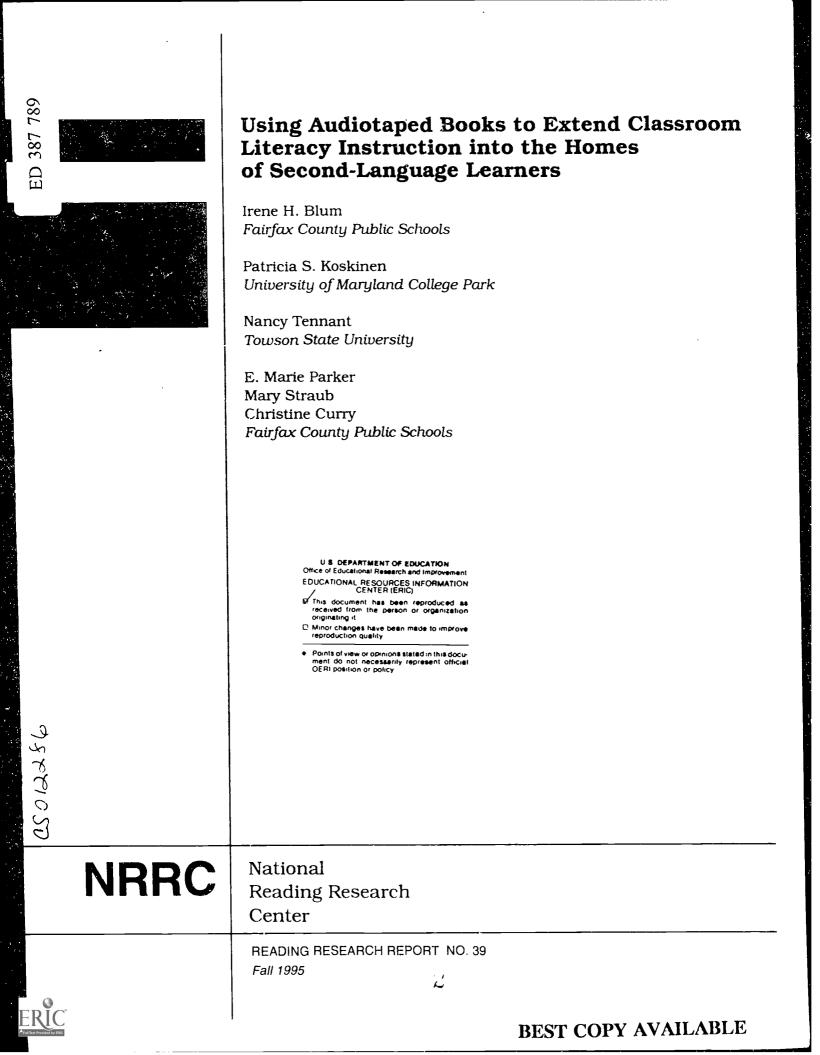
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ABSTRACT

A study investigated whether home-based repeated reading with an audio model was a significant supplement to the literacy instructional program of second-language learners. Beginning first-grade readers who spoke English as a Second Language benefit from having daily access to repeated reading in their home environment. To provide this access, books that had been shared in school were given to students for daily home use. After home rereading routines were established, students were then given a tape recorder and audiotapes to accompany these books. Of particular interest was the effect of repeated reading with an auditory model on first-grade students' reading fluency and self-monitoring behavior. Also of interest was the effect of this school/home roading activity on student reading motivation and behavior. A single-subject reversal design with multiple baselines across individuals was used. Home-based repeated reading of books was compared to home reading of books with audiotapes. Subjects were 5 first-grade students in the Washington, D.C., area with limited English proficiency. Results indicated that all subjects received substantial benefit from the opportunity to practice reading books with audiotapes at home. Findings suggest that the support provided by the audiotapes enabled students to fluently read increasingly more difficult texts. (Contains 40 references, and 1 table and 1 figure of data. Appendixes present selected books used in the project, individual case profiles of the 5 subjects, and data.) (Author/RS)





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Using Audiotaped Books to Extend Classroom Literacy Instruction into the Homes of Second-Language Learners

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READING RESEARCH REPORT NO. 39 Fall 1995

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The National Reading Research Center (NRRC) is funded by the Office of Educational Research and Improvement of the U.S. Department of Education to conduct research on reading and reading instruction. The NRRC is operated by a consortium of the University of Georgia and the University of Maryland College Park in collaboration with researchers at several institutions nationwide.

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Using Audiotaped Books to Extend Classroom Literacy Instruction into the Homes of Second-Language Learners

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Abstract. The purpose of this study was to investigate whether home-based repeated reading with an audio model is a significant supplement to the literacy instructional program of secondlanguage learners. It was hypothesized that beginning first-grade readers who spoke English as a second language would benefit from having daily access to repeated reading in their home environment. In order to provide this access, books that had been shared in school were given to students for daily home use. After home rereading routines were established, students were then given a tape recorder and audiotapes to accompany these books. This enabled students to hear the English storybook as they followed along looking at the printed text. Of specific interest in this study was the effect of repeated reading with an auditory model on first-grade students' reading fluency and self-monitoring behavior. Also of interest was the effect of this school/home reading activity on student reading motivation and behavior. This 19-week study employed a single-subject reversal design (ABA) with multiple-baselines across individuals. Home-based repeated reading of books (A/Baseline) was compared to the home reading of books with audiotapes (B/Intervention). The study involved a single subject and four replications. Results from this study indicate that all five participating second-language learners received substantial benefit from the opportunity to practice reading books with audiotapes at home. It appears that the support provided by the audiotapes enabled students to fluently read increasingly more difficult texts.



Data from the 1990 United States Census indicate that nine million immigrant youth enrolled in United States public schools over the last decade. Most often, they are poor and many are survivors of war, civil strife, or economic depression. Recent immigrants come from extremely diverse cultures (McDonnell & Hill, 1993). Asian/Pacific Islander presence in the United States increased more than 100% from 1980 to 1990, and Hispanic populations went up by more than 50% during that same period. Currently more than 2.2 million students are learning English as a second language in our schools. If school enrollment reflects population projections, this figure may increase to over 3.4 million by the year 2000 (The Condition of Bilingual Education in the Nation: A Report to the Congress and the President, 1991). Many of these recent immigrants lack communication skills in English and therefore have difficulty participating in school activities, particularly those related to literacy learning. The educational future of these secondlanguage learners may well be "at risk." Since reading provides essential access to gaining information and developing independence in learning, designing educational environments which support the literacy learning of culturally and linguistically diverse students must be a high priority (Gersten & Jimenez, 1994; O'Flahavan, 1994).

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Traditionally, second-language learners have been taught separately until they acquire a language proficiency level set by their school or school system. Recent research, however, suggests considerable benefits in having secondlanguage learners mainstreamed (Anzalone, Straub, & Thomas, 1994; Morrow, 1992; O'Flahavan, 1994). This new research, along with the rapidly growing number of immigrants, has encouraged the examination of alternative models. If teachers are to respond successfully to the challenge of teaching second-language learners and native English speakers in the same classroom, thoughtful attention must be given to the design and implementation of instructional activities which are appropriate and effective for both groups (Gersten & Jimenez, 1994).

It is particularly important to provide many opportunities to develop and practice language and reading skills. There is also a need to support what is taught in the classroom by expanding the language and literacy experiences of young students to other contexts, such as the home context. The relationship of children's experiences with language and reading at home to their success in learning to read is well established (Durkin, 1966; Teale, 1986; Tobin & Pikulski, 1988; Wells, 1985). Secondlanguage learners, however, have limited opportunities to practice English in their homes. They typically reach the end of their sixth year of schooling with a cumulative exposure of approximately 40,000 hours of their home language, but only 3,000 hours of English (Elley & Mangubhai, 1983). In addition, while we know that access to books is a critical factor in early literacy development (Elley, 1992), some second-language learners do not have many books available in their home environment. Our work with secondlanguage learners in Chapter 1 schools indicated that these children had few English language storybooks in their homes. Secondlanguage learners who have limited experiences



with spoken English and few opportunities to read English storybooks at home are at a distinct disadvantage.

In our efforts to design a learning environment that fosters literacy, providing opportunities for students to develop expertise has been an important consideration. In this type of environment, students read with understanding, learn strategies to improve their reading, feel successful, and are motivated to practice (Meichenbaum & Biemiller, 1990). Along with other researchers and practitioners, we have been particularly interested in the use of repeated reading to develop fluency (i.e., smooth, accurate, natural, expressive reading) with both developmental and less proficient readers. Repeated reading involves multiple readings of a text and provides substantial practice in reading connected discourse. This deceptively simple rehearsal strategy allows novices to feel like experts as they become more fluent readers (Blum & Koskinen, 1991).

For some time, there has been considerable interest in a variety of repeated reading strategies and their role in developing skilled fluent reading. Researchers using these strategies have well-documented evidence of improved reading rate and accuracy (Chomsky, 1976; Dahl, 1974; Dowhower, 1987; Herman, 1985; Rasinski, 1990; Samuels, 1979), increased vocabulary (Elley, 1989; Koskinen & Blum, 1984), and enhanced comprehension (Dowhower, 1987; Herman, 1985; O'Shea, Sindelar, & O'Shea, 1985; Yaden, 1988). In addition, repeated reading enhances selfmonitoring, one of the behaviors essential for independent reading. Clay (1991) suggests that rereading familiar text is " . . . one way of developing the smooth orchestration of all those behaviours necessary for effective reading" (p. 184). It also appears that repeated reading helps students gain confidence in their reading and is an activity which engages their interest (Koskinen & Blum, 1984; Topping, 1987; Trachtenberg & Ferruggia, 1989). Research on the use of successful methods includes repeated reading of passages (Dowhower, 1987; Herman, 1985; Samuels, 1979) and paired repeated reading (Koskinen & Blum, 1986) where students work together reading short passages of text and evaluate their own and their partner's improvement. Another variation involves rereading with a live or audiotaped model of the passage (Carbo, 1978; Chomsky, 1976; Gamby, 1983).

Repeated reading not only provides opportunities for learners to develop expertise, but also appears to provide considerable motivation to practice. Because it allows students at many different instructional levels to participate in the same activity and improve at their own pace, it is a very flexible strategy. In addition, this strategy can be modified for use in both classroom and home contexts. While there is support in the literature for the in-school use of repeated reading with below-average Englishspeaking readers, there is limited information or research on its use with second-language learners in either the school or home setting. Repeated reading may have particular benefits for young second-language learners, especially when it is used with an auditory model to support and extend language learning. This auditory model provides a form of scaffolding which is critical for beginning readers (Feitelson, Goldstein, Iraqi & Share, 1993; Vygotsky,

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1978). Repeated reading with a model is also particularly adaptable for use in the home context and provides an excellent opportunity to extend learning to that setting where English is not spoken or read.

The purpose of this study was to investigate whether home-based repeated reading with an audio model is a significant supplement to the literacy instructional program of secondlanguage learners. We hypothesized that beginning readers who spoke English as a second language would benefit from having daily access to repeated reading in their home environment. In order to provide this access, books that had been shared in school were given to students for daily home use. After home rereading routines were established, students were given a tape recorder and audiotapes to accompany these books. This enabled students to hear the English storybook as they followed along looking at the printed text. Of specific interest in this study was the effect of repeated reading with an auditory model on first-grade students' reading fluency and self-monitoring behavior. Also of interest was the effect of this school/home reading activity on student reading motivation and behavior.

Method

Setting

The study took place in a first-grade classroom located in a suburban elementary school within the metropolitan Washington area. The school had a population of approximately 360 students representing a diverse range of languages and cultures. The school was a Chapter 1 school and the student/teacher ratio in firstgrade classes was 15 to 1. Language arts instruction in this first-grade classroom was integrated with other subjects throughout the day, and the teacher focused her instruction on broad themes supported by a wide variety of materials which included literature and content texts, poetry, songs, films, and other resources. The classroom teacher worked with an English as a Second Language (ESL) resource teacher who taught ESL students within the regular classroom for 45 min a day during the language arts instructional time block. Instruction included a period for readers' workshop, writers' workshop, and other daily opportunities for personal independent reading, including a daily scheduled DEAR (Drop Everything and Read) time. In addition, the teacher read aloud to the children at least once each day. The classroom included a library, and children were encouraged to take books home for recreational reading; however, a daily home reading program was not part of the classroom routine prior to the beginning of the project.

Participants

Nine first-grade students with limited proficiency in English participated in prestudy and baseline activities. The children ranged in age from 6 to 7¹/₂ years, and had limited proficiency in English as determined by a score of 80 or less on the Pre Language Assessment Scales (PreLAS). The primary languages of these students were as follows: Spanish (2), Vietnamese (2), Russian (1), Farsi (1), Laotian (1), Korean (1), Arabic (1). All children had



limited or no ability to read in their primary language. Of the nine participating students, five had low and stable baseline performance. These students were included in the singlesubject experiments.

Design

This 19-week study employed a singlesubject reversal design (ABA) with multiple baselines across individuals to explore the effects of repeated reading using books and audiotapes in the home environment. The ABA or reversal design is the simplest of the experimental analysis strategies that allows for an analysis of the controlling effects of the introduction of an intervention and its subsequent removal (Hersen & Barlow, 1976; Zweig, 1987). Home-based repeated reading of books (A/Baseline) was compared to the home reading of books with audiotapes (B/Intervention). The study involved a single subject and four replications. Replication of the ABA design in different subjects and across several baselines increases external validity and strengthens conclusions about the power and controlling forces of the treatment (Hersen and Barlow, 1976; Kratochwill, 1978; Zweig, 1987). Children participated in baseline activities for either 5 or 9 weeks. Three subjects spent 5 weeks rereading books and 11 weeks rereading books with audiotapes. Two subjects spent 9 weeks rereading books and 7 weeks rereading books with audiotapes. To examine whether the treatment effect was sustained, all subjects returned to home use of books only for three weeks (A/Baseline).

Instructional Materials

Interviews and survey responses from parents indicated that English was not often spoken in the home, that few English storybooks were available, and that reading was not a daily activity. Therefore, the preparation of literacy materials for these children required special consideration. First, there was a need to provide for a range of interest and reading difficulty levels so that students would have successful initial experiences with storybook reading. Short books with repetitive language patterns, which had been used successfully in first-grade classrooms, were considered especially appropriate for home-based reading. Second, since many parents had limited skill in reading written English, they would not be able to assist with or monitor students' reading. Audiotapes of the stories were used to provide support for oral reading. Third, since the children were not accustomed to daily home reading, classroom and home reading routines were developed and materials were packaged to facilitate book access and encourage reading at home. The following is a description of materials used in this study to provide successful home-based rereading opportunities.

Books. The shared and repeated reading in this project was conducted with books which were written in English (see Appendix A). These short books contain familiar concepts and vocabulary with commonly used oral language patterns. In addition, they have illustrations which portray closely the meaning and language of the story. The gradually increasing level of language difficulty, ranging from single-word labels and two-word sentences to

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complex text with literary language, provided an opportunity for emerging readers to have successful experiences with print. Consequently, these books were particularly appropriate for second-language learners as well as beginning readers who are native speakers of English.

One hundred fifty different books that were used in this study ranged from emergent to independent first-grade level. There were three copies of each title. They were color coded to assist with organization and management of project materials and activities. One copy, marked with a red dot, was used for in-class reading after it had been introduced; one copy, marked with a blue dot, was packaged for home use; and one copy, marked with a yellow dot, was packaged along with an audiotape of the story for home use. The "packages" consisted of zip-lock plastic bags with the book's title written on the front. Each book was numbered and supplied with a library card so that it could be checked out and returned as it was transported back and forth from home to school. Blue dot books were put in zip-lock bags marked with blue tape. Yellow dot books were packaged in zip-lock bags marked with yellow tape that indicated it had both a book and an audiotape. This color coding helped children and teachers identify different types of materials. In addition, color-coded books were kept separate in different baskets.

Audiotapes. Audiotapes were made for all of the books by native English-speaking adults, and the English text was read exactly as presented. On each of the tapes the reader stated the book's title along with the name of the author and illustrator. Students were then directed to the story and encouraged by the reader to "Put your finger under the first word and follow along as I read." The book's text was then read at a pace which would allow beginning readers to follow along. The reading was expressive, but slow enough so students could match oral and written words. Students were also given at least 3 seconds to turn the page after they heard the page-turning sound. This amount of time allowed the young readers to both look at the pictures and physically turn the page.

Tape recorders. Battery-operated tape recorders with easy-to-use controls were provided for each participating child. When the children were given both books and audiotapes to practice at home, they were also taught how to use a tape recorder and given one for their personal use during the project. The children were instructed to take the tape recorder home so they could listen to and read books each night.

Backpacks. Backpacks, marked with the project title "Dog Gone Good Reading" and designated expressly for the purpose of carrying reading materials to and from school, were given to each child. This packaging was designed to provide a motivating and convenient way to transport materials and also to help children remember to read on a daily basis.

Check-out/check-in chart. To assist with management of the daily book exchange, a poster-board chart was used. This chart, with the project logo (dog mascot) and title "Dog Gone Good Reading," contained library card pockets with each child's name glued on the board. The



children were taught to remove the library card from the back of their book and place it in their pocket on the chart when they checked out a book or book and tape. When they checked in materials, they retrieved the card from their chart pocket and replaced the card in the book.

Assessment Tasks

In this study, fluency and self-monitoring behaviors were assessed on a weekly basis. Other measures, including a reading observation survey and parent, child, and teachers' surveys, were conducted periodically throughout the study. The following is a description of each of these measures.

Weekly Measures

Fluency assessment. To assess fluency and monitor reading level, samples of oral reading were collected on a weekly basis. Text for the oral reading samples was drawn from books which had been introduced by the teacher and also read independently by the child. When students began to bring books home, the oral reading procedure was used only with books that students had taken home at least once that week. All observations were both audiotaped and coded as the child read the material orally. The coding system was based on the guidelines suggested by Clay (1993) which include the number and percent of words read accurately. The oral reading text contained at least 50 words from books at the child's instructional level. Once a child had accurately read at least 90% of the words in a book, that book was not read again for the weekly oral reading assessment. Criteria for fluent reading were smooth, natural, expressive reading determined by teacher judgment and word accuracy of 90% or higher as determined by an analysis of oral reading. Guidelines developed by the authors suggested that teachers should move a child to the next higher level when the abovementioned criteria were met for the 50-word sample. Since the books at lower levels were often very short, it was frequently necessary to have students read two or three books to obtain a 50-word oral reading sample. Teachers followed the guidelines in most cases; however, there were certain instances when a child met the above criteria, but the teacher decided that he/she needed additional practice. In such cases, the final decision was determined by teacher judgment.

Self-monitoring behaviors. Weekly oral readings were also coded for self-monitoring behaviors. Using guidelines suggested by Clay (1993), researchers noted any deviations from the text, including error substitutions, the number and rate of self-corrections, and repetitions. Error substitutions and self-corrections were then analyzed in an attempt to discover whether children were using meaning, structure, and visual (print) cues. Repetitions were noted because they indicate rereading behavior which is considered a (positive) self-monitoring reading behavior, not an error.

Periodic Assessment Tasks

Observation surveys. Four measures adapted from Marie Clay's observation survey were administered four times during the study. The following is a description of each measure.

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- 1. Letter Identification. To determine children's ability to identify letters, a 54-item measure was used. Upper- and lower-case letters were arranged in two groups. These included all upper-case and lower-case letters as well as several style variations of some letters. Letters were randomly ordered rather than using an alphabetical sequence. Children were asked to name the letters as they moved across a row of print.
- 2. Word Recognition. To assess knowledge of high frequency words, lists of 20 high frequency words were used. Children were asked to read the words they knew and were given a maximum of 5 seconds to respond to each word.
- 3. Hearing and Recording Sounds in Words. To assess children's ability to hear and record sounds in words, a two-sentence dictation task was used. The sentences were presented twice, first at a normal reading speed, then slowly, word by word, and repeated as many times as necessary. Children were asked to record each sentence and encouraged to say the words slowly and think about how they would write them. Phoneme accuracy, rather than correct spelling, was used as the criteria for evaluation.
- 4. Oral Reading Behavior. To assess reading level, cues, behaviors, and strategies, children's oral reading was observed and coded. This observation procedure is referred to by Marie Clay as a "running record." The Reading Recovery Packet

(1979), which included a series of graded books, was used as the oral reading text. Children read individual books until they fell below a word accuracy rate of 90%. The highest level at which a child scored 90% was considered his or her independent reading level.

Child reading motivation/behavior surveys. A 10-item survey was used to assess reading motivation/behavior at three times during the study. The survey included yes/no and 4-item Likert responses to the following types of questions: (1) individual and family reading habits; (2) attitudes toward books, reading, and being read to; and (3) frequency of book/book-and-tape use at home. The third survey, administered at the conclusion of the project, included two additional items specifically related to the benefits of learning from books and books and tapes. Five months after the conclusion of the study, a 14-item survey similar to the third survey was used to assess the long-term effects of the school/home reading program. Two questions relating to the use of books and tapes for first- and second-grade students were added to the original survey.

Parent surveys. Two surveys that required written responses and two surveys that were conducted as interviews were used to assess parents' perception of their child's reading motivation/behavior and to explore parents' perception of treatment effectiveness. Questions on the 12-item survey were similar to those of the child survey, including Likertscale responses related to child and family reading habits as well as child attitudes toward books. Questions on the 10-item interview

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included yes/no responses with probes to encourage elaboration. The interview questions related to mechanical operation of the tape recorder, frequency of book-and-tape use, and child's engagement with books. Two phone interviews were conducted with the parents, one during the last quarter of the study and one at the end of the study. Interpreters fluent in the parents' languages conducted the interviews. The last interview included two additional questions related to the effectiveness of treatment activities. One question compared home reading of books with book reading that was supported by audiotapes. A second question addressed student independence in using the home reading materials.

Teacher Surveys. A 12-item survey was used twice to assess teachers' perception of individual students' reading motivation/ behavior. Questions were similar to those of the child and parent surveys, including Likertscale responses related to child reading habits in school as well as child attitude toward books. The second survey that was completed at the conclusion of the study included two additional questions. One question compared the effectiveness of home reading of books with book reading that was supported by audiotapes and another question focused on students' independence in using the home reading materials. The survey was completed by both the classroom teacher and the ESL resource teacher.

Procedures

This school/home reading project was divided into two phases: (1) prestudy activities

(9 weeks); and (2) the single subject experiments (19 weeks).

Prestudy Activities

During the 9 weeks of prestudy activities, children were introduced to the books that would be taken home during the intervention and participated in a range of initial assessment activities. This extended period of time was used so students would be very familiar with book selection activities and to eliminate the novelty effect related to weekly audiotaping of student reading.

For the first 3 weeks of the prestudy activity phase, a book was introduced and reread with students by the classroom teacher or the ESL resource teacher every day. This 5 min shared reading procedure included: (1) an oral look-through with the children making predictions and the teacher providing key vocabulary and examples of language patterns necessary for independent reading; (2) an oral reading of the book by the teacher; and (3) a rereading of the book with the children.

After 3 weeks of daily book introductions, students began to participate in book selection and assessment procedures as part of their regular classroom routine. Each week, students read shared books to the ESL teacher or the research assistant while she tape recorded and coded their reading. Children were acquainted with the fact that the books were of different levels of difficulty and were guided to choose books for reading practice from a specific level. In addition to the weekly fluency assessments, all 9 students were given the first observation survey and the child reading motivation/

behavior survey. During this time, the parents were informed of the project, given a parent survey, and asked to remind their child to reread the books they were bringing home. While parent support as listeners and assistants was invited and encouraged, children could participate in this home reading project without parents' direct involvement. Both teachers involved with the project (the classroom teacher and the ESL resource teacher) completed a teacher survey on each child.

During the last week of the prestudy activity phase, the children were introduced to procedures for taking books home. A second copy of each book that had been shared in class was placed in a special basket for home use. Because these books were in blue color-coded packages, they were easily identified by the students. A routine was established for checking out books and returning the books to the classroom.

Single-Subject Experiments

During the single-subject experiments, data was collected during the following three periods: (1) baseline activities that involved students taking books home; (2) intervention that involved students taking books and audiotapes home; and (3) a return to the baseline activities where students took only books home.

Baseline activities. During baseline activities, students took books home that had been shared in school on a daily basis so they could practice reading them at least three times to themselves or a family member. Project backpacks were provided to transport books to and from home. While children were directed to choose at least one book at their specific independent level, they were also permitted to take additional books of any other level. Samples of students' oral reading were audiotaped and coded on a weekly basis. Only books that had been taken home during the week were used as reading material. Diagnostic information from the students' weekly oral reading guided the teacher's decision related to the level of books that should be taken home during the next week. Four students participated in 5 weeks of baseline activities, and 5 students participated in 9 weeks of baseline activities.

After all children had taken home books for a month, a second observation survey, child survey, parent survey, and teacher survey were administered. Based on the results of the oral reading portion of the observation survey, assigned reading levels were adjusted when necessary.

Intervention activities. Intervention activities included the use of audiotapes and a tape recorder for students' home-based shared rereading. Yellow color-coded book/tape packages for listening/reading were kept in separate baskets so they would be accessible and easily located for home use. Children were encouraged to use the same procedures introduced for home reading of books, which included asking the student to take books and audiotapes home daily and to read along with the audiotaped book at least three times individually or with a family member. Each child was given a tape recorder to keep at home for the duration of the project. In addition to teaching the children how to use this machine,



the teacher helped children think about where they specifically would do their home reading (location) and where at home they would store their tape recorder.

Three students participated in intervention activities for 11 weeks; the other 2 students participated in intervention activities for 9 weeks. During this time, they all participated in the same type of book selection and weekly oral reading procedures that had been established during baseline activities. In addition, during the 9th week of the single-subject experiments, the third observation survey was given. Again, assigned reading levels were adjusted if the oral reading portion of the survey indicated a change should be made. During the 11th and 12th weeks of the single-subject experiments, when all children were taking books and tapes home, the first phone interview was conducted with the parents. Interpreters who were fluent in the parents' language conducted the interview, and thus were able to encourage elaboration in response to various questions.

Return to baseline. To explore literacy behavior without the support of audiotapes, all students returned their tape recorders and began taking home only books again. This return to baseline activities continued for a 3-week period, and oral reading procedures were conducted weekly. After this 3-week period, the final individual observation survey as well as the child and teacher surveys were conducted. In addition, interpreters interviewed parents a second time by phone. Of particular interest in these final motivation/behavior surveys were new questions concerning reactions to the home use of books and audiotapes as opposed to use of only books. Five months after the end of the singlesubject experiments, children were interviewed again after they had entered second grade. This follow-up survey was similar to the third childsurvey and included additional questions related to whether the school/home program with books and audiotapes should be used in the first grade again and whether it should be used in their current second-grade program.

Results

Qualitative procedures were used to analyze the data from this study. Visual inspection of graphic displays with linear "best fit" regression lines was employed as a means to evaluate weekly oral-reading samples and selfmonitoring behaviors. Descriptive procedures were used to analyze the observation surveys as well as child, parent, and teacher surveys. Nine students participated in all prestudy activities and baseline data collection. Five of these children who had consistently low fluent-reading levels during the baseline period were identified as subjects for the single-subject experiments. Individual profiles of these children are presented in Appendix B. Since the school/home reading program was part of the classroom instructional program for all students, the 4 second-language learners who were not selected for the singlesubject experiments did continue with the weekly intervention activities. Graphs of their progress in reading fluency are included in Appendix C.

Weekly Assessment Tasks

Fluency assessment. Oral reading samples were analyzed weekly to determine the students'

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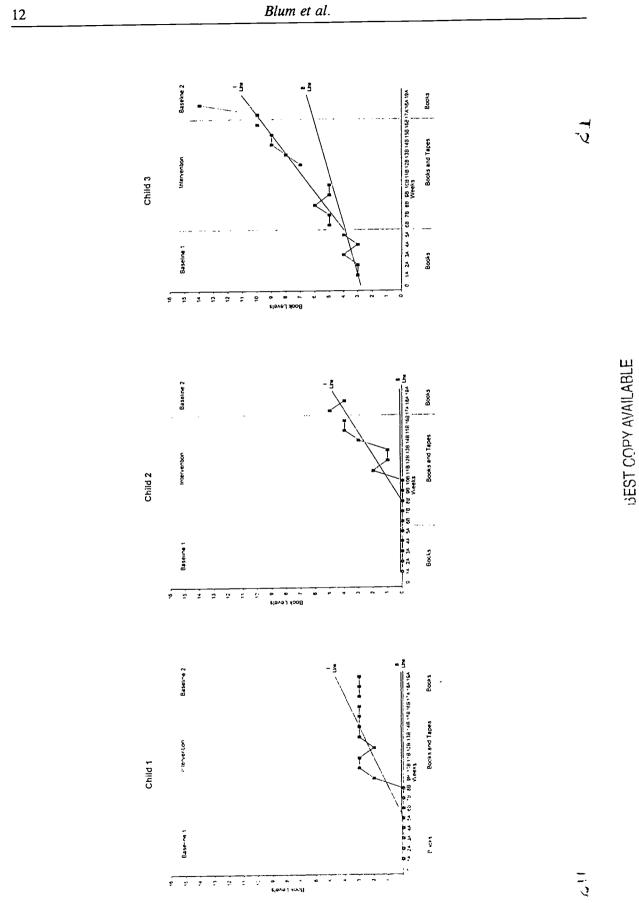


Figure 1. Fluent Reading Levels with Linear "Best Fit" Regression Lines over a 19-Week Period

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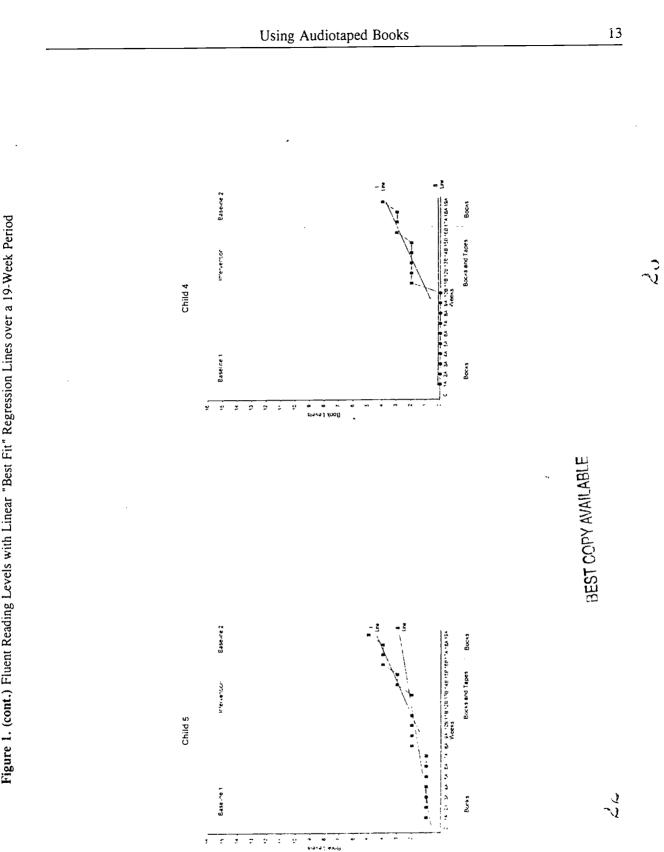


Figure 1. (cont.) Fluent Reading Levels with Linear "Best Fit" Regression Lines over a 19-Week Period



fluent reading level. Criteria for fluent reading were smooth, natural, expressive reading as determined by teacher judgment and word accuracy of 90% or higher. Individual graphic displays of students' weekly fluent reading levels including linear "best fit" regression lines for baseline and intervention periods are shown in Figure 1. All 5 participating students showed substantial growth over the baseline as demonstrated by their ability to read fluently and accurately books of increasing difficulty. In addition, these gains were maintained, and in three cases, exceeded intervention activities during the return to baseline period. There was 100% agreement by three evaluators that performance was better during the intervention period than during the baseline period for all 5 students.

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Self-monitoring behavior. Self-monitoring behavior was assessed by documentation of repetition of a word or phrase, analysis of error substitutions, and self-corrections in reading. Error substitutions and self-corrections were analyzed to indicate whether the students appeared to be using meaning, structure, and/or visual (print) cues. Repetitions and selfcorrections during the baseline period were sporadic and infrequent. During the intervention and return to baseline periods, there was only a slight increase in the number of repetitions and self-corrections.

Periodic Assessment Measures

Observation surveys. Fluent reading level and percentages for letter identification, word recognition, and hearing and recording sounds in words are presented in Table 1. All children made progress on the tasks included in the observation survey from the first to the final administration; however, growth on these measures cannot be directly attributed to intervention activities. Nevertheless, these measures did provide another measure of reading fluency that confirmed the assignment of reading levels and verified that children's reading performance on audiotaped books was not due to rote memorization.

Child motivation/behavior surveys. Analysis of the child motivation/behavior surveys revealed that children were reading more at home and were excited about learning to read. At the conclusion of the study, the children were asked which they thought was most helpful to them in learning to read, the books alone or the books and tapes. Three of the children said they felt the books and tapes were most helpful. Children made comments such as, "My mom and dad didn't have to help me with the tapes. Because if I can't read the book I need the tape." Two of the children said they thought the books alone were most helpful. One child explained, "I had to learn the words." They were also asked at the end of the program which they enjoyed using the most. Four said they preferred using the books and tapes; one preferred the books alone (this was Child 3 who made dramatic progress during the intervention period). Five months after the conclusion of the study (when they were in second grade), 4 of the 5 children confirmed their preference for using books and tapes to help them learn to read. All 5 children stated they would like to have the opportunity to continue taking books and tapes home so that they could practice the books they were learning to

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Table 1. Summary of Diagnostic Survey Information: Fluent Reading Level and Percentages for Letter Identification, Word Recognition, and Hearing and Recording Sounds in Words

	Pre-Stud	y Period	Week 5	Week 9	Week 19
Child #1					
Language Spoken in Home: Arabic					
Letter Identification	81%	(44/54)	96% (52/54)	94% (51/54)	94% (51/54
Word Recognition	20%	(4/20)	5% (1/20)	25% (5/20)	30% (6/20
Hearing & Recording Sounds in Words	30%	(11/37)	46% (17/37)	35% (13/37)	62% (23/37
Fluent Reading Level*	I	3	1	2	3
Child #2					
Language Spoken in Home: Vietnamese					
Letter Identification	91%	(49/54)	96% (52/54)	100% (54/54)	100% (54/54
Word Recognition	5%	(1/20)	0% (0/20)	25% (5/20)	30% (6/2
Hearing & Recording Sounds in Words	5%	(2/37)	22% (8/37)	19% (7/37)	27% (10/3
Fluent Reading Level*		2	2	1	3
Child #3					
Language Spoken in Home: Farsi					
Letter Identification	96%	(52/54)	94% (51/54)	100% (54/54)	100% (54/5
Word Recognition	60%	(12/20)	85% (17/20)	95% (19/20)	100% (20/2
Hearing & Recording Sounds in Words Fluent Reading Level*	81%	(30/37) 4	81% (30/37) 8	100% (37/37) 12	97% (36/3 18
Child #4					
Language Spoken in Home: Russian					ĺ
Letter Identification	17%	(9/54)	80% (43/54)	94% (51/54)	96% (52/5
Word Recognition	0%	(0/20)	15% (3/20)	45% (9/20)	45% (9/2
Hearing & Recording Sounds in Words	0%	(0/37)	46% (17/37)	62% (23/37)	76% (28/3
Fluent Reading Level*		В	В	2	3
Child #5					
Language Spoken in Home: Spanish			ĺ		
Letter Identification	94%	(51/54)	98% (53/54)	98% (53/54)	98% (53/5
Word Recognition	25%	(5/20)	40% (8/20)	70% (14/20)	80% (16/2
Hearing & Recording Sounds in Words Fluent Reading Level*	32%	(12/37)	62% (23/37) 3	84% (31/37)	86% (32/3
riuent keading Level*		2	,	, ,	1

*Reading Levels: B, 1, 2 = Readiness 3-4 = Pre Primer 1 9-12 = Primer

14-16 = 1st grade

5-6 = Pre Primer 218-20 = 2nd grade

7-8 = Pre Primer 3

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read in second grade. In addition, all 5 recommended that the first-grade teacher use books and tapes as a home reading activity with her current students.

A comparison of survey data from the prestudy activity period with the final child survey revealed that all of the participants increased the frequency with which they read the books they brought home from school. During the prestudy period, only one of the students said that he was very excited about learning to read. At the conclusion, all 5 reported that they were very excited about learning to read. On the final survey, 4 of the 5 students said they would very much like getting a book for a present, as opposed to no one mentioning that they would like to receive a book on the first survey. Three of the 5 reported an increase in the number of children's books in English which they had in their homes. Data from the follow-up survey completed five months after the conclusion of the study indicated that they enjoyed reading books to people in their family and did read books to their family. All children also said that they liked to read and that they did bring books home from school. These changes cannot be attributed specifically to the books and tapes intervention. However, the increase in positive reading attitude and behaviors following the introduction of a school/home daily reading program is worthy of note.

Teacher surveys. Data from the teacher surveys revealed positive teacher attitudes about the school/home reading program. At the conclusion of the study, teachers were asked whether reading books or books and tapes had been most beneficial to the children as they were learning to read. For all but one of the children, the teachers thought the books and tapes were the most helpful. Teachers reported that they would use a school/home reading program with books and audiotapes in the future and that this activity should be done on a daily basis. They observed increased independence in book selection and classroom routines related to the daily book exchange. The teachers also reported that of the 5 children, 2 were consistently independent about remembering to bring materials back and forth from home and to practice the materials at home. Two of the children were seen as needing to be reminded occasionally; one was seen as needing constant reminding.

Teachers were also enthusiastic about using the school/nome reading program because they noticed differences in social interaction about books, more leisure reading, and increases in self-monitoring of reading behaviors. A comparison of the initial and final teacher surveys revealed that all 5 students talked to teachers more about books and were more likely to discuss books with their classmates. Teachers also observed that children were choosing to read more frequently in their free time. All children were reported to be taking books home almost all of the time, as opposed to only one taking books home this often during the prestudy period. In addition, teachers reported examples of students monitoring their reading fluency. This was viewed as new behavior for these children. While the changes in student behavior and attitude reported by teachers cannot be attributed to the intervention effects, they appear to be associated with the introduction of the school/home reading program which provided daily access to bloks.

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Parent surveys. Descriptive procedures were used to analyze parents' written and oral responses to survey questions. All the parents reported that their child listened to the audiotapes of the books at home and enjoyed this activity. When asked whether books or books and tapes were more beneficial to children as they were learning to read, 4 of the 5 parents said the books and tapes, while 1 parent felt the combination of books and tapes as well as just books would be most helpful. Parents noted that all children looked at the books while listening to the audiotapes. While 4 of the parents felt the children paid attention to the words as they read, 2 reported that they felt the children were memorizing the story and not reading the written words.

Parents observed that during the intervention period when children were listening to stories on the audiotapes, they became more involved with books. Four of the 5 parents noted that the children seemed to be reading more, and 4 parents also said the children usually remembered to do their reading on their own without being reminded. Several of the parents mentioned that the children talked more about the books that were taped and frequently searched for an audience to demonstrate their new reading skill. One parent said that her daughter "insisted that her brother listen" (to her read).

Discussion

The present study investigated whether home-based repeated reading with an auditory model was a significant supplement to the literacy instructional program of language minority students. Home-based repeated reading of books was compared to home reading that included books and accompanying audiotapes. All 5 participating second-language learners received substantial benefit from the opportunity to practice reading books with audiotapes at home. It appears that the support provided by the audiotapes enabled students to fluently read increasingly more difficult texts.

It should be noted that the 5 students selected for final data analysis in this study were those who had low and stable reading performance and were making limited literacy progress in the classroom even when books were taken home on a daily basis (baseline period). The school/home literacy program that was designed for these students included a number of features that were hypothesized to be advantageous to language minority students. This program included a shared reading activity in school with each of the books that could be taken home. Recent research by Feitelson et al. (1993) documents the value of teachers reading to students as a way to increase a secondlanguage learner's reading achievement. In the current study, the shared reading provided an auditory model, background vocabulary knowledge, and generally excited interest by the teacher's attention to the book. The books used in the school/home program were especially appropriate for independent reading because they contained short repetitive language patterns and pictures that facilitated comprehension for second-language learners.

The home reading component in this study also encouraged a successful rereading strategy (Dowhower, 1987) and provided daily home access to books which is so vital for reading

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achievement (Elley, 1992). In addition, this school/home component provided for several other factors shown by research to increase students' motivation to read (Gambrell et al., in press). These included choice of materials (Spaulding, 1992) and opportunities for social interactions about books (Guthrie, Schafer, Wang, & Afflerbach, 1993). It is interesting to note, however, that with all these beneficial factors, the second-language learners in this study made limited progress in fluent text reading even with simple text over a 5- to 9-week period. However, when audiotapes of these books were made available, substantial increases in fluency were noted by the students, parents, and teachers.

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Survey data revealed that while students in this study were highly motivated to take home both books and books and tapes, 3 of the 5 children felt they learned more when taking books and tapes home. Follow-up interviews with these students in second grade revealed even more positive feelings about the benefits of using books and tapes at home. It is interesting to note that in both interviews, only the child who made the most dramatic progress felt that books without audiotapes were more helpful to her in first grade. Apparently, as she began to make more accelerated progress, she needed less support. However, in the follow-up interview, this child and all the others wanted to continue the activity with "harder" books in their second-grade classrooms. Interviews also revealed that children had grown in their ability to monitor their reading. One child came to school after the tape recorders had been given back to the library and told her teacher, "Ms. Parker, my book was hard! I really need the tape!"

Parents and teachers strongly supported the school/home reading program. Both teachers and 4 of the 5 parents felt that books and tapes were more beneficial to their students' reading growth than just the books alone. Teachers reported not only increased reading fluency but also child independence and confidence. They noted that the expectations and classroom routines for daily check-in and check-out established a home-reading habit that previously had not been part of the children's lives.

In addition, teachers suggested that having auditory models of fluent English in the home environment encouraged more parent awareness of the student's reading progress and provided a way for parents who did not speak English to participate as a partner/learner in their child's home reading. In a sense, the audio model put English words "in the air" in these homes. These English words appeared to capture others' attention, thereby increasing social interaction related to books which is so important to progress in learning to read (Guthrie et al., 1993). Repeated reading with an auditory model provided critical supportscaffolding-which enabled these novices to feel like expert readers. This initial success provided confidence and strong motivation to practice which is essential to developing skilled fluent reading. Teachers also noted that the school/home reading activities with audiotapes were also appropriate for their native Englishspeaking beginning readers and had been successfully used for a 3-month period with all 15 English-speaking and second-language learners in the classroom.

While the results of this study appear promising, there is a need for systematic inves-

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tigation of school/home literacy programs that include audio models. It will be important to replicate the findings of this study with larger samples of children and to use research designs which provide more generalizability. Research should also focus on issues related to the amount of teacher-initiated home reading (daily, weekly, and so forth), type and level of home reading material, and technical features of the auditory model, such as pace and number of readings. In addition, there is a need to explore features of delivery systems, including the necessity of providing tape recorders for home use, and the size and range of libraries for school/home use. There is also a need to explore how the introduction of English storybooks and audiotapes at home influence parents' interest and support of their child's literacy activities. Home observation studies could provide information about changes in parents' behavior as well as a sense of the complexity of language interactions surrounding reading and listening to books.

With the dramatic increase of secondlanguage learners in our nation's classrooms, there is a need to expand these children's language and literacy experiences before the cycle of discouragement and illiteracy becomes a pattern in their lives. These children need to have opportunities to feel successful and develop the confidence that will encourage them to become fluent, motivated readers. Because of the extraordinary demands placed on teachers in these multicultural classrooms, special emphasis also needs to be given to instructional activities that are effective with both second-language learners and native English-speaking children. School/home instructional programs that provide books and audiotapes for home environments that currently offer limited exposure to the English language and English storybooks may be one of the solutions to these problems.

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APPENDIX A

Selected Books Used in Home-School Reading Projects

TITLE	PUBLISHER	LEVEL.	# OF WORDS
Baby Gets Dressed	Wright	E	16
The Farm	Rigby	Е	28
The Ghost	Wright	Е	26
Go, Go, Go	Wright	Е	17
A Party	Wright	E	14
What Are You?	Rigby	E	27
Who Likes Ice Cream?	Rigby	Е	15
A Zoo	Rigby	E	28
All Of Me	Rigby	E	25
The Ball Game	Rigby	Е	37
Buffy	Rigby	Е	31
The Chocolate Cake	Wright	Е	23
The Circus	Rigby	Е	28
Don't Wake the Baby	Rigby	E	18
Frightened	Wright	Е	42
Fruit Salad	Rigby	Е	29
In the Mirror	Wright	Е	23
Jack-in-the-box	Rigby	E	34
Major Jump	Wright	Е	22
My Home—Cowley	Wright	E	46
Our Baby	Rigby	E	28
A Scrumptious Sundae	Rigby	E	32
The Tree House	Wright	E	32
A Toy Box	Rigby	E	33
What's for Lunch?	Wright	E	36
Who's Coming for a Ride	Rigby	E	2
Yuck Soup	Wright	E	25
Big and Little	Wright	E	36
Buzzing Flies	Wright	E	45
Dear Santa	Rigby	E	49
Dressing Up	Rigby	E	31
Getting Ready for the Ball	Rigby	E	27
I Love My Family	Wright	E	31
In My Bed	Rigby	E	57
Little Brother	Wright	E	31

*Level: E = Emergent, N = Novice, A = Apprentice, and D = Developing



TITLE	PUBLISHER	LEVEL	# OF WORDS
A Monster Sandwich	Wright	Ε	36
My Home-Melser	Wright	Е	42
Nighttime	Wright	Е	44
Sharing	Rigby	Е	24
Shoo!	Wright	Е	37
Silly Old Possum	Wright	Е	41
The Storm	Wright	Е	29
Sunrise	Rigby	Е	46
Teeny Tiny Tina	Rigby	Е	34
Tommy's Tummy Ache	Rigby	Е	20
Uncle Buncle's House	Wright	Е	56
What Has Spots?	Rigby	Е	29
When I Play	Rigby	Е	31
Climbing	Rigby	Е	34
Happy Birthday!	Rigby	Е	28
Houses	Wright	Е	59
In My Room	Rigby	Е·	44
Little Pig	Wright	Е	53
The Monsters' Party	Wright	Е	92
Our Street	Wright	Е	40
The Pet Parade	Rigby	Е	33
The Scarecrow	Rigby	Е	31
Up in a Tree	Wright	. E	47
Wake up, Mom!	Wright	Е	94
The Bike Parade	Rigby	Ν	16
The Farm Concert	Wright	Ν	74
Hello Goodbye	Rigby	Ν	29
Ногасе	Wright	Ν	56
The Monkey Bridge	Wright	Ν	63
Our Dog Sam	Rigby	Ν	56
Reading is Everywhere	Wright	Ν	53
Surprise Cake	Rigby	N	32
We Make Music	Rigby	N	44
What Can Fly?	Rigby	N	28
Along Comes Jake	Wright	N	86

Selected Books Used in Home-School Reading Projects

'Level: E = Emergent, N = Novice, A = Apprentice, and D = Developing



Selected Books Used in Home-School Reading Projects

TITLE	PUBLISHER	LEVEL.	# OF WORDS
Bread	Wright	N	69
Goodbye, Lucy	Wright	N N	60
Mr. Grump	Wright	N	77
One Cold, Wet Night	Wright	N	134
The Seed	Wright	N	51
Too Big for Me	Wright	N	70
Where Are You Going, Aja Rose?	Wright	N	100
Ants Love Picnics Too	Rigby	N	27
The Big Toe	Wright	N	123
The Bogly	Rigby	N	61
In a Dark, Dark Wood	Wright	N	. 81
Don't You Laugh at Me!	Wright	N	167
Grumpy Elephant	Wright	N	94
The Haunted House	Wright	N	78
The Present	Rigby	N	30
The Red Rose	Wright	N	127
Three Little Ducks	Wright	N	102
Timmy	Rigby	N	54
Two Little Dogs	Wright	Ν	72
The Well-fed Bear	Rigby	N	35
What Did Kim Catch?	Rigby	N	48
Where is Nancy?	Rigby	N	56
Baby's Birthday	Rigby	N	53
The Best Place	Rigby	N	61
The Farmer and the Skunk	Peguis	N	127
Five Little Monkeys Jumping	Clarion	N	. 100+
Go Back to Sleep	Rigby	N	74
Guess What!	Rigby	N	28
Let's Have a Swim	Wright	N	74
Oh, A-Hunting We Will Go	Atheneum	N	100+
Teddy Bear, Teddy Bear	Peguis	N	100+
Who Will Be My Mother?	Wright	N	156
Dear Zoo	Four Winds	Α	115
The Fat Pig	Peguis	A	100+
Grandpa Snored	Rigby	A	52

'Level: E = Emergent, N = Novice, A = Apprentice, and D = Developing



Selected Books Used in Home-School Reading Projects

TITLE	PUBLISHER	LEVEL.	# OF WORDS
It's Not Fair	Rigby	А	51
Mike's New Bike	Troll	Α	183
Pardon? Said the Giraffe	Harper Collins	Α	100+
When Dad Came Home	Rigby	A	46
When I Was Sick	Rigby	A	53
Come for a Swim!	Wright	A	100+
Dad's Headache	Wright	A	100+
The Gingerbread Boy	Steck-Vaughan	A	100+
Helping	Scholastic	А	100+
The Hungry Giant	Wright	A ·	100+
The Lion and the Mouse	Steck-Vaughan	А	100+
Meanies	Wright	А	100+
Rosie's Walk	Macmillan	А	100+
Susie Goes Shopping	Troll	А	100+
T-Shirts	Richard Owen	Α	100+
The Wedding	Rigby	, A	100+
When Lana Was Absent	Rigby	Α	100+
The Cooking Pot	Vright	Α	100+
Greedy Cat	Richard Owen	A	100+
Hansel and Gretel	Ladybird	A	100+
Happy Birthday	Troll	A	100+
I Saw A Dinosaur	Rigby	A	100+
My Boat	Wright	A	100+
The Carrot Seed	Harper Collins	A	100+
It Didn't Frighten Me	Scholastic	A	100+
Noise	Wright	A	100+
Obadiah	Wright	A	100+
One Monday Morning	Scribners	A	100+
One Sock, Two Socks	Gage	A	100+
Peanut Butter and Jelly	Dutton	A	100+
The Terrible Tiger	Wright	A	100+
Three Little Witches	Troll	A	100+
Elephant in Trouble	Troll	D	100+
Fun at Camp	Troll	D .	100+
The Giant's Boy	Wright	D	100+

'Level: E = Emergent, N = Novice, A = Apprentice, and D = Developing

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TITLE	PUBLISHER	LEVEL	# OF WORDS
The Three Little Pigs	Gage	D	100+
The Tiny Woman's Coat	Wright	D	100+
Goodnight Moon	Harper Collins	D	100+
Help Me	Wright	D	100+
I Know an Old Lady	Wright	D	100+
I Was Walking Down the Road	Scholastic	D	100+
The Kick-a-lot Shoes	Wright	D	100+
Little Red Riding Hood	Ladybird	D	100+
You'll Soon Grow into Them, Titch	Greenwillow	D	100+
Are You My Mother?	Random House	D	100+
Go, Dog, Go!	Random House	D	100+
Green Eggs and Ham	Random House	D	100+
Hop on Pop	Random House	D	100+
I Can Read with My Eyes Shut!	Random House	D	100+

Selected Books Used in Home-School Reading Projects

'Level: E = Emergent, N = Novice, A = Apprentice, and D = Developing

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APPENDIX B

Individual Case Profiles

Child #1 (Abdul)

Entry Information: (Prestudy Observation survey) Letter Identification: 81% Hearing/Recording Sounds: 30%

Word Recognition: 20% Fluent Reading Level: B

27

Abdul was born in Lebanon and has lived in the United States for 1¹/₂ years. His native language is Arabic. He is 6 years old and in the first grade. His Pre-LAS score is 38.5; his oral proficiency rating is 2. His teachers report that he seldom talks about books to them or his classmates, though he enjoys being read to and listening to stories at the listening center.

Fluency Assessment:

Evaluators agree that Abdul did better during intervention (books and tapes) than during baseline (books alone). Evaluators also agree that Abdul's linear "best fit" regression line was better during intervention than baseline. Abdul's baseline performance was low and stable. He made progress during the intervention which started to stabilize at book level 3. His progress continued at book level 3 during the return to baseline.

Exit Information:

(Final Observation survey) Letter Identification: 94% Hearing/Recording Sounds: 62%

Word Recognition: 30% Fluent Reading Level: 2

Abdul reported that he thought the books alone were more helpful to him than the books and tapes. ("I had to learn the words.") His teachers felt that the books and tapes were more beneficial to him. His teachers reported that he had a significant amount of difficulty remembering to bring the materials back and forth to school on his own. Abdul's parents reported that Abdul enjoyed listening to the books at home and paid attention to the words while he listened. They also said that he seemed to be reading more now that he was bringing home the taped stories.



Individual Case Profiles

Child #2 (Joanna)

Entry Information: (Prestudy Observation survey) Letter Identification: 91% Hearing/Recording Sounds: 5%

Word Recognition: 5% Fluent Reading Level: 2

Joanna has lived in the United States her whole life, though English is not spoken at home. Her native language is Vietnamese. She is 6 years old and is in the first grade. Her Pre-LAS score is 72; her Oral Proficiency rating is 3. Her teachers report that she seldom talks about books she has read and seldom asks to read to her teachers and classmates. She shows little interest in learning to read and does not seem to enjoy listening to taped stories at the classroom listening center.

Fluency Assessment:

Evaluators agree that Joanna did better during intervention (books and tapes) than during baseline (books alone). Evaluators also agree that Joanna's linear "best fit" regression line was better during intervention than baseline. Joanna's baseline performance was low and stable. She made progress during the intervention which started to stabilize at book level 4. During return to baseline, her progress reached level 5, then returned to level 4.

Exit Information:

(Final Observation survey) Letter Identification: 100% Hearing/Recording Sounds: 27%

Word Recognition: 50% Fluent Reading Level: 3

35

Joanna reported that she felt the books alone were more helpful to her than the books and tapes, and that she enjoyed the books alone more. ("They helped me read.") Her teachers fel the books and tapes were most beneficial to her. Her teachers reported an increase in her interest in learning to read as well as her desire to read to others. Joanna's parents agreed with the teachers' observations that the books and tapes were more helpful to Joanna than the books alone. Her parents reported that, though Joanna was looking at the words while listening to the tapes, she appeared to be memorizing the books rather than learning the words much of the time. Her parents also noted that Joanna was reading more than before the start of the intervention, and that Joanna asked if her mother was "proud of her now that she knows how to read."

Individual Case Profiles

Child #3 (Bijhan)

Entry Information: (Prestudy Observation survey) Letter Identification: 96% Hearing/Recording Sounds: 81%

Word Recognition: 60% Fluent Reading Level: 4

Bijhan was born in Afghanistan and has lived in the United States for two years. Her native language is Farsi. She is 6 years old and is in the first grade. Her Pre-LAS score is 80.5; her Oral Proficiency rating is 3. Her teachers report that Bijhan is a highly motivated student with a strong interest in reading. Though she enjoys listening to stories being read aloud, she does not seem to enjoy listening to taped stories at the classroom listening center. Bijhan seldom discusses books with her classmates or teachers.

Fluency Assessment:

Evaluators agree that Bijhan did better during intervention (books and tapes) than during baseline (books alone). Evaluators also agree that Bijhan's linear "best fit" regression line was better during intervention than baseline. Bijhan's baseline performance was low and stable. She made progress during the intervention, and her progress continued during the return to baseline.

Exit Information:

(Final Observation survey)Word Recognition: 100%Letter Identification: 100%Word Recognition: 100%Hearing/Recording Sounds: 97%Fluent Reading Level: 18

Bijhan reported that she thought the books and tapes were more beneficial to her than the books alone. One of her teachers agreed with this assessment while the other felt that the books alone were most helpful to Bijhan. Bijhan's parents reported that Bijhan was conscientious about practicing the materials sent home. They said she paid attention to the words as she listened to the tapes and often talked about the books she had listened to on the tapes. Bijhan's parents felt the books and tapes were more helpful to Bijhan than the books alone. ("She could pronounce words better.")



Individual Case Profiles

Child #4 (Helga)

Entry Information: (Prestudy Observation survey) Letter Identification: 17% Hearing/Recording Sounds: 0%

Word Recognition: 0% Fluent Reading Level: B

Helga was born in Russia and has lived in the United States for only several weeks. She came to this country speaking no English. Her native language is Russian. Helga is 6 years old and is in the first grade. Her Pre-LAS score is 31.5; her Oral Proficiency rating is 1. Her teachers report that Helga seems to enjoy books and likes listening to stories being read aloud.

Fluency Assessment:

Evaluators agree that Helga did better during intervention (books and tapes) than during baseline (books alone). Evaluators also agree that Helga's linear "best fit" regression line was better during intervention than baseline. Helga's baseline performance was low and stable. She made progress during the intervention, and her progress continued during return to baseline.

Exit Information:

(Final Observation survey) Letter Identification: 96% Hearing/Recording Sounds: 76%

Word Recognition: 45% Fluent Reading Level: 3

Helga reports that she feels the books and tapes were more helpful to her than the books alone. ("Because if I can't read the book I need the tape. My mom and dad didn't have to help me with the tapes. They just had to help me with the books.") Her teachers agree that the books and tapes were more beneficial. Her teachers note that Helga learned to speak English during this study and has become extremely talkative about books she has read. She is eager to read to her teachers and classmates. Helga's parents report that Helga enjoyed listening to the books and tapes at home and paid attention to the words, yet seldom discussed any of the stories with them. They say that "she insisted that her younger brother listen" to the taped stories. Helga's parents feel that books and tapes were more beneficial to Helga than the books alone.

Individual Case Profiles

Subject #5 (Maria)

Entry Information: (Prestudy Observation survey) Letter Identification: 94% Hearing/Recording Sounds: 32%

Word Recognition: 25% Fluent Reading Level: 2

Maria was born in Peru and has lived in the United States for two years. Her native language is Spanish. She is 6 years old and is in the first grade. Her Pre-LAS score is 79.5; her Oral Proficiency rating is 3. Her teachers report that Maria enjoys reading and often asks to read books to her teachers. She often chooses to read in her free time, yet seldom discusses books she has read with her classmates. Her conversation contains few references to books.

Fluency Assessment:

Evaluators agree that Maria did better during intervention (books and tapes) than during baseline (books alone). Evaluators also agree that Maria's linear "best fit" regression line was better during intervention than baseline. Maria's baseline performance was low and stable. She made progress during the intervention, and her progress continued during the return to baseline.

Exit Information:

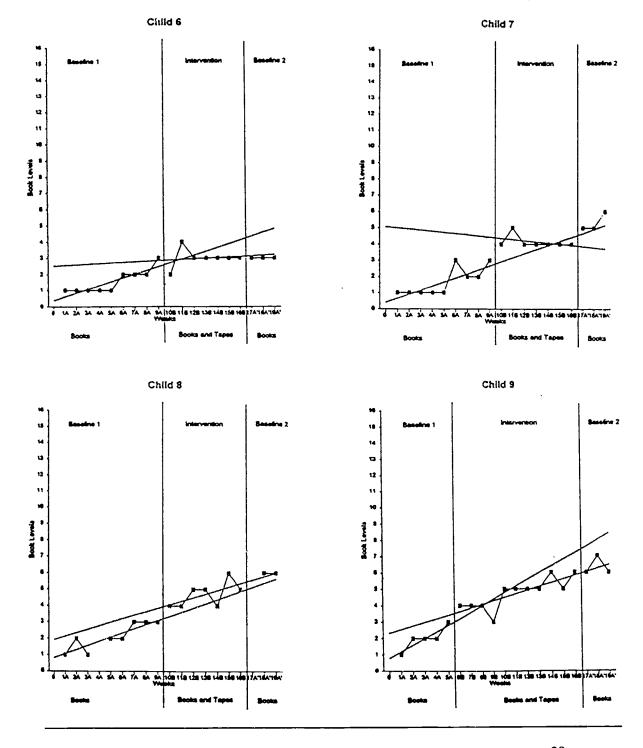
(Final Observation survey) Letter Identification: 98% Hearing/Recording Sounds: 86%

Word Recognition: .80% Fluent Reading Level: 5

Maria says she thinks the books and tapes were more helpful to her than the books alone. ("Because the books didn't say the word the way the tapes did".) Her teachers agree that the books and tapes were more beneficial. Maria's parents report that she enjoyed listening to the tapes at home and often talked about the taped stories. Maria, however, says the books were too boring and repetitious. Her parents feel that a combination of books alone and books and tapes would be most helpful to Maria.

APPENDIX C

Fluent Reading Levels with Linear "Best Fit" Regression Lines over a 19-Week Period for ESL Children Not Used in Final Data Analysis



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