
Achieving Excellence in Reading: Where Do We Begin?

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Educators have known for many years that children do not benefit equally from formal instruction. Youngsters who lack language and basic concepts are apt to be unable to meet the expectations of the school. Evidence from research indicates that language-limited children are at risk of later academic difficulties and that these children can benefit from special assistance in language development during their early years (DeMauro, 1983; Illinois State Board of Education, 1985; Weiss, 1988).

For children whose first experiences with standard English begin at the kindergarten or first grade level, basic interpersonal communication skills may be acquired quickly. However, these skills are often insufficient for academic needs (Cummins, 1982; Saville-Troike, 1983).

The Illinois State Board of Education (1985) found that pre-kindergarten children from a limited-English background who were given the opportunity to learn basic concepts and language simultaneously generally developed adequate language skills to enable them to handle school tasks from grade three upward. Children with comparably limited English proficiency who did not receive preschool language intervention were likely to experience difficulty.

Theoretical Framework

The University of Colorado conducted a three-year project for three- to five-year-old, limited-English-proficient children. The program's design was based on the work of Piaget and the neurolinguistic work of

Lenneberg. Results of the program showed both immediate and long-term benefits, including improved language, cognitive, and social development, increased self-esteem, and improved readiness for school. Gains were shown in subtest scores measuring vocabulary, pronunciation, comprehension, and active language use. The study found no clear evidence that a particular instructional approach is best for language-deficient children but that flexibility in the instructional approach, taking into consideration individual learner variables, may be most appropriate in improving language levels of these children. Demographic data revealed that 81% of limited-English-proficient children between the ages of three and five had no access to special assistance in language development until kindergarten or first grade. Many of these children came from homes in which parents spoke little English, and many came from backgrounds where low income levels were coupled with low expectations. The three-year follow-up to this program revealed a reduction in remedial services required by the participating students. The cost of the program was absorbed by the savings from this reduction within one year after the program ended (Weiss, 1988).

In 1982 Joan Tough conducted a longitudinal study of young children in England. Her findings on different social-class groups suggested that programs devoted to building vocabulary, practicing of syntactic structures, and using locational prepositions were too limited in scope. She found that the main problem of these at-risk children was that their expectations about using language did not support learning. The development and use of language should be the means for the at-risk child to develop self-motivated learning.

A longitudinal study on mother/child interaction patterns during preschool years was conducted by Dale Farran (1982). She found that many factors play a role in contributing to the academic problems of at-risk children—environment, ethnicity, the dominant culture, and the schools themselves. She found that the place for intervention to facilitate school performance for at-risk children was not in families but in schools.

Research by Catherine Snow (1982) on social-class differences in mothers' speech suggests that interactions with children while book reading provide opportunities for novel, complex, and creative use of language. Lynne Feagans (1982) studied social-class differences in children as they relate to school performance. She found that intervention programs often focused on language skills not reinforced in the schools.

Based on prior research, the following study on at-risk children was designed to achieve these objectives: 1) to provide opportunities for interaction between child and adult; 2) to encourage the development of concepts through concrete experiences, dialogue, and reflective think-

ing; 3) to assist children in adapting their language to the language of the classroom through the use of trade books (to learn about story framework, sequence of events, and new experiences); and 4) to encourage self-motivated learning through positive, successful learning experiences each day.

Sample Description and Design

Kindergarten students in four high-risk (Chapter 1) schools in Calcasieu Parish, Louisiana, were pretested in September, 1988, using Form C of *The Boehm Test of Basic Concepts* (The Psychological Corporation, 1986). The thirty-six students in each of the four schools who made the lowest scores on the test were assigned randomly to either the experimental or the control group. Experimental-group members received treatment in groups of three for thirty minutes each day. Control group members received no special treatment. A paid program supervisor was in attendance at each school every day to maintain the continuity of the program—setting out materials, collecting the children, making certain that volunteer tutors were in place, and substituting for them if necessary. Treatment was administered by volunteer tutors trained by the researchers. These were adult volunteers from the community who agreed to give one hour on a specific day each week to the program. Each adult volunteer tutored two different groups of three kindergarten students for 30 minutes each day. This provided interaction between the adult tutor and each at-risk kindergarten child every day throughout the study. During the 30-minute session the tutor presented basic concepts (over/under, near/far, etc.) for approximately 15 minutes. Concept development began at the concrete level, progressing from relating the concept to the children themselves to the use of concrete objects to the use of flannel board and felt pieces to the use of pictures to illustrate the concepts. Finally, individual worksheets were used to allow for application of the concept to the printed page. This progression, designed to meet objectives one, two, and four, took place over the eight months of the program.

The remaining fifteen minutes of the tutoring session were spent in reading tradebooks aloud to the children. During this time, new vocabulary words were introduced; concepts being developed were reinforced; story framework, sequence of events, and characters' feelings and experiences were examined; and children were involved in using language through questioning strategies (practicing predictive and problem-solving skills). These activities were designed to meet objectives one, two, three, and four.

Members of experimental and control groups were posttested during the first week in May, 1989, using Form D of *The Boehm Test of Basic Concepts* (The Psychological Corporation, 1986). Forms C and D are parallel forms and test the same 50 concepts.

Results of the Study

Tests were scored and results recorded. Statistical procedures were applied to these results. In testing the hypothesis that the experimental group would show greater increase in scores on the posttest than the control group, a t-test for significant differences in gain scores (difference between the pre and posttest score) was used. First, entering (pretest) scores for each group were tested. Variance was found to be homogeneous. Then gain score for each student tested was computed. A t-test was applied to the gain scores of the experimental and control groups. A significant difference at the .001 level in the gain scores in favor of the experimental group was found (Table 1).

Table 1

Gain Score Data for Kindergarten Boehm Test of Basic Concepts, 1988-89

Group	n	Mean	Standard Deviation
Experimental	67	14.015	12.075*
Control	71	5.986	15.123

* $t = 3.46$ $p < .001$

A t-test was run on the experimental- and control-group gain scores by schools. A significant difference at the .001 level at one school and at the .006 level at a second school was found in favor of the experimental groups. At the other two schools, however, t was not found to be significant (Table 2).

Table 2

Gain Score Data by Schools Boehm Test of Basic Concepts, 1988-89

School	n	Mean	Standard Deviation
One			
Pretest	18	10.6111	15.827
Posttest	19	7.2632	15.923
Two			
Pretest	17	17.17647	8.212
Posttest	18	10.2222	6.486*
Three			
Pretest	17	16.6471	5.989
Posttest	17	1.6471	18.828**
Four			
Pretest	15	10.8667	14.6333
Posttest	17	4.4118	16.474

* $t = 3.00$ $p < .001$

** $t = 3.13$ $p < .006$

Note: No significant differences in gain score were obtained for schools one and four.

Discussion

Results indicate that the intervention treatment of one adult working with small groups of at-risk kindergarten students every day for thirty minutes is successful in raising these children's understanding of the fifty basic concepts tested at the end of the kindergarten program. Part of the intervention treatment, however, focused on building general vocabulary, developing an understanding of story framework, and practicing predictive and problem-solving skills, none of which was tested by the posttest at the end of kindergarten.

The primary objective of the research project was to enable at-risk children to be successful in first-grade reading. Scores from the reading portion of an in-place end-of-year first-grade achievement test will be used as an indicator of success in first-grade reading. These scores will be forthcoming in early September, 1990.

Implication for Classroom Instruction

The intervention strategies applied in this study could be replicated in any kindergarten classroom through the use of volunteer adults, or older students if available. In addition to the learning of basic concepts, involvement with tradebooks and daily interaction with other adults and peers may increase these students' confidence and facility in language usage, as well as enhance their self-images. The ultimate goal is the success of these at-risk kindergarten children in first-grade reading, so that they will not become school drop-outs in the future.

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