categories: Pre-Reading Programs and Activities, Beginning Reading Instruction, Programs and Grouping Practices, Vocabulary and Word Analysis, and Reading Achievement and some Correlates. The author concludes that a core of reading researchers who might develop important studies is still lacking. He contends that although there are a few individuals who have contributed continuously over the years, less than 20 percent of the studies come from experienced researchers in reading. A bibliography is included. (AW)
What Research Tells Us
About the Teaching of Reading

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Many general research summaries were made related to reading instruction during the past year by Aaron, Blount, T. Harris, Otto and Barrett, A. J. Harris, McCullough, Early, Sheldon and Lashinger, and Summers.

Other reported studies related to beginning reading, behavioral research, college-adult reading, grouping, language and reading, listening, perception, reading disability, reading interests, secondary reading and a great variety of miscellaneous topics which touch virtually every phase of reading and related language arts.

I have concentrated my own reviews of research done in 1967, 1968, 1969 and 1970 on the topics of pre-reading, beginning reading, programs and grouping practices, vocabulary and word analysis and reading achievement and some correlates. As you can see my interests relate to the very young child and children in the elementary school.

Pre-Reading Programs and Activities

Pre-reading programs have caught the imagination of many researchers. There is a tremendous interest in the language development of two, three and four-year-old children. There is also a great interest in the language activities in the kindergarten. Those most interested in the children of the inner city have focussed attention on the very young.

Reidford and Berzonsky (1) used Bereiter and Englemann materials to develop a curriculum for 24 children in language, arithmetic and reading. They worked 2 1/2 hours a day, 5 days a week for six months and found
that their efforts reflected in raising the tested I.Q. and stimulating reasoning ability as measured by ITTPA.

Pendergast (2) investigated the effects of two different nursery school programs, Montessori and conventional day nursery, on the development of perceptual motor skills and receptive language. Some 120 children were studied - 40 each in Montessori, conventional nursery and no nursery for a period of seven months. The children were measured on a pre- and post-basis by the Frostig, the Boston Speech Sound Picture and the Peabody Picture Vocabulary Tests. The results indicated that Montessori group gained most in eye-hand coordination. In auditory discrimination the Montessori group showed a minimum advantage. There was some evidence that socio-economic status was important in effecting changes. Middle class children showed less comparative growth because of their home enrichment which had given them many of the advantages implicit in the educational program.

Karnes and Hodgkins (3) studied the effects of a highly structured program with pre-school disadvantaged children compared with the traditional nursery program. The high structure program centered on all areas of deprivation in language, mathematics, reading and social studies - emphasizing, vocabulary-labeling, verbal observations, discussion and visual auditory discrimination. At the end of the seven month program, the children in the highly structured classes as measured by the Stanford-Binet showed a mean gain of 14.3 I.Q. points. At the beginning of the program 29% of the children were in the low-average range and no child was in the superior range. At the close of the study no child was in the low-average range while 22% tested in the superior range.
Clasen (4) and others demonstrated that children from low-income families could gain from direct language training in an eight week period compared to a group experiencing indirect language training as measured by ITPA. Their gains persisted through a year of kindergarten experiences.

It seemed obvious from these and other studies that direct language instruction aided disadvantaged children and could, as in this instance, enhance the pupils in the kindergarten year.

Koppman and LaPray (5) predicted reading readiness status after teaching children word matching and letter matching for 48 days. This study suggested that as teachers worked with young children they grew in their ability to predict readiness status in a significant manner.

Scott (6) studied the relationship between skill seriation and various measures yielded by the Metropolitan Reading Readiness Test. The results supported the position of Piaget and Inhelder that the early growth of intelligence is characterized by a strong interactive effect between seriation and classification. The educational implications of the study relate to the importance of integrating perceptual and language activities into programs for pre-school disadvantaged children.

**Beginning Reading Instruction**

LaConte (7) surveyed the opinions and practices of 777 kindergarten teachers randomly chosen in two northeastern states. It was found that teachers of long experience were negative about teaching reading in the
kindergarten. Fifty per cent taught reading. Thirty-one per cent taught it regularly, while nineteen per cent reported no teaching of reading.

Of those who did teach reading, 45% did so because they wanted to do so. Ninety per cent preferred to teach reading informally rather than formally.

It was interesting to find that this study reported in 1969 yielded results similar to those of Bernard Belden who studied 1100 kindergarten teachers in New York State. It is apparent that under one guise or another a large group of kindergarten children are taught to read and that this condition has existed for at least 15 years and probably much longer.

Williams (8) studied the effectiveness of different training methods necessary to teach kindergarten children to discriminate letter-like forms. Three conditions were compared:

1. Discrimination training where the comparison stimuli were quite different from the standard;
2. Discrimination training where the comparison stimuli are transformatives (rotations and reversals) of the standards;
3. Reproduction training.

Discrimination training in which the comparison stimuli were transformations were superior to training where the comparison stimuli were totally different forms.

It seemed clear that effectiveness of readiness training depends
on particular technique used and the time training was given.

Braun (9) studied the effects of stimuli cues and interest as factors in acquiring textual stimuli at the kindergarten level. Subjects in four groups were presented eight words, four of which were of boy interest, four of which were girl in auditory or auditory-visual manner.

Auditory presentations were favored over auditory-visual. Auditory interests favored sex. Study suggested further study of auditory versus auditory-visual treatment and effects of sex related interest-loaded words.

Rubin and Pollack (10) in a study of auditory perception related to toy objects found that auditory perception training was successful in aiding kindergarten pupils to learn to discriminate word sounds. The study also demonstrates that auditory-perceptual training makes it possible to teach the discrimination of sounds to kindergarten boys.

Studies made of ways of teaching beginning reading were conducted by a number of investigators. Riendeau (11) studied the advantage of teaching reading with a language experience approach as compared with basal readers. While the researcher suggested that the language experience approach was superior, a review of the tables presented seem to reveal an error made which would suggest that the basal reader children performed in a superior manner.

Shapiro and Willford (12) studied 250 children of two I.T.A. groups, one of which began reading in kindergarten and the other in first grade.
The kindergarten trained children achieved at a higher level than those first taught in first grade in word meaning, paragraph meaning, spelling and word study skills.

Holmes and Rose (13) studied the comparative effect of teaching ITA and TO with disadvantaged children and found that children learned to read ITA more rapidly than TO.

Thoburn (14) compared two ITA approaches -- words first and phonics first with first grade children and found that a words first approach was superior.

Six research teams reported on the results of first grade studies carried on through the end of third grade. These USOE studies have been evaluated by the authors of each and by Robert Dykstra at the end of the first and second grade years. These six reports give us further clues related to method, material and other factors related to the success of boys and girls in the studies.

Fry (15) investigated the use of ITA, a diacritical marking system and TO and found no significant differences among the methods in silent or oral reading.

Hayes and Wuest (16) experimented with ITA, phonics and TO and found that pupils taught with ITA scored higher in Gilmore accuracy and comprehension.

Harris and Morrison (17) studied disadvantaged urban children. They used a skills centered and a language experience approach. The skills centered were either basal or phonovisual, while the language experience was either regular language experience method or a language
experience audio visual method. The results suggested that there were no significant differences between the two approaches. The study suggested that the teacher seems to be more important than method. It also suggests planned reading readiness activities in the kindergarten. Boys from disadvantaged homes are similar in readiness tasks to girls but seem to be less affected positively by later teaching.

Schneyer (18) described results of teaching by a linguistic and basal reader approach and the results suggested that neither of the two approaches were more effective.

Stauffer and Hammond (19) reported on a study using language arts and basal reader approaches. The group test results showed no significant differences between groups in various aspects of reading performance. However, on individual tests of word recognition and oral reading, the language arts group was superior. They also were reported as writing more words correctly.

Sheldon, Stinson and Peebles (20) studied those students of their study who, in the third grade, had failed to read adequately. One hundred six of 324 pupils were studied. Most of the pupils came from the linguistic group and were from the lowest socio-economic group. All disabled readers could have been identified from test results at the beginning of the first grade. Teacher variables seemed more important in this study than the method used.
Programs and Grouping Practices

Six studies are related to the disadvantaged and it seems obvious that those children who are poor and live in the inner city will be studied at great length during the next few years.

Libby (21) reported on differences in reading performance of inner and outer city children and leaves the reader with the assumption that inner city children lose out because of their inability to pay attention.

Litcher and Johnson (22) studied the changes in attitudes towards Negroes, of white elementary students after use of multi-ethnic readers. The report suggests that there is a positive effect in terms of feelings of white children towards Negroes when they used the multi-ethnic readers.

An evaluation of a programmed reading approach in primary grades was made by Hammill and Mattleman. (23) No differences in achievement were noted between those using programmed material; those using programmed materials and basals; and those using basal readers only.

In two studies of ITA, Downing (24) suggested that pupils using ITA failed less than those using TO. The effect of ITA was important five years after introduction. In the second study Downing and Latham (25) did a follow-up of children five years after ITA was introduced and found that ITA pupils scored significantly higher than TO groups in tests of capital letters, story comprehension, tenses, spelling, sentence completion and abbreviation.

One of the few studies of class size and reading achievement was reported by Balow. (26) When classes were reduced to half original size
for instruction, children made gains significant at the .05 level. Class size seemed to lose impact after third grade.

**Vocabulary and Word Analysis**

These studies range from a consideration of very young children to the skills of high school and college students.

Trimble (27) identified through a Predictive Index Test, kindergarten pupils who would fail to learn to read in first grade and those who would succeed. The estimate was based on the number of subtests failed. At the end of first grade only 5% of pupils predicted as able to succeed failed, while 39.5% of those predicted as failures did not succeed. Schools located in lower socio-economic areas had the highest percentage of failures. The study indicated that tested intelligence was not a guide to success in reading.

An interesting study of the utility of phonic generalizations in four selected basal reading series was carried on by Maresh. (28) The study revealed that there were questionable aspects to the use of phonic generalizations in basal readers.

Only one series reached the 70 per cent minimum approach to total utility of generalizations. The causes for the low utility for phonic generalizations seemed to be that the generalizations were too broad.

Sedarat and Otto (29) studied the relationship consensuality of word association and reading ability of fifth and sixth grade readers.
Five stimulus words were presented to good and poor readers and it was found that they did not differ in response consensuality. In another study of consensuality of good and poor readers, Otto examined the responses of pupils to a word association task. The answers to two questions were sought: Will poor readers give more idiosyncratic responses than good readers when stimuli are limited to concrete nouns? Will poor readers respond less idiosyncratically than good readers when stimuli are pictures rather than words?

The results with fourth and sixth grade good and poor readers suggests that good readers had significantly higher scores than poor readers or greater consensuality and there was a greater consensuality among responses to words than pictures. Poor readers did not respond more consensually when pictures were presented. The study suggests that poor readers persist in idiosyncratic responses.

Rankin and Overholser (30) studied the sensitivity of intermediate grade pupils to contextual clues. They found that there was a significant difference in difficulty among the clues. Reading ability is substantially predictive of the ability to utilize clues.

**Reading Achievement and Some Correlates**

Hirshoren (31) studied the predictive validity of the Stanford Binet and the ITPA when administered to children ranging in age from 5-0 to 6-3. These tests were valid predictors of school achievement as measured two years later by the California Achievement Test.
Taylor and Nolde (32) investigated the relationship between neurological disorganization and reading disability of 50 children admitted into an institute of Reading Disability. The findings suggested that initial reading scores were not positively or significantly correlated with any of three measures of neurological organization.

Hopkins and Sitkei (33) evaluated the use of intelligence and reading readiness tests to determine reading success in grade one and found that both predicted reading success at a significant level. Since the reading readiness test predicted reading success as well as the intelligence test it was preferred because it takes less testing time and it is more easily interpreted.

Reed (34) investigated whether differences in copying ability was related to reading ability in grade one children. It was revealed that poor copiers were less successful in reading achievement than good copiers.

Nye (35) studied the achievement gains in silent and oral reading, vocabulary, comprehension and listening comprehension of second grade pupils, who were provided a listening-reading program as compared to those who were provided reading without the listening experience. Results indicated that listening is beneficial to reading comprehension when all levels of mental ability groups are combined for evaluation. In analyzing the study it was found that only a small number of children were compared for sub-group treatment, hence limited the generalization of the results.
Elkind and Deblinger (36) examined the effect of training in perceptual activity upon certain reading skills of second grade children. It was apparent that nonverbal training in perceptual activity had a greater effect upon certain aspects of reading achievement than did the more usual type of reading instruction. Practice in visual exploration, schematization, reorganization, transport and anticipation clearly improved the performance of the experimental group on the recognition of words and word forms.

Lyle (37) reported a tendency toward distortion in perceptual and perceptual motor tasks among retarded and adequate readers. Pupils were tested with WISC, achievement tests, tests of finger agnosia, lateral dominance and reversal tendencies in reading and writing. A factor analysis revealed two orthogonal factors of reading disability: one relating to perceptual and perceptual motor distortions and the other to formal verbal learning difficulties.

Sequence reversals appear to be more a factor of formal verbal learning than of perceptual/perceptual-motor distortion.

Hansen (38) investigated the influence of the home literary environment on a child's independent reading attitude and found that the home literary environment was a significant contribution to independent reading. From the study we could conclude that it is more important what parents do in the environment than what social class is represented.

Of the remaining studies, that of Davis (39) who attempted to ascertain the differences in the ability of intermediate grade pupils
in distinguishing between statements of fact and opinion, is made.

It was found that pupils were more capable of identifying statements of fact than those of opinion. It was suggested that pupils needed instruction in aiding them to distinguish between statements of fact and opinion.

As we reviewed the research reported during the past four years it became obvious that we still lack a core of reading researchers who might develop important studies for our consideration. We do have a number of individuals who produce one or two studies and are no longer heard from. A few individuals have contributed continuously over the years but when we analyze the total number of studies we can see that less than 20 per cent come from experienced researchers in reading.

We hope that the time will come when reading research will achieve such status that it will attract a wide variety of steady contributors who through their persistence find important answers to the issues related to reading instruction.


19. Russell G. Stauffer and G. and W. Dorsey Hammond, "The Effectiveness of Language Arts and Basic Reader Approaches to First-Grade Reading Instruction Extended into Third Grade," Reading Research Quarterly, IV (Summer, 1969), 468-499.


34. James C. Reed, "Children's Figure-Drawing--A Clue to Reading Progress," The Reading Teacher, 23 (November 1969) 132-136.


