What Works Clearinghouse

ies INSTITUTE OF EDUCATION SCIENCES

Interactive Shared Book Reading

Practice description

Interactive Shared Book Reading is a general practice that adults may use when reading with children and is intended to enhance young children's language and literacy skills. Typically, Interactive *Shared Book Reading* involves an adult reading a book to a child or a small group of children and using a variety of techniques to engage the children in the text. Two related practices are addressed in the What Works Clearinghouse (WWC) intervention reports on *Dialogic Reading* and *Shared Book Reading.*

Research

Two studies of *Interactive Shared Book Reading* met the WWC evidence standards and one study met the WWC evidence standards with reservations.[1] Together these three studies included over 100 preschool children from the Midwest and Florida, and they examined intervention effects on children's oral language, print knowledge, and early reading/writing. The majority of the children were from economically disadvantaged families and many were considered at-risk. This report focuses on immediate posttest findings to determine the effectiveness of the practice.[2]

Effectiveness

Interactive Shared Book Reading was found to have mixed effects on oral language, no discernible effects on print knowledge, and potentially positive effects on early reading/writing.

	Oral language	*Print knowledge*	*Phonological processing*	*Early reading/ writing*	*Cognition*	*Math*
Rating of effectiveness	Mixed effects	No discernible effects	N/A	Potentially positive effects	N/A	N/A
Improvement index[3]	Average: +3 percentile points Range: –20 to +17 percentile points	Average: –4 percentile points Range: –10 to +10 percentile points	N/A	Average: +26 percentile points	N/A	N/A

1. To be eligible for the WWC's review, the Early Childhood Education (ECE) intervention had to be implemented in English in center-based settings with children aged three to five or in preschool. One additional study is not included in the overall effectiveness ratings because it compared variations of *Interactive Shared Book Reading* interventions to each other, which does not allow the effects of *Interactive Shared Book Reading* to be determined. See the section titled "Findings for comparisons between variations of *Interactive Shared Book Reading*" and Appendix A5 for findings from this study.
2. The evidence presented in this report is based on available research. Findings and conclusions may change as new research becomes available.
3. These numbers show the average and range of improvement indices for all findings across the studies.

Additional practice information

Developer and contact

Interactive Shared Book Reading is a practice that does not have a single developer responsible for providing information or materials. The interventions described in this report were developed by the study authors and are not available for distribution through a common developer. Readers interested in using *Interactive Shared Book Reading* practices in their classroom can refer to sources available through internet searches for information. A list of examples follows, although these sources have not been reviewed or endorsed by the WWC:

- "Strategies to Promote Emergent Literacy:" http://www.cfchildren.org/wwf/researchrvw/strategies.
- "Reading and Talking Together About Books:" http://www.emsc.nysed.gov/evenstart/parentinged/lessons/scale2/LII2_2.doc.
- Reading Rockets' Roots of Reading: Meet the Experts: http://www.pbs.org/launchingreaders/rootsofreading/meettheexperts_2.html.
- Stern Center for Language and Learning: http://www.sterncenter.org/BBsharedbookreading.htm.
- Royal Children's Hospital, Melbourne "Community Pediatric Review:" http://www.rch.org.au/emplibrary/ccch/CPR_Vol_13_No_1.pdf.
- Early Childhood Research & Practice Journal article: http://ecrp.uiuc.edu/v7n2/heisner.html.
- Child Trends' Poster presented at Head Start's 7th National Research Conference June 28, 2004: http://65.242.47.55/Files//Child_Trends-2004_06_30_SP_EmergentLiteracy.pdf.

Scope of use

Information is not available on the number or demographics of children or centers using this practice.

Teaching

In center-based settings, *Interactive Shared Book Reading* can be used by teachers with individual children or in small and large group settings. In a typical *Interactive Shared Book Reading* session, an adult reads a book to a child or a group of children and engages the children in the text through interactive techniques before, during, or after reading the text. For instance, before reading the book, the adult may ask the children to point to the title or make predictions about what might happen in the book. During book reading, the adult may ask questions, give explanations, pose prompts, or call on a child to answer a specific question. The adult may focus on modeling reading to the children and helping them with various aspects of print awareness, such as learning that text is read from top to bottom and left to right. After reading the book, the adult may discuss the book with the children and attempt to draw connections between events in the story and in the children's lives. The books chosen for reading often have large print, a small number of words per page, and illustrations throughout. Other factors to consider in selecting books include regional relevance (e.g., reading a story about children making snow angels may not be relevant to children in Southern California). Although *Interactive Shared Book Reading* practices vary in frequency, reading sessions are generally brief (e.g., 10 to 15 minutes) and occur several days a week. Specific teacher training on *Interactive Shared Book Reading* practices is not available.

Cost

Information is not available about the costs of teacher training and implementation of *Interactive Shared Book Reading* practices.

Research

Eight studies reviewed by the WWC investigated the effects of *Interactive Shared Book Reading* practices in center-based settings. Two studies (Lamb, 1986; Mautte, 1991) were randomized controlled trials that met WWC evidence standards. One study (McCormick & Mason, 1989) was a quasi-experimental design that met WWC evidence standards with reservations. One additional study met the WWC evidence standards (Justice & Ezell, 2002) and is included in this report; however, it compared two different variations of *Interactive Shared Book Reading* to each other, which does not allow the effects of *Interactive Shared Book Reading* to be determined. Therefore, this study is discussed separately and the findings are not included in the intervention ratings.[4] The remaining five studies did not meet WWC evidence screens.

Met evidence standards

Lamb (1986) included 36 three- to five-year-old low-income children from a day care center in Tallahassee, Florida. Lamb compared three intervention groups—read-aloud with language interaction, read-aloud only, and language interaction only—to a no-treatment comparison group participating in regular preschool activities. This WWC intervention report focuses on the comparison of oral language and print knowledge outcomes between the read-aloud with language interaction group (the *Interactive Shared Book Reading* condition) and the read-aloud only group (the comparison condition) with a total of 19 children. The comparison between the read-aloud with interaction group and the no-treatment comparison group was excluded from the review by the WWC because it did not meet WWC evidence screens.[5] The language interaction only intervention group was excluded from the WWC review because it cannot be used to isolate the effects of *Interactive Shared Book Reading.*

Mautte (1991) included 53 at-risk low-income four-year-olds from an inner-city Early Childhood Education center in Tampa, Florida. The children were primarily African-American and about half were female. Mautte compared two intervention groups—repeated reading with adult interaction and repeated reading without adult interaction—to a no-treatment comparison group participating in regular preschool pre-kindergarten curriculum activities. This WWC intervention report focuses on the comparison of oral language and print knowledge outcomes between the repeated reading with adult interaction group (the *Interactive Shared Book Reading* condition) and the repeated reading without adult interaction group (the comparison condition) with a total of 38 children. The comparison between the repeated reading with adult interaction group and the no-treatment comparison group was not used by the WWC because it did not meet WWC evidence screens.[6]

Met evidence standards with reservations

McCormick and Mason (1989) included 51 children from four Head Start classrooms in a small city in the Midwest. The children were primarily Caucasian. McCormick and Mason

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4. Some of the other studies that are included in the WWC review may appear to be head-to-head comparisons of *Interactive Shared Book Reading.* However, in each of the other studies, the comparison condition does not involve one or more of the key components of this practice (e.g., McCormick and Mason is a comparison between an interactive reading condition and a condition that involves interaction but not the book), allowing the WWC to determine the effects of *Interactive Shared Book Reading.*

5. The researcher implemented the intervention in all three groups but had no or minimal contact with the children in the no-treatment comparison group; therefore, the agent of the intervention was confounded with study condition for any comparison between an intervention group and the no-treatment comparison group (i.e. the effects of the individual providing the intervention cannot be separated from the effects of the intervention).

6. The researcher implemented the intervention in both groups but had no or minimal contact with the children in the no-treatment comparison group; therefore, the agent of the intervention was confounded with study condition for any comparison between an intervention group and the no-treatment comparison group (i.e. the effects of the individual providing the intervention cannot be separated from the effects of the intervention).

Research *(continued)*

compared print knowledge and early reading/writing outcomes for children in a Book Recitation group (the *Interactive Shared Book Reading* condition involving storybook reading with adult interaction about print) to children in a Story Discussion group (the comparison condition involving story telling with discussion of pictures and no print).[7]

Effectiveness

Findings

The WWC review of interventions for early childhood education addresses children's outcomes in six domains: oral language, print knowledge, phonological processing, early reading/writing, cognition, and math.[8]

Oral language. Lamb (1986) reported non-statistically significant findings for two measures in this outcome domain. The direction of the effects favored the comparison group for both measures and the effects were large enough to be considered substantively important and negative according to WWC criteria.

Mautte (1991) analyzed one measure in this outcome domain and found a non-statistically significant effect; however, the effect favored the intervention group and was large enough to be considered substantively important and positive according to WWC criteria.

Print knowledge. Lamb (1986) reported non-statistically significant findings for one measure in this outcome domain. The direction of this effect favored the comparison group but was not large enough to be considered substantively important by WWC criteria. In this study, the effect was indeterminate, according to WWC criteria.

Mautte (1991) reported findings for one measure in this outcome domain. The effect favored the comparison group, but was reported as not being statistically significant. Further, the effect was not large enough to be considered substantively important by WWC criteria. In this study, the effect was indeterminate, according to WWC criteria.

McCormick and Mason (1989) analyzed two measures in this outcome domain. They found no statistically significant effects, and the effects were not large enough to be considered substantively important by WWC criteria. In this study, the effect was indeterminate, according to WWC criteria.

Early reading/writing. McCormick and Mason (1989) found a statistically significant difference favoring the intervention group for one measure in this outcome domain,[9] and the WWC confirmed the statistical significance of this effect. In this study, the effect was statistically significant and positive, according to WWC criteria.

Rating of effectiveness

The WWC rates the effects of an intervention in a given outcome domain as: positive, potentially positive, mixed, no discernible effects, potentially negative, or negative. The rating of effectiveness takes into account four factors: the quality of the research design, the statistical significance of the findings,[8] the size of the difference between participants in the intervention and the comparison conditions, and the consistency in findings across studies (see the WWC Intervention Rating Scheme).

7. McCormick and Mason (1989) implemented a second phase of the intervention when the children were in kindergarten. This phase is not included in this review because it did not meet the criterion for sample age (i.e., children aged three to five or in preschool) for the WWC review of ECE interventions.
8. The level of statistical significance was reported by the study authors or, where necessary, calculated by the WWC to correct for clustering within classrooms or schools and for multiple comparisons. For an explanation about the clustering correction, see the WWC Tutorial on Mismatch. See Technical Details of WWC-Conducted Computations for the formulas the WWC used to calculate the statistical significance. In the case of *Interactive Shared Book Reading,* a correction for multiple comparisons was needed.
9. The authors also assessed three other measures in this domain. The word label and new book measures were excluded from this report because they did not have sufficient face validity or reliability. The taught book measure was excluded from this report because the Book Recitation group had been exposed to the book during the intervention but the Story Discussion group had not, so it was not a fair measure of intervention effects.

The WWC found *Interactive Shared Book Reading* to have mixed effects for oral language, no discernible effects for print knowledge, and potentially positive effects for early reading/writing

Improvement index

The WWC computes an improvement index for each individual finding. In addition, within each outcome domain, the WWC computes an average improvement index for each study as well as an average improvement index across studies (see Technical Details of WWC-Conducted Computations). The improvement index represents the difference between the percentile rank of the average student in the intervention condition and the percentile rank of the average student in the comparison condition. Unlike the rating of effectiveness, the improvement index is based entirely on the size of the effect, regardless of the statistical significance of the effect, the study design, or the analyses. The improvement index can take on values between –50 and +50, with positive numbers denoting favorable results.

The average improvement index for oral language is +3 percentile points across the two studies, with a range of –20 to +17 percentile points across findings. The average improvement index for print knowledge is –4 percentile points across the three studies, with a range of –10 to +10 percentile points across findings. The improvement index for early reading/writing is +26 percentile points for the one outcome in one study.

Findings for comparisons between variations of *Interactive Shared Book Reading*

The study described below does not contribute to the overall rating of effectiveness because the study compared two variations of *Interactive Shared Book Reading,* which does not allow the effects of *Interactive Shared Book Reading* to be determined. However, the WWC believes that the findings from this comparison may provide useful information to practitioners who are making a determination about the relative merits of different variations of *Interactive Shared Book Reading* practices. The WWC reports the individual study findings here and in Appendix A5.

Justice and Ezell (2002) included 30 three- to five-year-old children from low-income households attending a Head Start center in a rural Appalachian region of southeastern Ohio. The children were primarily Caucasian and half of them were female. Justice and Ezell compared print knowledge outcomes for two groups of children participating in different types of Interactive Shared Book Reading: a reading group focusing on print and a reading group focusing on pictures.

Print knowledge. Justice and Ezell (2002) analyzed six measures[10] in this outcome domain. The authors reported statistically significant differences favoring the reading group focused on print over the reading group focused on pictures for three of these measures (print recognition, words in print, and alphabet knowledge) and the WWC confirmed the statistical significance for two of these measures (print recognition and words in print). In this study, the difference between the two groups was statistically significant and positive, according to WWC criteria. The average improvement index for print knowledge is +30 percentile points, with a range of +12 to +46 percentile points across findings.

Summary

The WWC reviewed eight studies on *Interactive Shared Book Reading.* Two of these studies met WWC evidence standards and one study met WWC evidence standards with reservations. One additional study that met WWC evidence standards is described in this report but is not included in the overall rating of effectiveness. The remaining studies did not meet WWC evidence screens. Based on the three studies included in the overall rating of effectiveness, the WWC found mixed effects for oral language, no discernible effects for print knowledge, and potentially positive effects for early reading/writing. Across these three studies, the effects of *Interactive Shared Book Reading* were measured relative to the effects of other preschool reading

10. Justice and Ezell also reported a print awareness composite score, which was a sum of scores across the six measures described above; the WWC does not include the print awareness composite in this report because the WWC includes the six individual measures used to develop the composite.

The WWC found *Interactive Shared Book Reading* to have mixed effects for oral language, no discernible effects for print knowledge, and potentially positive effects for early reading/writing *(continued)*

activities (i.e., shared book reading and story discussion). Based on the study that compared *Interactive Shared Book Reading* with a print focus to *Interactive Shared Book Reading* with a picture focus, the WWC found potentially positive effects on print knowledge. The evidence presented in this report may change as new research emerges.

References

Met WWC standards

Justice, L. M., & Ezell, H. K. (2002). Use of storybook reading to increase print awareness in at-risk children. *American Journal of Speech-Language Pathology, 11*(1), 17–29.

Additional source:

Justice, L. M. (2000). An experimental evaluation of an intervention to stimulate written language awareness in preschool children from low-income households. *Dissertation Abstracts International, 61*(07), 2587A. (UMI No. 9980417).

Lamb, H. A. (1986). The effects of a read-aloud program with language interaction. *Dissertation Abstracts International, 47*(5-A). (UMI No. 8616894).

Mautte, L. A. (1991). The effects of adult-interactive behaviors within the context of repeated storybook readings upon the language development and selected prereading skills of prekindergarten at-risk students. *Dissertation Abstracts International, 52*(1), 122A. (UMI No. 9115887).

Met WWC standards with reservations

McCormick, C. E., & Mason, J. M. (1989). Fostering reading for Head Start children with Little Books. In J. Allen & J. M. Mason (Eds.), Risk makers, risk takers, risk breakers: Reducing the risks for young literacy learners (pp. 154–177). Portsmouth, NH: Heinemann.

Additional source:

McCormick, C. E., & Mason, J. M. (1986). Use of little books at home: A minimal intervention strategy that fosters early reading. Center for the Study of Reading: Technical Report No. 338 (ED 314742).

Did not meet WWC evidence screens

Kertoy, M. K. (1994). Adult interactive strategies and the spontaneous comments of preschoolers during joint storybook readings. *Journal of Research in Childhood Education, 9*(1), 58–67.[11]

Mason, J. M., Kerr, B. M., Sinha, S., & McCormick, C. (1990). Shared book reading in an Early Start program for at-risk children. *National Reading Conference Yearbook, 39,* 189–198.[12]

Morrow, L. M. (1988). Young children's responses to one-to-one story readings in school settings. *Reading Research Quarterly, 23*(1), 89–107.[12]

Reese, E., & Cox, A. (1999). Quality of adult book reading affects children's emergent literacy. *Developmental Psychology, 35*(1), 20–28.[13]

For more information about specific studies and WWC calculations, please see the WWC *Interactive Shared Book Reading* Technical Appendices.

11. All outcome measures were confounded with the conditions of the study (i.e., the conditions of elicitation were different for the intervention and comparison groups) and no outcomes could be used in the effectiveness ratings.
12. Complete data were not reported: the WWC could not compute effect sizes based on the information provided.
13. Complete data were not reported: the WWC could not compute effect sizes because the posttests were adjusted by both pretest and an intervention-by-pretest interaction term rather than by pretest scores alone.