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AUTHOR Karweit, Nancy
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ABSTRACT

This report describes the development of a story-reading program called Story Telling and Retelling (STaR), and its effects on the language and comprehension of disadvantaged prekindergarten and kindergarten children. Following an introduction, an initial section describes the development of this program as part of an urban school restructuring effort, Success for All, a five-year program currently being carried out in Baltimore, and explains the reasons for the choice of story reading as a primary activity. The next section explains the operation of the STaR program, its materials (sequence cards, flannel board materials) and methods (retelling, dramatization), which are intended to facilitate the effective use of stories in classrooms. Evaluation of the program is addressed in the next section: individual students from a matched control group were compared with experimental students, tests (the Merrill Language Screening Test and the Test of Language Development) were individually administered to 206 prekindergarten and kindergarten children (43 and 60 matched pairs, respectively), and results indicated program effectiveness, showing positive effects ranging from effect sizes of .24 to 3.75. In addition, informed and anecodotal evidence showed that the program met with approval from teachers and enthusiasm from the children. A final section briefly discusses issues remaining to be resolved. Two tables of data are included, and 17 references are attached. (SR)

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Report No. 39

April, 1989

THE EFFECTS OF A STORY READING PROGRAM ON THE VOCABULARY AND STORY COMPREHENSION SKILLS OF DISADVANTAGED PREKINDERGARTEN AND KINDERGARTEN STUDENTS

Nancy Karweit

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Center for Research on Elementary and Middle Schools
The Johns Hopkins University
3505 North Charles Street
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This program focuses on improving the organizational performance of schools in adopting and adapting innovations and developing school capacity for change.

This report, prepared by the Elementary School Program, describes a story-reading program called Story Telling and Retelling (STaR) and reports its effects on the language and comprehension of disadvantaged prekindergarten and kindergarten children.

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Abstract

This report describes the development and effects of a story-reading program (STaR) on the language and comprehension of disadvantaged prekindergarten and kindergarten children. The story-reading program was developed as a part of a school restructuring effort, Success for All. STaR contains materials (sequence cards, flannel board materials) and methods (retelling, dramatization) to facilitate the effective use of stories in classrooms. Individual students from a matched control school were matched with experimental students in the program assessment. The Merrill Language Screening Test and the Test of Language Development were individually administered to 206 prekindergarten and kindergarten children (43 and 60 matched pairs, respectively) to measure the effects of the program on language. Positive effects for the program ranged from effects sizes of .24 to 3.75.

Introduction

The benefits of story reading in the development of literacy of young children have been demonstrated in several studies. These studies indicate that story reading helps children increase their receptive and expressive vocabulary (Burroughs, 1972; Chomsky, 1972), differentiate oral language and print, understand the conventions of print (Baghban, 1984), and appreciate that one major function of print is to convey meaning (Clay, 1979, Smith, 1978).

Several studies have examined how the story reading experience benefits children (Teale, 1986; Peterman, Dunning and Mason, 1985). These studies suggest that it is not simply the *act* of story reading that is important in enhancing literacy, but that specific elements are helpful. In particular, the interaction between adult and child, which helps the child construct meaning from text (Ninio and Bruner, 1978), has been linked to the development of literacy.

Story reading in school situations has also been shown to increase children's vocabulary, awareness of print, and comprehension skills. Specific features of the story-reading situation or context appear to affect these opportunities for construction of meaning. Both organizational features (such as size of group) and instructional features (teacher's enthusiasm, opportunities for interaction and opportunities for story reconstruction) influence the effectiveness of story reading. When children have an opportunity to actively recreate and make the story their own through such activities as retelling and dramatization, comprehension of the story is increased (Sims, 1988; Morrow, 1985). A variety of techniques may be used, but younger children appear to recall more of the story and to comprehend meaning

better when they have opportunities for story dramatization and role playing as opposed to simply verbally retelling the story or carrying out a follow-up art activity.

In typical classroom usage, however, story time may not contain many of the elements that make story reading successful -- high verbal interaction between adult and child, physical closeness of materials and print, and the chance for the child to ask questions or provide interpretation of the story as it progresses.

Frequently, teachers will simply read a story and then assign a follow-up art activity, with little opportunity for students to actively participate in the story or to reconstruct it. This use of stories lacks the essential elements which make story reading important in the development of literacy.

To make story reading effective, then, requires that the essential characteristics found in one-on-one story reading be maintained in a group situation. But the group nature of the classroom affects the quality and quantity of exchange between reader and listeners. Thirty-eight kindergarten students cannnot be given the same amount and type of opportunity for question and response as can one child. The demographics of the classroom often are responsible for turning storytime from an active listening and responding time to just another teacher directed "sit still and listen" activity.

Little research has addressed this issue of how to institute an effective story-reading routine in a group situation. The lion's share of research in the area of story reading in classrooms has been concerned more with understanding the effects of one-on-one story telling on children in classrooms rather than on how story telling can be effectively adapted to the organizational constraints in everyday kindergarten and prekindergarten classrooms. Although this research suggests how story reading influences young children, it provides little guidance for solving the implementation issues.

Development of a Story Reading Curriculum

These implementation issues came to the forefront as we developed a story-reading program to be used in prekindergarten and kindergarten classrooms as a part of the initial reading program in Success for All (Madden, Slavin, Karweit and Livermon, 1989), an experimental program for restructuring urban elementary schools. The goal of Success for All, as the name implies, is to have *all* children progress through the elementary school successfullly. The program is a five-year effort currently being carried out in Baltimore. The data and procedures described here are from the first year of the program.

We focused on the development of story reading as a primary activity because of the fit of this activity with several concerns and assumptions about the purpose and function of prekindergarten and kindergarten. Models of the development of literacy (Lomax and McGee, 1987) illustrate the critical importance of facility in oral language, print awareness and comprehension of text -- the factors which story reading has been shown to affect.

Moreover, disadvantaged children, who are the focus of the Success for All program, may be particularly lacking in these areas when they enter preschool and kindergarten. To compound the problem, these initial phases of literacy are often overlooked or trivialized by schools in the rush to start children on the serious business of learning to read and mastering the mechanics of reading. Listening to stories is seen as "play" and not as a serious part of the curriculum. This mentality may be especially true in the education of disadvantaged children for whom it is argued that they must start earlier to prevent falling behind. The double tragedy of this view is that the disadvantaged may be particularly disadvantaged in precisely these language areas which are being overlooked to focus on mechanics -- which are meaningless without this necessary linguistic base. They thus start early on the wrong thing Regrettably, those children who most often lack experiences in story reading at home are those who are given the worksheets and fragmented curricula which constitute "reading readiness."

Criticism of these practices is scarcely new (see Elkind, 1988). But criticism alone is unlikely to reverse them. What is needed are developmentally appropriate alternative programs which are workable, affordable and consistently effective, and which can be used by everyday teachers, in everyday classrooms, everyday.

Thus a major goal for the prekindergarten and kindergarten program in Success for All was to provide an easy to use, interesting, and developmentally sensible approach to language development for young students who do not have a wealth of language experience outside of school. Stories were an appealing vehicle to provide these opportunities for language use and comprehension. As well as increasing exposure to vocabulary and language, stories are about ideas and events that expand thinking and imagination, and are interesting and meaningful to the children.

Following our examination of effective programs and practices, (Slavin, Karweit and Madden, in press), we also appreciated the importance of specific and detailed procedures in the operation of the program. That is, we knew that the program must not be simply a philosophical statement about the importance of children's literature, but a set of specific and comprehensive practices and activities.

Finally, the program for the prekindergarten and kindergarten had to make sense and fit with the reading program in Success for All. Success for All requires both an organizational and curricular change and is based on two essential ideas: prevention and immediate intensive intervention. Preventing learning problems by providing the best possible instruction and preparation is one principle; the second principle is correcting learning difficulties as they arise within the regular instructional framework. Rather than failing students and giving them an additional year to attempt to catch up, the Success for All model provides additional help -- through tutors -- at the time the students are experiencing difficulties.

The program uses cross-age grouping of students into reading achievement homogene-

ous groupings. Thus, a first-grade-age student may be in a reading class with a third-grade-age student if they are reading on the same level. The reading class sizes are approximately 15 and instruction takes place with the entire group. Reading takes place for ninety minutes and is at the same time for all classes. Additional reading teachers are employed to reduce class size during reading instruction. During the rest of the day, these reading teachers tutor individual students who are not making adequate progress in the curriculum. Students are tested every eight weeks to determine their placement in the curriculum. Students spend the remainder of their class day with their regular grade.

The beginning reading curriculum emphasizes development of basic language skills and sound and letter recognition. It uses a sound blending and phonics approach starting in grade 1. Students in pre-K, K, and grade 1 use the Peabody Language Kits to help them build essential language skills. The initial reading program uses a series of phonetically regular mini-books and emphasizes oral reading to partners, instruction in story structure and comprehension, and integration of reading and writing.

The middle level (beginning grade 2) curriculum uses a modifed form of CIRC (Cooperative Integrated Reading Curriculum) with the district's Macmillan basal series. CIRC provides cooperative learning activities built around story structure, prediction, writing, vocabulary, decoding practice and direct instruction in reading comprehension (Stevens et al 1987)

Resources in addition to the curricular and organizational changes in the Success for All school include a family support team (two social workers and parent liaison), a program facilitator to oversee the operaton of the program and a building advisory committee.

We implemented the Success for All model in one elementary school in Baltimore City starting in 1987-1988. There were 440 students in the school, almost all were black, and 80 percent received free lunch. The first-year results are presented elsewhere (Madden et al,

1989) -- generally, the students in Success for All outperformed those in the control school on individually administered reading tests and on the standardized tests (CAT) for grades 1 and 2.

Operation of the Story Reading Program

The story reading program, STaR (Story Telling and Retelling) consists of a set of materials (story kits) and suggested procedures for use. The procedures include ways to organize the classroom space and time, ways to introduce the story and maintain student involvement, and techniques for reviewing and retelling the story. The story kits include a book, a teacher guide sneet (STaR sheet) and story telling aids (sequence cards and flannel board figures). There are 110 story kits presently available. The stories include favorite children's literature and were selected by the teachers in the pilot school. Other stories were added from a variety of library lists and from informal nominations from teachers and librarians. Teachers in the pilot school evaluated the appropriateness and interest for each book they used and those books were eliminated which appeared not to work for a number of teachers.

STaR includes five main activities:

- introduce the story
- read the story
- review
- retell (group)
- retell (individual)

The activities are designed for a whole class format with a teacher and an aide present. The activities take approximately 20-30 minutes each day. In this pilot year, two stories were told and retold in a five-day period. Story reading occurred one day; retelling took place the next day. In one week two stories were read, then the fifth day was used for an

additional dramatization or retelling of another story. Teachers varied this pace of presentation to fit the needs of a story or a classroom.

The Day 1 activities involve introducing the story, reading the story, and reviewing the characters and events in the story. Techniques and suggestions are supplied on the teacher guide sheets for ways to introduce and prepare students for the story they are about to hear. Typical strategies might include a discussion of the book cover that relates the cover to the children's own experiences.

The actual story reading stresses the use of summarizing, predictive questionning, and expressive language to reinforce the story line. The guide sheets suggest places where summarizing and predictive questions might be asked as well as strategies for reviewing the story with the children.

The literature on storytelling indicates the importance of active reconstruction of the events of the story in order for children to actually derive meaning from the text which they have heard. Each STaR kit provides some specific strategies and materials to help in this reconstruction. First, each kit has sequence cards which depict the major events in the story. These cards are color renditions of the events in the story which can be used to prompt recall, to order events, and to prompt discussion of various parts of the story. The sequence cards may be used as an aid for the teacher to illustrate the review or by the children when they carry out a group retelling of the story. Dramatization of the story is encouraged and specific techniques for story dramatization are often included in the guide sheet. Techniques for retelling the story to another child or for the child to be the teacher are also suggested.

Children also have individual conferences with the assistant to retell the story to her. This takes place during the group retell and will typically involve about three children per story. In the individual retell, the assistant prompts the child to tell the story as if they were

telling about it to a family member or to a friend. Specific prompts are included which can be used if needed.

The goal of the STaR program is to increase children's opportunites for language use in the classroom and to increase their ability to derive meaning from what they hear in the classroom. Additionally, we hoped to provide an enjoyable introduction to literature and the world of print to serve as continued motivation as the children learn to read.

Evaluation of the STaR Program

In the pilot year there were two prekindergarten teachers, each teaching a morning and afternoon class, and four kindergarten teachers, each teaching an all-day class, in the experimental school. Students from these classes who were present at the fall pretest (Boehm in prek and Metropolitan in K) were individually matched with students from a matched control school. Children in the experimental and control schools were individually administered the Merrill Language Screening Test and the Test of Language Development Picture Vocabulary and Sentence Imitation Scales. Table 1 provides the results for the matched pairs of prekindergarten students; Table 2 provides the results for the kindergarten students.

Tables 1 and 2 About Here

Table 1 shows the statistics for the Success for All (SFA) and control prekindergarten classes on the pretest (Boehm), the TOLD subtests (picture vocabulary and sentence imitation), and the Merrill (comprehension). The effect sizes (far right-hand column) are computed as the difference in means between the two groups divided by the standard deviation for the control group. An effect size gives the difference between the two groups in terms of standard deviation units. By convention, an effect size of .33 is usually regarded as a meaningful educational difference.

The two groups were not appreciably different at the pretest (E.S. = -.11), although the control students were slightly higher than the SFA students. However, by the post-test the SFA prekindergarten students outperformed the control students on all measures, except the grammatic completion test. The means are not adjusted for the initial pretest differences.

The Merrill comprehension measure closely follows the activities undertaken in STaR -- listening to a story and then retelling and answering questions which indicate comprehension of the story. The results suggest that the goal of deriving meaning from text, an important element in the process of learning to read, is addressed by the STaR program.

The results for kindergarten year also suggest positive results for the SFA program. In addition to the STaR and the Peabody, these students began the decoding segment of the program in the later part of the year. The kindergartners showed positive effects on the TOLD (with the exception of vocabulary), the Merrill, and the Woodcock. The large Woodcock word attack differences indicate that these skills are probably not taught in the regular Baltimore City curriculum.

In addition to the statistical testimony of the effectiveness of the program, the anecdotal and informal evidence of positive effects are important. Teachers in general like the approach used in STaR of providing a framework while leaving enough flexibility for their own innovation. Perhaps the highest accolade comes from the 4- and 5-year-olds themselves, who view going to the library as a treat not to be missed and who enthusiastically pick up new books and ask one another: "What do you think will happen here?"

Conclusions and Discussion

The results of the initial year are encouraging, but several issues remain to be resolved. First, STaR is a part of a larger curricular and school change effort. It is not possible to say with certainty the extent to which positive results were due only to the STaR program or only to other elements of the Success for All model. Future studies are needed to assess the impact of the curriculum alone.

Second, we do not know what components of the STaR program are more important than others. Are the materials such as the sequence cards and the puppets critical? Is the individual story retelling to the assistant important? Additional studies of various components are needed.

Finally, we have no longitudinal evidence that an emphasis on oral language in the prekindergarten and kindergarten years carried out in this fashion is more or less effective than other approaches which have been advocated and which have had demonstrated effectiveness. Additional studies contrasting alternative curricular approaches are needed to address this set of issues.

Table 1

Comparison of Achievement Test Scores of Matched Success for All (SFA) and Control (CTL) Schools

Prekindergarten (N=43 pairs)

Test	SFA X (S.D.)	CTL X (S.D.)	F p	Effect Size
Boehm (Pretest)	20.7 (7.0)	21.3 (5.7)	0.2 p<.64	-.11
TOLD (Test Of Language Development) Picture Vocabulary	10.6 (3.8) 63rd %ile	8.6 (3.9) 25th %ile	4.6 p<.04	.51
TOLD Sentence Imitation	6.6 (5.2) 37th %ile	4.5 (2.9) 25th %ile	4.9 p<.03	.73
TOLD Grammatic Completion	5.4 (4.7) 37th %ile	4.2 (3.7) 27th %ile	1.3 p<.26	.32
Merrill Language Screening Test Comprehension	3.4 (1.4)	2.6 (1.4)	7.2 p<.01	.52

Table 2

Comparison of Achievement Test Scores of Matched Success for All (SFA) and Control (CTL) Schools

Kindergarten (N=60 pairs)

Test	SFA X (S.D.)	CTL X (S.D.)	F p	Effect Size
Metropolitan Achievement Test (Pretest)	68.8 (19.3)	69.5 (15.6)	0.5 p<.48	.04
TOLD (Test Of Language Development) Picture Vocabulary	11.5 (4.3) 37th %ile	10.5 (4.2) 25th %ile	1.3 p<.26	.24
TOLD Sentence Imitation	8.7 (5.4) 25th %ile	6.4 (3.9) 16th %ile	5.0 p<.03	.59
TOLD Grammatic Completion	8.9 (5.9) 25th %ile	5.6 (4.8) 16th %ile	10.1 p<.001	.69
Merrill Language Screening Test	3.7 (1.2)	3.0 (1.5)	8.3 p<.01	.47
Woodcock Language Proficiency Battery Letter-Word Test	8.3 (5.0) G.E. 1.0	5.8 (2.7) G.E. .7	8.1 p<.01	.93
Woodcock Word Attack	1.6 (2.0) G.E. 1.5	0.1 (0.4) G.E. .8	35.9 p<.001	3.75

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