Decoding Only?—The Effectiveness of Two Programs (One Developmental, One Remedial) Designed Specifically to Teach Decoding Utilizing a Decoding-Only Strategy.

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ABSTRACT

The author reports two federally funded programs designed to teach decoding utilizing a perceptual conditioning approach. Teachers in the projects worked with small groups or with individuals. The primary materials were word cards in the five decoding kits published by Easier-to-Learn materials. The cards were arranged in 125-word groupings according to the common letter clusters. In training sessions two or more cluster groupings were studied in terms of the visual and auditory structure of the whole word. Up to 20 words were utilized with the same letter cluster in either the initial, medial, or final position. The goal was to have the learner respond, by habit, to the word structure that contributes most to the sound of the whole word. The summer-school program, funded under Title I, had 56 remedial readers ranging mainly from third to fifth grades. The developmental 1-year program, funded under Title III, had 217 students ranging from first to fifth grades. Pretest and post-test scores on the word analysis section of the Durrell Analysis of Reading Difficulty indicated (1) that the average improvement for the 1-year program youngsters was approximately 2 years and (2) that the average gain of the summer-program students was slightly less than 1 year, with the boys' average gain approximately 4 months less than the girls'. The students were tested on the 220 Dolch Sight Words before and after the program, and an overall improvement of 35 percent was found. (AW)
Title: Decoding Only? - The effectiveness of two programs, (one developmental, one remedial) designed specifically to teach decoding utilizing a decoding-only strategy.

Principal Investigator and Person presenting the paper: Gerald G. Glass, Adelphi University Garden City, New York 11530

SUMMARY

Introduction

The author is project director for two separate federally funded programs designed to teach decoding utilizing a perceptual conditioning approach. The all-year developmental program is funded under Title III (Projects for the Advancement of Creativity in Education) in the New York City Public School system. The summer remedial program was funded under Title I in the Brentwood (Long Island) Public School system. The perceptual conditioning strategy was described in detail in a presentation made at the 1965 IRA Convention. The results of a four month pilot study was reported at the Clinic Director's Seminar conducted as part of the 1970 IRA Convention.

Actual discussion of the perceptual conditioning rationale and method is not appropriate in the present report of the demonstration research and its findings. However, it should

be said here that the approach orders the learning-to-read process as first learning to decode and then learning to "read". The rationale assumes, for instructional purposes, that decoding is only associatively related to reading; reading being defined as minimally including understanding the printed word (in contrast to decoding which is identifying the sound of the word). If one thus orders the reading process it becomes apparent that what one needs to know in order to identify the sound that (for example) "creamery" makes is very different in substance and dimension than what one needs to know in order to respond to the meaning of the word, whether in isolation or in its dimensions within specific context. Decoding (it is assumed) is based more upon appropriate sound-symbol repetitions than upon the many dimensional intellectual learnings which are the substance of reading.

Method

The teachers in the projects worked with small groups or with individuals. The primary material used was the approximately 1900 word cards which are included in the five decoding kits published by Easier-To-Learn materials. The cards are arranged in 125 word groupings according to the common letter clusters. (These clusters were identified by the author in an examination of the words introduced in two major basal series.) In each
training session two or more "cluster" groupings were studied in terms of the visual and auditory structure of the whole word. The learner never sees less than a whole word. In addition, the only time whole words are seen in context is when the students do at-sight oral reading from a basal for practice purposes. The students are conditioned by very selective questions which elicit responses focusing on visual and auditory associations made with common letter clusters in whole words. Upward to twenty words are utilized with the same letter cluster in either the initial, medial or ending position. The goal is to have the learner respond, by habit, to the word structure that contributes most to the sound of the whole word. As was mentioned in the introduction, the ten to fifteen minute lessons includes only the teaching of decoding and does not concern itself with "reading", that is, meaning. Our youngsters are told that they will be able to read after they learn to decode.

Populations

P. S. 20 Queens (N.Y.C.) - thirty weeks of instruction, three times a week. Total population 217: 112 boys and 105 girls. The classes: three first grades, two second grades, two third grades, two fourth grades, and one fifth grade.

Brentwood (Long Island) Summer School - Daily instruction a total of forty-two instructional days: average attendance,
thirty-three days. Total population; fifty-six: forty-two boys, fourteen girls. Although the bulk of the students were in third, fourth and fifth grade some students were in the sixth grade. All students in the Brentwood program were identified as "remedial readers". Students were chosen by the teachers for extra work in the "summer decoding clinic" because of significant below grade reading levels.

Scoring

Test results are reported in terms of the pretest and post-test scores on the word-analysis section of the Durrell Analysis of Reading Difficulty (new edition).

The norms for the Durrell word-analysis section are expressed in grade levels. For each grade level a classification of low (L), middle (M) and high (H) is given based upon the number of words identified correctly. However, it will be noted that the results for this paper are expressed in ordinal numbers. Durrell's classification of L, M and H at each grade level does not lend itself to expressing mean measures of change in decoding ability. To be able to report change in a valid and reasonable manner, five points were assigned to change from one classification (L M H) to another e.g., if the pretest score was at a low third and the post-test score was at a middle third level, the change would be a one classification change and thus a five point change (approximately four to five months growth). If the change in score went from low
second to low third, the change would be 15 points i.e., from low second to middle second to high second to low third (more than one year's growth).

Results

P. S. 20 Queens - Average improvement for the 217 youngsters was approximately two years, (24 points). There was no significant difference in the improvement of the boys versus the girls. For the 3 first grades (containing many non-English speaking children) the improvement approximated one year and a half, (15.7 points). There was no significant difference between the boys versus the girls. The 2 second grades improved more than two years, (28.6 points). The girls' improvement was approximately one-half year greater than the boys. The 2 third grades improved slightly more than two years, (27.6 points). There was no significant difference between the improvement of the boys versus the girls. The 2 fourth grades improved slightly more than two years, (27.1 points). There was no significant difference between the boys and the girls. The one fifth grade improved two years, (25 points) and here again there was no difference between the boys and the girls.

Brentwood Summer School - The overall average gain for the fifty-six students was slightly less than one year, (10.4 points). The boys' average gain was approximately four months less than
the girls. (However, because of the small n the chi square was not significant.) The students were tested on the 220 Dolch Sight Words before and after the program. There was an overall improvement of thirty-five per cent. (Unfortunately, no statistical significance can be placed on the thirty-five per cent improvement because a percentage score requires another score to test significance.)

Discussion

The P. S. 20 Queens study ran for the full school year. The average improvement of two years included the many "disadvantaged" first grade youngsters, who did not progress further than letter identification. (Only one child did not learn to identify, at sight, all the letters in the alphabet.) This segment of the first grade population offset a large group of first graders who made dramatic strides in their learning to read. Although the school is not primarily composed of disadvantaged minority youngsters, more than thirty per cent of the students in the instructional program were from the minority disadvantaged group. The normal prediction for the school had been somewhat less than one year's growth as a result of one year's instruction. It is apparent, then, that the average growth reported is significant not only as one looks at the whole school but becomes increasingly significant when one sees the improvement made by youngsters.
who were predicted to make less than normal growth. As an indication of the program's acceptance, the ten teachers involved in the program for the 1969-70 year have volunteered to be in the 1970-71 program. In addition, we have requests from more than half of the teachers in the school to include the perceptual conditioning program in their reading curriculum.

The Brentwood summer remedial program improvement of just less than one year in the seven weeks that the program was run was highly significant. The change becomes dramatic when we consider the expectancy level of the children who attended the summer reading center. They are all children who have, in the past, not made normal developmental growth in reading. They had been identified as "remedial" and in need of extraordinary help beyond the classroom situation. Upwards of eighty percent of the youngsters were either black or of Puerto Rican descent.

A reasonable prediction for the summer reading group assumed that they would make less than average improvement (if any at all) in any remedial reading program. Considering the juxtaposition of the facts that the group averaged only thirty-three instructional sessions and improved approximately one year of reading ability with the low growth expectancy makes one take heart with the results.

Approximately 28 teachers worked in both the Developmental and the Remedial Projects. Except for the first grade classes in the Queens Project, all classes and groups in both Projects
reported improvement statistically similar to average improvement for each program. This is a strong indication that a great majority of teachers were able to produce uniformly effective results. It is probable, then, that in these programs the Perceptual Conditioning strategy significantly affected the reported improvement. In contrast, most other studies, overwhelmingly indicate that the teacher (and not the approach) is the primary affector of improvement.