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Developing Pre-Literacy Skills via Shared Book Reading

Assessment of a family intervention program for pre-school children at risk of becoming reading disabled

RUTH FIELDING-BARNSLEY
NOLA PURDIE
Queensland University of Technology

ABSTRACT

This paper reports on a low cost intervention program implemented into the homes of 34 preschool children at risk of reading failure. The intervention was targeted at families where there was a history of reading disability. Families were instructed in dialogic reading via videotaped examples of good practice. The intervention took place over eight weeks. Pre- and post- measures of language and literacy were taken for experimental and control groups. The intervention was successful in raising levels of concepts about print for the experimental group; receptive vocabulary and alphabet knowledge improved for the control group. There were no significant changes in measures of expressive vocabulary, rhyme and initial sounds. For students in both groups, gender was associated with rhyme, and concepts of print; parent educational level was associated with alphabet knowledge, and expressive vocabulary.

INTRODUCTION

Parental and family influences can profoundly enhance the quality and quantity of literacy experiences of children (Snow, Burns & Griffin, 1998), and lead to improved measures of early reading (Adams, 1990; Purcell-Gates & Dahl, 1991). Parent-preschooler reading explains 8% of the variance in the outcome measures of language growth, emergent literacy, and reading achievement in Year One (Bus, van Ijzendoorn & Pellegrini, 1995).

The importance of early literacy experiences was also noted in the DETYA (1998) "Literacy for All" report, the focus of which was on identifying children at risk in the first years of schooling in order to "provide 'make up opportunities' which take account of the varied range of prior learning opportunities" (p.18-19).

The focus of the current study is on identifying children at risk before the first years of formal schooling. The reasoning behind this is that such children are very capable of overcoming their disadvantages before formal schooling with the assistance of their families (Fielding-Barnsley, 2000; Jordan, Snow & Porche, 2000).

The specific children referred to as 'at risk' in this study are members of families who have a known history of reading disability. Evidence from the Colorado twin study shows that reading disability has a significant inherited component (Cardon et al., 1994), and that children who have a parent or sibling with a noted reading problem have an increased chance of developing similar problems (Gilger, Pennington & DeFries, 1991). There have been several family studies which have shown that reading disorders tend to run in families (DeFries, Vogler, & la Buda, 1986) but more recently researchers have been able to untangle the shared influence of the environment and genetics in similar family studies. DeFries et al. studied 1044 individuals in 125 families with a reading disabled child. There

were 125 matched control families. The siblings and parents of the reading disabled children performed significantly worse on reading tests than the families of the control children.

Home language and literacy experiences are identified by the Centre for Improvement of Early Reading Achievement (CIERA) as crucial for later reading success.

(www.ciera.org/ciera/information/principles/). These experiences include joint book reading with family members. The two most powerful predictors for reading success, which may be included in a joint reading program, are letter name knowledge, and phonemic knowledge (the conscious awareness of the sounds in spoken words) (Torgeson & Burgess, 1998).

Although recent research evidence points to the importance of alphabet knowledge and phonemic awareness for early reading success (Byrne & Fielding-Barnsley, 2000), there are other factors that have not gained equal emphasis, Torgeson (1998) identified weak general verbal abilities as being an area of concern. Individual differences in vocabulary development also may have long-term consequences in reading development (Hargrave & Senechal, 2000). Kame'enui and Simmons (1999) noted that vocabulary growth appears to be a result of reading rather than direct instruction in vocabulary. Familiarity with the basic purposes and mechanisms of reading are also included as predictors of later success in reading in the National Research Council Report (1998).

The intervention in the current study is based on a method developed by Arnold and Whitehurst (1994) and Whitehurst et al., (1994) known as dialogic reading. Dialogic reading involves families reading *with* their children rather than *to* their children. Parents, or other family members, are instructed in the methods of dialogic reading, which include asking questions, providing feedback, and eliciting increasingly sophisticated descriptions from the child. Additional instruction is also provided to develop an awareness of rhyme, concepts about print (CAP), and alphabet knowledge (Fielding-Barnsley, 2000). In the classic study by Tizard, Schofield and Hewison (1982) highly significant improvements associated with parental involvement in children's reading were reported. In a replication of this study, however, it was found that improvements were largely due to teacher effect (Macleod, 1996). Thus, questions were raised about the effectiveness of parent involvement when they are not given any special training. As Sylva and Evans (1999) concluded in their evaluation of parent involvement programs "We need to know more about the effective ways to involve teachers and parents... Do parents need more structured guidance in order for there to be a beneficial effect on their child" (p.284). Such questions were taken into account in the design of the present study.

A pilot dialogic reading study targeting children at risk because of low SES factors showed promising results in increasing levels of rhyme, CAP, and vocabulary (Fielding-Barnsley, 2000). Similar methods were employed in the present study but with additional instructions to parents provided on videotape.

Several studies have targeted individual components of the present study—vocabulary development (Hargrave & Senechal, 2000 Robbins & Ehri, 1994); reading achievement (McCormick & Mason, 1986); oral language (Wells, 1985; DeBarshye, 1993), and phonological awareness (Burgess, 1997) – but none have incorporated all the listed components in a single study. The most comprehensive study undertaken to date measured vocabulary, comprehension, sound awareness, letter recognition, environmental print and concepts of print (Jordan, et al., 2000). However, the children in that study were already attending their first year in formal schooling and therefore were more amenable to a wider diversity of measures.

Two of the major considerations for the current intervention program were that it should be easy to implement, and cost effective. Intervention programs offered in school contexts often lack these prerequisites. For example, the most common intervention in Australian and New Zealand schools is Reading Recovery, which involves hours of individual instruction, thereby necessitating a huge investment in both time and money. Not only is Reading Recovery costly but it also leaves children in a vulnerable position until they are six years old. As Torgeson (1998) pointed out "the best solution to the problem of reading failure is to allocate resources for early identification and prevention... in the majority of cases, there is no systematic identification until third grade, by which time successful remediation is more difficult and more costly" (p.1).

METHOD

Participants

Thirty-four children with an average age of 63 months made up the total sample. There were 17 children in the experimental group and 17 children in the control group. There were 20 boys and 14 girls, with a balance of each in the two groups. All children attended pre-school at least three half-days per week.

Families at risk of having a child who may develop reading difficulties at school were invited to nominate themselves for the study. The families were deemed to be at risk if one or more members had a history of reading disability. The family member could be a parent, sibling or other blood relative. The educational levels of the parents ranged from completion of Year 10 to completion of tertiary level education.

Advertisements were placed in the local media, the SPELD Association, and with learning support teachers at local schools. The total response was 34 families who fulfilled the criteria; several families nominated for the study but could not be included due to a problem with distance from the research centre. The research took place in the city and environs of Brisbane in Queensland, Australia. The control group received the intervention after the collection of post-test data.

Data Collection

Three types of data were collected: tests of pre-reading skills, telephone interviews with parents, and parents' written comments about their responses to the program. The pre-reading tests provided quantitative data about children's pre- and post-intervention pre-literacy skills. The interview and written comment data provided information about parents' perceptions of change and the process of intervention.

Pre-reading tests

The Peabody Picture Vocabulary Test (PPVT-111; Dunn & Dunn, 1997). This test is a measure of receptive vocabulary. A matrix of four pictures is shown to the child who is then asked to choose the one that matches the spoken word provided by the tester.

The *Expressive Picture Test* was developed by the author as a measure of expressive vocabulary contained in the selected books. The child is presented with colour pictures representing words found in the books, and asked to name them.

Rhyme Recognition Test (Byrne & Fielding-Barnsley, 1991). This test of rhyme awareness requires the child to identify which of three words sounds most like the target (e.g., *cat; hat, clock, bed*).

Concepts About Print Test (CAP-Clay, 1979) is a measure of a child's exposure to books. Test items include: book orientation, print not picture tells the story, direction of print, word-by-word matching. For more advanced readers, there are items that focus on a more complex understanding of common punctuation marks.

Recognition of Initial Consonant Sound and Alphabet (RICSA) (Fielding-Barnsley, 2000). This test requires the child to identify the first sound in a word (e.g., "What is the first sound you hear when I say Sam'") The test of alphabet recognition involves the child being shown a line of five letters of the alphabet and being asked to circle the name of the alphabet letter given.

The rhyme recognition test and the RICSA test are measures of phonological awareness, phonemic awareness, and alphabet respectively.

Telephone interviews

In week four of the intervention, parents of children in the experimental group were interviewed by phone by the chief investigator. Parents were asked to comment about the progress of the intervention so far (e.g., "Is your child enjoying the books?" "Does he/she have any favourite books?" "Have you encountered any problems in keeping up with the reading program?"). The interviews were recorded verbatim and transcribed into written format.

Written comments

Each experimental group family was asked to record the frequency and amount of time spent reading each of the eight books. Parents were also asked to make relevant observations and comments about each book, and about the overall progress of the intervention.

PROCEDURE

The initial meeting with each family took place in the family home. The research assistant presented the experimental families with videotaped instruction exemplifying good practice in dialogic reading. This video recording was produced by the author in a pilot study reported earlier (Fielding-Barnsley, 2000). Written information was also given to each family, thereby extending the visual information provided on the videotape. Three families were presented on the videotape, with each family concentrating on a different aspect of dialogic reading. There were examples emphasising rhyme, vocabulary and concepts about print. A four-page pamphlet developed by The University of New England School of Psychology's Early Literacy Team was also given to each experimental family. This pamphlet contains sections on: "How to promote pre-reading skills in your child; Read with your child; Let your child tell the story; Play with speech sounds: Rhyme and alliteration; Teach your child about the alphabet; and Teach your child about the sounds that make up words ... and how letters stand for these sounds."

All parents were asked to complete a *Family Reading Survey* and to record their levels of education. The *Family Reading Survey* included questions relating to the number of times that the parents read to their children, visits to libraries, and numbers of books in the home.

A selection of eight picture books (see Appendix for list of books) plus a *Parents' Handbook* (Barrs & Ellis, 1998) was provided for each experimental family, as well as a *Reading Together Record* form.

The books were selected from the *Reading Together Series* (Barrs & Ellis, 1998). A variety of genres were selected including rhyme, fictional stories, factual texts, alphabet books, and traditional songs. The books selected fulfilled the requirements of the study in that they provided for development of rhyme awareness (phonological awareness), alphabet knowledge, alliteration (phonemic awareness), and rich vocabulary. The selection of the alphabet book was influenced by Murray, Stahl and Iveys's (1996) study that showed greater gains were made when children used alphabet books with example words to demonstrate sound values.

Experimental families were asked to read each book with their child at least five times during the eight-week intervention. Elley (1989) advocated this method as being the most successful for improving vocabulary skills.

The families in the control group were not given any books or instructions for dialogic reading. Pre-testing of the experimental and control children took place at the initial meeting. A parent was present during testing, which in hindsight was not a good idea, as is discussed in the results section.

Data analysis procedures

Multivariate repeated measures analysis of variance procedures were used to compare the experimental and control groups on pre- and post- test measures of pre-reading skill. The method proposed by O'Brien and Kaiser (1985) was used whereby difference scores are calculated and then used in a regular multivariate analysis of variance (MANOVA).

Because of the small numbers in each group, we were not able to explore interactions between various characteristics of the children and changes in pre-reading scores across time. Instead, we examined total group differences, based on children's pre-test scores, according to age, gender, parent educational level, and which family member had a disability. For the age variable, children were classified as either (a) younger (50 to 60 months), or (b) older (61 to 76 months). For educational level, children's parents were classified as either having completed studies at (a) high school, TAFE, or less; or (b) at a tertiary level. The 'family member with a disability' variable had two levels (a) whether the person was a parent or other relative (such as a parent, grandparent, aunt, uncle, or cousin), or (b) a sibling. Separate MANOVAs were performed in which each of these four independent variables was crossed with the children's five pre-test scores.

Analysis of the qualitative data obtained from the interviews and written comments was a process in which initial reading of transcripts allowed preliminary impressions to be noted or formed into memos.

Data were searched for common themes as well as for differences. Codes were developed to apply to segments of the data so that themes could be organized in a meaningful way.

RESULTS

Differences in Tests of Pre-Reading Skills

Descriptive statistics for the children's scores on the five measures of pre-reading skill are shown in Table 1. The mean scores represent the difference between pre-and post-test scores. A MANOVA was performed to examine group differences, and based on the Wilks' Lambda criterion, $\lambda = .05$, there was a significant multivariate result, $F(5, 28) = 3.36, p = .02$. The univariate results presented in Table 1 indicate that the experimental and control groups differed significantly only on the PPVT score, with the control group making a greater gain than the experimental group. The close to significant results for Alphabet Knowledge and Concepts of Print should also be noted, particularly given the size of the eta-squared (η^2) statistic, whereby .01 indicates a small difference, .06 a medium difference and .14 a large difference. Overall, the experimental group made a greater gain than the control group on Concepts of Print, but the reverse was the case for Alphabet Knowledge.

Whole group differences according to selected characteristics of the children and their families

There were no significant age differences, and no linear trends, across the six measures of pre-reading skills. Girls achieved significantly higher scores than boys on Rhyme, $F(1, 32) = 4.57, p = .04$; Concepts of Print, $F(1, 32) = 5.31, p = .03$; and Initial Consonants, $F(1, 32) = 6.49, p = .02$. In addition, there was a trend for girls' scores on the other measures to be higher, although differences were not significant. Higher educational levels were associated with significantly higher scores on the PPVT, $F(1, 32) = 3.59, p = .02$; Alphabet Knowledge, $F(1, 32) = 4.00, p = .05$; Expressive Vocabulary, $F(1, 32) = 4.09, p = .05$; and Initial Consonants, $F(1, 32) = 8.45, p < .01$. Though not significantly so, Rhyme, and Concepts of Print scores were also higher for children of parents who had completed a tertiary education. There were no significant differences according to which member of the family had a reading disability.

Table 1: Mean difference scores and ANOVA results for the experimental and control groups on tests of pre-reading skills

Test	Experimental		Control		F	p	η^2
	Mean ^a	SD	Mean ^a	SD			
PPVT	.76	4.59	5.18	5.40	6.59	.02	.17
Rhyme	2.12	3.37	2.53	2.32	.17	.68	.01
Alphabet Knowledge	.18	3.07	2.12	3.46	2.99	.09	.09
Concepts of Print	2.00	2.42	.41	2.55	3.46	.07	.10
Expressive Vocabulary	1.88	2.91	1.05	2.14	.88	.35	.03
Initial Consonant	1.82	3.86	1.12	2.98	.36	.56	.01

^aTime 2 minus Time 1 mean scores.

Table 2: Whole group pre-test scores according to selected characteristics of the children and their families

	PPVT		Rhyme		Alphabet		Print		Ex.Voc		Init. Cons.	
	1	2	1	2	1	2	1	2	1	2	1	2
Age	61.4	62.9	4.9	5.4	16.9	17.8	16.2	14.5	19.0	17.8	3.0	3.1
Gender	64.8	60.3	6.4	4.2 *	17.9	14.2	9.0	6.4*	19.5	17.7	4.3	3.2*
Ed. Level	58.6	67.3*	5.0	5.4	13.8	18.4*	6.9	8.2	17.5	19.7*	1.6	5.14**
Family Member	61.5	64.4	5.5	4.9	14.2	16.7	7.0	8.0	18.3	18.6	3.5	2.7

Note:

* indicates the pair of means are significantly different, $p < .05$; ** $p < .01$.

Age: 1 = younger, 2 = older;

Gender: 1 = girls, 2 = boys;

Ed. Level: 1 = high school, TAFE, or less; 2 = tertiary,

Family Member: 1 = parent or other relative, 2 = sibling.

QUALITATIVE RESULTS

Several themes emerged from the analysis of the interview and written comment data. The themes are described and illustrated with examples in the following sections.

Family involvement/modelling

The dialogic reading program involved not only the parent who made the initial contact (in 90% of the cases this was the mother) but also other members of the family. Typical of family involvement were such comments as:

Father reads every night. Our daughter loves it ...would read six books if she could!

She has five or six books on her bed for the morning when father reads.

It's great! She can read some by herself. Her older sister reads the books to her.

The importance of establishing a home environment in which reading is valued appears to have been recognised by many of the families in this study. Parents also showed their children how reading is valued in the home by modelling the process to them. For instance:

C enjoyed reading together each night. It is now a fairly entrenched habit. He likes to hear the story first, then takes the book and will try to read it back to me.

Importance of variety

Parents' comments suggested that it is important to provide a variety of books for young children; whilst some children loved the rhyme books others were not at all keen on them. Thus the inclusion of different genres in the program design was confirmed as an important element. For instance, different parents reported:

He likes *The Mother Goose* and *I Spy ABC* because he knows them. He doesn't like *Night-night Knight*.

Rhyme books are his favourite.

S has chosen *I Spy ABC* and *Night night Knight* as the two books to keep—I think because they are more of a challenge to him.

Familiarity through repetition

Repetition has long been recognized as an important element in learning, particularly in the initial stages, and this principle was built into the study design. Parents were asked to read each book at

least five times with their children. Parents commented that this element of repetition helped children to become more familiar with the books, thereby increasing their feelings of confidence and competence in the reading process.

Beans on Toast: we read it four times in one session! Loves this book.

K read to me after the third time I had read it to her.

Pleasure/play

The reading process became for many of the children a form of play such as in the game I-Spy, or in the acting out and singing of the stories. Each book contained ideas for such extension that appear to have been helpful to the parents. In general, enjoyment in learning is an important motivational element that teachers aim to include, so it was pleasing to see the following comments:

Walking Through the Jungle: On the second reading we acted out the story.

The Wheels on the Bus: Sang with me as I sang, and loved it.

I Spy ABC: On the first attempt he sprang into two rounds of the alphabet song.

He loves the rhyme books. He plays I-Spy in the car.

N wanted to try and read it and she thought the book was funny.

Skill development

There were a number of comments that demonstrated the development of specific literacy skills such as phonemic awareness, concepts about print, use of cues, links between reading and writing, and alphabet knowledge.

This was one of C's favorites. He loved to say the sounds.

N looks at books differently now, even other books from the library. He looks at the pictures to see what the story might be about.

He loves the rhyme books. He plays I-Spy in the car.

Great! She recites *One, Two, Flea* and her interest in writing has developed.

We haven't spent much time on it but we have done some concepts about print with *Wheels on the Bus*.

Memorisation positive/negative

The process of memorisation has both positive and negative aspects to it as a strategy for learning.

On the positive side, memorisation in reading can help children to develop both a sight vocabulary and confidence in their reading abilities. *One, Two, Flea*: S loved this book and knows both stories off by heart. Recited *One, Two, Flea* with a little prompting from his sister.

On the other hand, it is important to remember that if the child's understanding of the reading process does not progress beyond memorisation, then alternative strategies will not be developed to cope with increasing decoding demands. Too often parents assume that their child is decoding the words when they are, in fact, memorising them. This can lead to some children not being identified as having problems with reading in the early stages. How often do we hear "But they were reading wonderfully at the start of school and now they are in Reading Recovery."

DISCUSSION

Although the only significant gains made by the experimental group related to concepts of print, they could be considered valuable in light of the ease and low cost of the intervention. In practical terms, families of children at risk can be given a selection of appropriate books, written instructions and/or videotaped instruction. The program can be run from a central location (e.g., a preschool) and materials can be recycled amongst families.

There are several possible explanations for the disappointing non-significant results on the other measures of pre-literacy skills for the experimental group. First, the very low numbers in the study made statistical analysis of the results somewhat unreliable. The power of a statistical test to detect significant and meaningful differences is reduced when the sample size is small (Cohen, 1988), and thus the chance of making a Type II error is increased. The fact that the eta squared statistic indicated small differences in favour of the experimental group on the initial consonant and expressive vocabulary measures needs to be remembered. Second, the relatively short time-frame for the intervention may have mitigated against changes occurring.

It may simply be that to obtain real change in pre-literacy skills takes longer than eight weeks. Third, there is the issue of fidelity of the implementation. Questions could be raised regarding the families' commitment to the intervention and whether they followed the written and videotaped instructions as was intended. More stringent methods may have been required to have obtained family commitment to the intervention program, perhaps a longer period of training would have been beneficial or greater contact with families over the eight-week period to provide them with support in the face of any difficulties they were confronting.

The fact that overall children in the control group made gains on several of the measures may be due to inadequacies in the testing procedure. As noted in the Method section, the parent/s were present when the testing took place. It is conceivable that they were alerted to the fact that dialogic reading could enhance certain aspects of prereading skills and subsequently could have emphasised each skill during incidental reading. For example, if vocabulary was being tested, then parents may have concluded that this was a useful thing to emphasise when reading with your child. It would be wonderful if we could utilize this hypothesis and just alert parents to the ideas, instead of having to instruct them on how to incorporate such practices into their reading!

A similar study (Jordan, et al., 2000) failed to show effects of dialogic reading on vocabulary as measured by the PPVT-R. The researchers suggested that the PPVT-R was designed to test incidental vocabulary acquisition and not to reveal curriculum effects. They advised using a vocabulary test that assessed knowledge of the specific vocabulary domains targeted in the parent-child activities. Similar findings and recommendations were made by Hargrave and Senechal (2000). Consideration was given to these recommendations when designing the expressive vocabulary test for the present study. However, there were insignificant results for this measure even though the words were selected from the books that were read with the children. A possible explanation for this is that children were close to ceiling and were already familiar with the vocabulary in the test. Another problem was encountered in selecting suitable pictures to represent the selected words. For example, for 'jungle', many of the children offered forest or bush as responses for this picture. In retrospect it would have been better to have designed a receptive vocabulary test similar to the PPVT but still using vocabulary from the books in the programme.

Disappointing results for measures of phonological awareness (p/a) were reported in an earlier pilot study (Fielding-Barnsley, 2000), and again the present study shows no significant results for these measures. This is an important issue, as phonological awareness is an area of concern for children at risk of reading failure. Genetic studies have reported phonological deficit as being genetic in origin (Castles, Datta, Gayan & Olson, 1999; DeFries, Alarcon, & Olson, 1997). Leseman & deJong (1998) made the decision not to test their 4-year old participants on measures of phonemic awareness. They considered that 4-year olds would be too young to have developed p/a and that most tasks measuring p/a would be too difficult for them. However, similar measures to those used in the present study were used successfully in studies by Byrne and Fielding-Barnsley (1993, 1995), but with children not identified as being at risk. Results from a study being conducted at present by Brian Byrne (personal communication, December 2000) also show disappointing results for training p/a in a similar group of children. The solution may be to offer these children explicit instruction by trained specialist teachers when they first enter school.

In light of the moderate gains reported we need to ask the question whether dialogic reading is perhaps more strongly related to language growth than to reading skills per se. Bus, van Ijzendoorn and Pellegrini (1995) hypothesised in their meta-analysis that "Book reading may affect children's understanding of the written language register more than it affects the mechanical skills of encoding and decoding print involved in reading" (p.5).

For example the written language register is very different from that of the spoken language. Children will develop an understanding of the complex syntax of written language during dialogic reading but this is a very difficult concept to measure.

As evidenced in the parental observations, children will show improved attitudes to books and reading when positive role models are established. Again, apart from observational data, this is a very difficult area to measure.

CONCLUSION

Whilst it is acknowledged that children from families with a known reading disability will be at risk of developing reading problems (Gilger, Pennington & DeFries, 1991), it is important to acknowledge that much can be done to alleviate these problems. By building on the identified strengths of each child and scaffolding areas of weakness it should be possible to assist these children. The most important factor is to implement early intervention that includes the family (Slavin, Karweit & Wasik, 1994).

Even though gains in home literacy outcome measures were small in this study, and in studies reported elsewhere (Bus, van Ijzenoorn & Pellegrini, 1995; Scarborough & Dobrich, 1994) it is a cost effective approach that helps to promote family involvement in the reading process.

Well-implemented parental programs have resulted in 2000 young adults achieving later school competence, avoiding assignment to special education, and developing positive views of themselves (Lazar & Darlington, 1982). This is reason enough to continue with well- designed early parental involvement programs. Perhaps we need to take note of one of the national goals of education in America that "All children in America will start school ready to learn and every school in America will promote partnerships with parents" (Ysseldyke, 1999, p.136). Parents are usually willing partners in the process of teaching children to read but they do need to know how to help their children.

REFERENCES

- Adams, M.J. (1990). *Beginning to read: thinking and learning about print*. Cambridge: MA. MIT Press.
- Arnold, DS, & Whitehurst, GJ (1994). Accelerating language development through picture book reading. In D. Dickinson (Ed.), *Bridges to literacy: Approaches to supporting child and family literacy* (pp. 103-128. Cambridge: MA: Basil Blackwell.
- Burgess, S. (1997). The role of shared reading in the development of phonological awareness: A longitudinal study of middle to upper class children. *Early Child Development and Care*, 127-128, 191-199.
- Bus, AG, van Ijzenoorn, MH & Pellegrini, AD. (1995). Joint book reading makes for success in learning to read: A meta-analysis on intergenerational transmission of literacy. *Review of Educational Research*, 65, 1-21.
- Byrne, B, & Fielding-Barnsley, R. (1993). Evaluation of a program to teach phonemic awareness to young children: A one-year follow-up. *Journal of Educational Psychology*, 85, 104-111.
- Byrne, B, & Fielding-Barnsley, R. (1995). Evaluation of a program to teach phonemic awareness to young children: A 2-and 3-year follow-up, and a new preschool trial. *Journal of Educational Psychology*, 87, 488-503.
- Byrne, B, & Fielding-Barnsley, R. (2000). Effects of preschool phoneme identity training after six years: Outcome level distinguished from rate of response. *Journal of Educational Psychology*, 93, 659-667.
- Cardon, LR, Smith, SD, Fulker, DW, Kimberling, WJ., Pennington, BF & DeFries, JC (1994). Quantitative trait locus for reading disability on Chromosome 6. *Science*, 266, 276-279.
- Castles, A, Datta, H, Gayan J, & Olson, RK (1999). Varieties of developmental reading disorder: Genetic and environmental influences. *Journal of Experimental Child Psychology*, 72, 73-94.
- CIERA (2000). 10 principles: Improving the reading achievement of America's children. <http://www.ciera.org/ciera/information/principles/>
- Clay, MM (1979). *Stones – The concepts about print test*. Exeter: NH: Heinemann.

- Cohen, J (1988). *Statistical power analysis for the behavioural science*. Hillsdale, NJ: Erlbaum.
- DeBaryshe, BD (1993). Joint picture-book reading correlates of early oral language skill. *Journal of Child Language*, 20, 455-46.
- DeFries, JC, Alarcon, M., & Olsen, RK (1997). Genetics and dyslexia: Developmental differences in the etiologies of reading and spelling deficits. In C. Hulme & M. Snowling (Eds), *Dyslexia: Biology, Cognition, and Intervention* (pp. 20-37). London: Whurr Publishers Ltd.
- DeFries, JC, Vogler, GP. & LaBuda, MC (1986). Colorado Family Reading Study: An Overview. In J.L. Fuller & E.C. Simmel (Eds), *Perspectives in Behaviour Genetics* (pp. 29-56). Hillsdale, NJ: Erlbaum
- Department of Employment, Education, Training and Youth Affairs (1998). *Literacy for All: The Challenge for Australian Schools*, Australian Schooling Monograph Series No. 1.
- Dunn, LM, & Dunn, LM (1997). *Peabody picture vocabulary test-revised*. PPVT-111 Circle Pines: MN; American Guidance Service.
- Elley, WB (1989). Vocabulary acquisition from listening to stories. *Reading Research Quarterly*, 24, 174-187.
- Fielding-Barnsley, R.O. (2000). Beginning reading instruction: Towards levelling the playing field. *Australian Journal in Early Childhood Education*, 7, 1-9.
- Gilger, JW, Pennington, BF, & DeFries, JC (1991). Risk for reading disability as a function of parental history in three family studies. *Reading and Writing*, 3, 205-218.
- Hargrave, AC, & Senechal, M. (2000). A book reading intervention with preschool children who have limited vocabularies. The benefits of regular reading and dialogic reading. *Early Childhood Research Quarterly*, 15, 75-90.
- Jordan, JE, Snow, CE, & Porche, MV (2000). Project EASE: The effect of a family literacy project on kindergarten students' early literacy skills. *Reading Research Quarterly*, 35, 524-546.
- Kame'enui, J, & Simmons, DC (1999). Beyond effective practices to schools as host environments: Building and sustaining a school-wide intervention model in beginning reading for all children. *The Australasian Journal of Special Education*, 23, 101-127.
- Lazar, I, & Darlington, R. (1982). 'The lasting effects of early education: A report from the Consortium for Longitudinal Studies', *Monographs from the Society for Research in Child Development*, 47, 2-3.
- Leseman, PPM, & deJong, PF (1998). Home literacy: Opportunity, instruction, cooperation and social-emotional quality predicting early reading achievement. *Reading Research Quarterly*, 33, 294-317.
- Macleod, FJ (1996). 'Does British research support the claims about the benefits of parents hearing their children read regularly at home? A closer look at the evidence from three key studies'. *Research Papers in Education*, 11, 173-199.
- McCormick, C, & Mason, JM (1986). Intervention procedures for increasing preschool children's interest in and knowledge about reading. In H. Teale and E. Sulzby (Eds.) *Emergent literacy, Writing and reading*. (pp. 90-115). New Jersey, Ablex Publishing Corp.
- Murray, BA, Stahl, SA., & Ivey, MG (1996). Developing phoneme awareness through alphabet books. *Reading and Writing: An Interdisciplinary Journal*, 8, 307-322.

National Research Council Report (1998). Preventing Reading Difficulties in Young Children. Committee of the Prevention of Reading Difficulties in Young Children, Washington, DC. National Academy Press.

O'Brien, RG, & Kaiser, MK (1985). MANOVA method for analysing repeated measure designs: An extensive primer, *Psychological Bulletin*, 97, 31-333.

Purcell-Gates, V, & Dahl, K. (1991). Low-SES children's success and failure at early literacy learning in skills-based classrooms. *Journal of Reading Behavior: A Journal of Literacy*, 23, 1-34.

Robbins, C, & Ehri, LC (1994). Reading storybooks to kindergarteners helps them learn new vocabulary words. *Journal of Educational Psychology*, 86, 54-64.

Saracho, ON (1997). Perspectives on family literacy. *Early Childhood Development and Care*, 127, 3-11.

Scarborough, HS, & Dobrich, W. (1994). On the efficacy of reading to preschoolers. *Developmental Review*, 14, 245-302.

Salavin, RE, Karweit, NL., & Wasik, BA (1994). Preventing early school failure. Needham Height. MA, Allyn and Bacon.

Snow, CE, Burns, MS & Griffin, P (1998). Preventing reading difficulties in young children. Washington, DC. National Academy Press.

Sylva, K & Evans, E. (1999). Preventing failure at school. *Children & Society*, 13, 276-286.

Torgeson, JK, & Burgess, SR (1998). Consistency of reading-related phonological processes throughout early childhood: Evidence from longitudinal-cor relational and instructional studies. In J. Metsala & L. Ehri (Eds.) *Word Recognition in Beginning Reading*, Hillsdale, NJ: Lawrence Erlbaum Associates.

Tizard, J, Scofield, WN, & Hewison, J. (1982). Collaboration between teachers and parents in assisting children's reading. *British Journal of Educational Psychology*, 52, 1-15.

Wells, G. (1985). Preschool literacy-related activities and success in school. In D. R. Olson, N. Torrance, & A. Hildyard (Eds.), *Literacy, language and learning. The nature and consequence of reading and writing* (pp. 229-255), Cambridge, UK: Cambridge University Press.

Whitehurst, GJ, Arnold, DH, Epstein, JN, Angell, AL, Smith, M, & Fischel, JE (1994). A picture book reading intervention in daycare and home for children from low-income families. *Developmental Psychology*, 30, 679-689.

Ysseldyke, J. (1999). Improving teaching and learning. *The Australasian Journal of Special Education*, 22, 133-147.

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Correspondence concerning this article should be addressed to:

Ruth Fielding-Barnsley

School of Learning and Professional Studies

Faculty of Education

Queensland University of Technology

Victoria Park Road,

KELVIN GROVE, QLD 4059, Australia.

Phone: (07) 3864 9615

Fax: (07) 3864 3987
Email: r.fielding-barnsley@qut.edu.au

APPENDIX: Books included in Family Intervention

Book	Author/s	Target Skill	Av. No. time read per child
Walking Through the Jungle	Julie Lacombe	Repetition/concept of word	8.3
One, Two, Flea	Allan Ahlberg & Colin McNaughton	Rhyming	10.5
I Spy ABC	Vivian French & Sally Holmes	Alphabet, alliteration and rhyme	7.2
Beans on Toast	Paul Dowling	Information, vocabulary	8.8
The Wheels on the Bus	Andy Cooke	Repetition / concept of word. Song to emphasise rhythm.	7.1
Night-night, Knight And Other Poems	Selected by Michael Rosen	Rhyming	6.0
Mother Goose	Michael Foreman	Rhyming	6.0
Incy Wincy Spider and Other Action Rhymes	Patrice Aggs	Rhyming (emphasising kinaesthetic)	5.3
Reading Together parents' Handbook	Myra Barrs & Sue Ellis	Extension activities and information on all above books.	5.3

These books are part of series of 24 books designed by Myra Barrs and Sue Ellis. The *Reading Together* series, along with the *Reading Together Parents' Handbook* is an ideal medium for shared book activities. Notes offering a range of support activities accompany each book in the series.
