Ten Years of Research on Corrective Reading Programs: A Review of the Literature

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The purpose of this paper is to survey the research of the past ten years on corrective or remedial reading programs. In the literature, various definitions are given to corrective reading and remedial reading programs, but in this paper no distinction will be made between the two terms. Both terms refer to a plan of corrective instruction and treatment for the disabled reader, generally outside of the regular classroom setting.

The review of the literature was made with an attempt to answer the following questions: (1) Have corrective reading programs in our elementary schools and secondary schools been effective? (2) Are group procedures in corrective reading effective or should more emphasis be placed on individual therapy? (3) Is short-term, intensive treatment more profitable than longer-term intensive treatment of the disabled reader? (4) In the future, should we continue to develop corrective reading programs in our elementary schools, our junior high schools, and our senior high schools?

This reviewer was aware of the problems in evaluating research studies. It was for this reason that the reviewer made a sincere attempt to use only those studies recommended by authorities in the field of reading, and to present the research studies and conclusions as they were reported by the researcher himself. Sources for summaries of reading research are included in the Encyclopedia of Educational Research(9) and in the Journal of Educational Research(11).

When searching for answers to the four questions previously listed, the reading specialist is generally thinking personally of those children currently in reading therapy or the many who are not receiving help with reading skills. What does research say about the incidence of reading disability on the national scene?

Surveys by Albert Harris(10) indicate that 10 to 15 per cent of all children are cases of mild or severe reading disability. Bond and Tinker (5) indicate that 10 to 25 per cent of the total school population are disabled readers. In 1969, Dr. James E. Allen(1), the United States Commissioner of Education, gave figures which showed that one-fourth
of the nation's students have "significant reading deficiencies." Carter and McGinnis (7) state that approximately 8 per cent of the student body are severely retarded readers.

Reading disability can be defined as characterizing the reader who is reading below his physical, emotional, and social level as well as functioning below the level of his mental maturity. It then becomes necessary to ask if existing corrective reading programs across the nation are effectively meeting the needs of this disabled reader.

**Have corrective reading programs in our elementary and secondary schools been effective?**

Bond and Tinker (5) report that carefully planned remedial reading programs can be effective at all grade levels. Bond and Tinker assume that normal children of average intelligence with average conditions of learning will gain a year in reading level during the school year. They conclude that the disabled reader will be expected to achieve more than a year in reading level for a corrective reading program to be called effective.

Balow (3) found that before any remedial reading, the disabled reader progressed at half the rate of normal children. Balow's study involved fifth and sixth grade students, receiving corrective reading instruction, who progressed at a rate of nine to twelve times their regular classroom rate.

Malmquist (13) reported on a six year study in Sweden involving a pilot study of 20 classes or 386 pupils and field experiments including 72 classes or 1,653 students in 12 cities in various parts of the country. There was a reduction of up to 80 per cent reading disability in grades one, two, and three if children with reading disability were identified at grade one and received continuous diagnosis and treatment. According to Malmquist (13), "the reading readiness variable had consistently the highest predictive power."

Many studies demonstrate that a structured corrective reading program adjusted to the needs of students can yield significant immediate results. The following studies are examples: Bliesmer's (4) study of fourth through eighth grades, Buerger's (6) study with third through seventh grades, Nasman (15), and Cawley et al (8) with junior high students, Noal (2) working with eleventh and twelfth graders, and Downing (2) teaching reading to disadvantaged adolescents.

Most of the studies reviewed show a successful attempt at treatment for the disabled reader. However, several studies at the junior high and senior high level found little significant gain in reading level.
Coston and Merz(2) used a team approach for a ten week, 90 minute daily “crash program” and expected far greater gains than those experienced by the 19 eighth graders. Brazziel and Gordon(2), while working with 300 seventh grade pupils, found the youngsters gained a mean 1.5 years growth from September to May. Brazziel and Gordon expressed the feeling that the corrective reading program would be far more effective in the early elementary grades.

Whitla (21) reported on an intensive tutorial program designed and administered by the Institute of Boston to 52 twelfth grade students. The Scholastic Aptitude Test administered to the high school seniors showed no significant gains made in study habits and reading skills of students in the study. The author concludes that “proper methods of study and critical and organized ability cannot be mastered in a few weeks. They are the result of the several years of previous application combined with certain abilities.”

Are group procedures in corrective reading effective or should more emphasis be placed on individual therapy?

The Keating study(9)(13) should stimulate more research on intensive individualized treatment for the disabled reader. Although the study was limited in numbers (20 boys, aged 12-16 years), the results were described as encouraging since 6 boys left the special classes at the end of the term with improved reading skills and 11 boys were continued in the program “with a very good prognosis.”

McCleary(14) reported on the results of a tutorial reading project with 330 first grade children. The 165 children in the experimental group were predicted by readiness test scores to experience reading failure. A tutor worked with each child 15 minutes every day on a one to one basis using a programmed training plan developed at Indiana University. The tutored children achieved significantly above the level of the control group of children. The individual instruction was called “preventive medicine for many first graders.”

Pollack(26) reported on a reading tutorial program conducted by the staff of the Maimonides Community Health Center, Brooklyn, New York. The Center found that when working with emotionally troubled children they also had to deal with their reading problems. The need for one-to-one individual reading instruction was recognized as necessary to help the child overcome his reading disability and recognize himself as a “successful and worthwhile human being.” Therefore, the reading tutorial program was initiated in one school using programmed reading materials and 16 parent tutors. Because
of its success the project at its second year involved 150 parent tutors with 6 public and 7 parochial schools.

The five year study of Lovell, Johnson, and Platt (9) (13) consisted of the effects of at least three months remedial instruction on 259 children referred to the Child Guidance Centre of an English County Borough. The results of the study showed no significant differences in reading gains, whether by individual or group instruction.

A study by Noall(2) involved two matched groups of 25 students in grades seven through college level. The study compared an individualized program (with a skilled classroom teacher and 24 student teachers) and a class using group instruction. With six weeks instruction both groups made significant gains on two reading tests.

Gold, with tenth grade students, and Walker, with seventh grade students(2) also conducted similar studies comparing individual instruction and group instruction. The results showed that corrective reading programs should recognize individual differences. However, specific individual instruction had no advantage over group reading procedures.

Schneyer (19) concluded from a review of studies at the secondary level that “there is little significant evidence at the present that individualized reading programs at the secondary level are greatly superior to uniform group instruction.”

The Fisher study (5) emphasizes that by combining reading instruction and therapeutic group sessions, students appear to show a significant gain in reading skills over reading groups with no counseling sessions. Separate studies by Roman, Dorney, and Dolan (2) seem to substantiate these findings. In addition Bond and Tinker (5) suggest that more emphasis should be directed toward reading and psychotherapy for more rapid improvement and lasting gains in reading.

Is short-term, intensive treatment more profitable than longer-term intensive treatment of the disabled reader?

Hicks and others (12) have evaluated the effect of the number of sessions per week of remedial reading instruction upon 92 third grade pupils and 78 fourth grade pupils. The students were assigned to two, three, or four half hour small group sessions per week. The number of sessions each week was found to have no effect for fourth grade students. However, an effect at the .01 level of significance was found for grade three. Three and four day session groups made significantly more gains than did the twice weekly instruction group. The authors suggest that “age or perhaps the readiness factor must be taken into
account when considering the optimal number of sessions for remedial reading.

Theodore Harris (11) reports the study by Cashdan and Pumfrey involving low-ability junior high boys. They found that the progress of the group of boys meeting twice weekly was not significantly more effective in changes of attitude or reading attainment than that of a group meeting once a week for reading instruction.

The study of Balow (3) appears to be relevant for elementary and secondary corrective reading instruction. Balow reported on the long-term effects of remedial instruction in the University of Minnesota psycho-educational clinic setting. The study involved fifth and sixth grade students (80 per cent were boys) who were considered of average or above average intelligence and of middle class to lower-middle class background with an average two to three years of reading retardation. The pupils, Groups I, II, and III, were given two hours of individual and group instruction daily for ten weeks. During this period of intensive instruction, the students progressed at a rate nine to twelve times their regular class rate which had been established at half the rate of normal pupils. After ten weeks Group I received no additional assistance in reading. These 36 students, tested after nine months, indicated that they had neither lost reading skills learned during the ten week intensive period of instruction, nor had they continued to progress in reading. However, Groups II and III, receiving supportive help during the 13 to 36 months following the ten week instruction, continued to develop at a rapid pace, approximately 75 per cent of normal growth in reading.

It appears that the most suitable way to determine effectiveness of corrective reading programs, regardless of length or type, is to study the research on the follow-up of such programs.

Robinson and Smith (18) report on a follow-up study at the University of Chicago. In 1958, an attempt was made to follow up on those pupils who were first in contact with the clinic ten years previously. In 1948, the chronological age of the clients ranged from 7 to 18 years of age. The median age was 14. Most of the clients were eight years old with an intelligence median of 120. The authors indicated that “the subjects were capable of advanced educational attainments.” The subjects were one or more years retarded in reading. Of 113 clients in 1948, 44 clients supplied information through personal interviews or by telephone or questionnaires sent to the former clients and their parents. Of these 44 subjects, 3 students dropped out of high school, 14 completed high school, 23 were enrolled in college or
had completed undergraduate work, 3 received a master's degree, 2 were enrolled in a doctoral program, and one was enrolled in medical school. It is apparent that, while these clients were disabled readers in 1948, most were to become productive members of society.

A follow-up study by Madeline Hardy in Canada (11) found significant individual improvement in oral and silent reading on 40 students who had earlier received individual remedial reading instruction. The students who had displayed deficiencies in perceptual and motor skills retained these defects.

The Carl Larson study in Denmark (22) involved 283 children in second and third grades. The experimental group of 150 children composed of small groups of four children received four hours remedial therapy a week. The control group of 133 pupils had no additional reading instruction. The special remedial instruction in grade two reduced the need for remedial classes the following year even though the improvement did not qualify the children for promotion to a higher grade.

Buerger's (6) study at Lakewood, Ohio, on 72 children having received remedial reading instruction in grades three through seven concluded that while "pupils (experimental group) who received remedial reading made significant immediate gains, they did not make greater long-term educational progress than the control group." Buerger suggested that continuing support beyond the period of intensive remedial treatment be maintained to encourage the disabled reader to continue to achieve in reading.

In Walled Lake, Michigan, Rasmussen and Dunne (17) working with 59 junior high school students (36 boys and 23 girls of normal intelligence but retarded in reading) found no significant improvement after three years of corrective instruction. In spite of disappointing results in reading growth, the researchers noted in a follow-up of these students that the drop-out rate was significantly reduced. It was concluded that "retarded readers with normal intelligence have a smaller drop-out rate as a result of placement in the correctional reading class."

Strang (20) reports on the study of Gallagher who gave individual tutoring in reading for two years to 21 brain injured retarded children. The eight to twelve year old children made steady progress in reading. However, when tutoring had ended, a follow-up study indicated that the children tended to regress to their previous level of reading. They appeared to make no further gains in reading.

Nasman (15) has reported the results of a six weeks reading im-
provement program in Portland, Oregon, involving 186 ninth grade students in a control group and 188 ninth grade students in an experimental group receiving special corrective reading instruction. The study was designed to investigate whether a reading improvement program would result in significant growth at the end of the six weeks program and whether the growth would be maintained six months following the special reading instruction. The findings of the study showed that "a true difference existed in reading growth." However, tests showed that six months beyond completion of the six weeks reading improvement program, the experimental group had suffered a "true loss in reading growth." The author suggested that "a period of reading reinforcement would be desirable toward the end of the school year or that the six weeks program could be lengthened."

In the future, should we continue to develop corrective reading programs in our elementary schools, our junior high and senior high schools?

This section summarizes the research data collected from a review of many studies concerning effective corrective reading programs with an attempt to give relevant generalizations and implications for future corrective reading programs.

The summary of research reveals that a corrective reading program can be effective at any age level; however, success seems to come easier to the early elementary students as personal feelings of inadequacy and anxiety greatly affect the older students in the later elementary, junior high, and senior high schools. Carter and McGinnis(7) have concluded that "if the school is able to identify and provide adequate treatment for the disabled reader by third grade, there is a 70 to 80 per cent chance of success. If treatment is delayed until the seventh grade, the chance of success drops to 30 per cent." An abundance of research suggests that early identification of reading disability in grades one or two, with treatment in grades one, two, and three is imperative for an effective reading program.

Seemingly, individual instruction has great merit for young pupils in grades one, two, and three. In the beginning, readiness factors predict the reading process which needs to be introduced to the youngsters with adequate timing, giving successful reading experiences to the young child. Also, with individual attention, physical limitations such as visual defects and hearing defects, poor oral language skills, and inadequate experiential background may be discovered early.

Numerous studies show that individual instruction has little advantage over group instruction at the later elementary level, junior
high, and senior high level. The studies which advocate counseling-reading relationships with adolescents show that the psychological reorientation of pupils is important for treatment of reading disability.

In addition, many sources are urging further experiments utilizing individual instruction within a group setting. Perhaps the use of para-professionals is the key to more individualized instruction within a group.

Are "crash programs" of short duration profitable for the treatment of reading disability? The available research shows that many short corrective reading programs may produce significant immediate results. However, once the program is terminated, the continued reading progress of the students is questionable. Balow (3) concluded "that severe reading disability is probably best considered a relatively chronic illness needing long-term treatment rather than the short course typically organized in current programs."

Certainly, more research should be directed toward the follow-up of short-term and long-term corrective reading programs at all levels. Research is also limited as to the effect of the time allotment per day and the number of sessions per week on the total treatment of the disabled reader.

Should we continue to develop corrective reading programs in our schools in the future? In providing an answer to this question, the reader is directed to the numerous journal articles which show the need for corrective reading services and the search for qualified personnel.

Why is there the tremendous need for corrective reading programs? Why have educators turned to business and industry for teaching children "how to read"? According to Artley (2), available regional and statewide studies show that "there is a decline in reading growth beginning at about the age of entrance into junior high school. This lag in growth is not only relative to that maintained throughout the primary-elementary years, but also lower in relation to the normal and consistent increase in mental age." Artley contributes this disturbing condition to the "little concerted effort to provide systematic reading instruction beyond grade six as is provided on the earlier grade levels."

Lack of developmental reading instruction beyond grade six, however, cannot become the "scapegoat" for reading disability. Moreover, numerous sources support the conclusion that many cases of reading disability can occur because administrators and teachers fail to provide adequate developmental reading instruction for all children in
grades K-12. It should be the responsibility of the public school to enable all children to reach a reading level commensurate with their intelligence and to carry over the newly learned reading skills into functional reading situations. The inclusion of well-conceived corrective reading services with a school-wide developmental reading program seems as logical as it is essential for fulfilling this goal. It appears that the reading clinician, reading consultant, and reading therapist must provide the needed leadership for an effective school-wide reading program now.

References

11. Harris, Theodore et al (Ed.), “Summary and Review of Investi-


