Read-Alouds: Let's Stick to the Story

Stephen Krashen

Language and Language Teaching, issue 3, (Azim Premji University and the Vidya Bhawan Society) pp.1-7. 2013

Abstract

It has been claimed that when readers interrupt stories during read-alouds to point out aspects of print, children make better gains in print awareness, and eventually read better. I question these claims and the usefulness of interrupting stories in this way. Short-term gains are not evident for all aspects of print awareness, comparisons also make gains, and children exposed to print universally acquire print awareness. Also, long-term gains are small and have not been demonstrated for real reading for meaning. Finally, interrupting stories to reference print runs the risk of taking the focus off the story, and disrupting the pleasure and positive impact of read-alouds, which could have negative consequences for literacy development.

Reading aloud to children with no frills, just focusing on the story, is a highly effective way of promoting literacy. Children who are read to regularly, at home or at school, make superior gains in reading comprehension and vocabulary (Senechal, LeFebre, Hudson, and Lawson, 1996; Bus, Van Ijzendoorn, Marinus, and Pellegrini 1995; Blok 1999; Denton and West, 2002; Trelease, 2006).

Hearing stories read aloud is not only beneficial, it is pleasant. The empirical research confirms what most parents know: The vast majority of children say that they enjoy being read to (Walker and Kuerbitz, 1979; Mason and Blanton, 1971; Wells, 1985; Senechal, et. al. 1996).

It is therefore no surprise that research confirms that hearing stories and discussing stories encourages reading, which in turn promotes literacy development. The title of Brassell's paper says it all: "Sixteen books went home tonight: Fifteen were introduced by the teacher" (Brassell, 2003).

The advantages of read-alouds extend to second language acquisition: storybooks used in read-alouds provide a much richer source and language and cultural information than textbooks written for students of English as a foreign language (Wang and Lee, 2007).

The suggestion has been made that we can improve on reading aloud and make it even more effective: A series of studies done with four year-old children, it is claimed, shows that if readers direct children's attention to aspects of print, temporarily interrupting the story while reading aloud, the children develop print awareness more rapidly, resulting in better literacy development.

The results of "interruption" studies and some concerns

Table 1 provides a description of three of the major studies from this series (Justice & Ezell, 2000, 2002; Justice, Kaderavek, Fan, Sofka and Hunt, 2009). In these studies, in experimental groups, adults read to 4-year-old children and interrupted the reading in order to point out aspects of the print to the children, asking questions and making comments such as: ''Where should I read on this page?'' ''Do you know this letter?'' and ''This word is 'danger.'" The comparison groups were read to without being interrupted in this way. Each group heard the same number of stories.

Table 1: Three studies of the effect of interrupting reading aloud to focus on print

study	2000	2002	2009
reader	parent	researcher	teacher
size of group	one	1 to 3	class
duration	8 weeks	8 weeks	30 weeks
books read	8	8	30
times read, each book	2	3	4
sessions	16	24	120

2000: Justice and Ezell, 2000
2002: Justice and Excell, 2002
2009: Justice, Kaderavek, Fan, Sofka, & Hunt, 2009.

Table 2 presents the results of these three studies, presented as effect sizes, calculated according to procedures described by Morris (2008), which takes the pretest into consideration. (According to common practice, an effect size of .2 is considered to be small, .5 is considered to be medium, and .8 or more is large.)

The experimental (interrupted) children generally did better, and it some cases the effect sizes are substantial. But there are three aspects of these results that should be noted.

Table 2: Effect sizes

Measure	2000	2002	2009
words in print (1)	1.22	1.7	
alphabet knowledge	0.003	0.51	0.42
word segmentation (2)	0.26		
print recognition (3)	0.89	1.05	
print concepts (4)	0.67	0.91	
orientation/discrim.		0.02	
literacy terms		0.6	
name writing			0.39

(1) knowing words are separated by spaces
(2) knowing how many words are in an utterance
(3) ability to pick out print when part of illustrations
(4) eg where title of book is located

First, the impact was not seen on all measures. Second, the 2009 study lasted much longer, but the impact was not larger than in the previous studies, which may be due to the larger number of children being read to at the same time. Third, and most important, all the competencies tested appear to be acquired without instruction by all children who are exposed to print, and they are acquired quite early. Are there many children in first grade today who do not understand that words are separated by spaces (words in print) or who cannot tell you where the title of a book is located? The concept of "word" is firmly established by grade one (Knight and Fischer, 1992).

Justice et. al. are clearly interested in children developing these competencies early, before starting kindergarten, an example of the current enthusiasm to get children to master "pre-literacy" skills such as phonemic awareness and print awareness early, because of the belief that they will be behind forever if they don't (for counterarguments, see Krashen and McQuillan, 2007; Krashen, 2001a, 2002, 2011).

Even if an early start were essential or even advantageous, children in the comparison groups did in fact make progress, often showing improvement in a short time-span. This is confirmed in table 3, which shows the percent gains for both experimental and comparison groups. Note that the comparison groups do indeed improve. Note also that in many cases the experimental group scored only a few items more correct, and the difference in percent gained between the groups is modest.

Table 3: Raw scores, gains and percent gains for experimental and comparison groups,

Justice et al, 2000	items	preE	postE	preC	postC	gainE	gainC	Diff	% diff
words in print	12	3.6	7.7	3.6	4.9	4.1	1.3	2.8	23%
alphabet knowledge	20	17	17.6	15.6	16.6	0.6	0.8	0.2	1%
word segmentation	16	6.9	9.1	7.2	7.4	2.3	0.2	2.1	13%
print recognition	15	1.5	7.35	1.65	6.15	5.85	4.5	1.35	9%
print concepts	18	9.7	14.4	9.9	11.5	4.7	1.6	3.1	17%

Justice et al, 2002	items	preE	postE	preC	postC	gainE	gainC	Diff	% diff
print concepts	20	8.9	11.9	9.1	11	3	1.9	1.1	5.5%
print recognition	20	0.8	5.9	0.3	1.3	5.1	1	4.1	20.5%
words in print	20	1.5	7.4	2	3	6	1	5	25%
letter orientation/discrim.	20	14.9	17.8	13.3	15.5	2.9	2.2	0.7	3.5%
alphabet knowledge	20	6.7	10.9	6.8	7.8	4.2	1	3.2	16%
literacy terms	20	7.6	10	7.7	8.6	2.4	0.9	1.5	7.5%

Justice et al, 2009	items	preE	postE	preC	postC	gainE	gainC	Diff	% diff
alphabet knowledge	26	5.7	16.6	1.3	8.2	10.9	6.9	4	15%
name writing	7	3	5.8	3.4	5.3	2.8	1.9	0.8	11%

preE = pretest experimental group
postE = posttest experimental group
preC = pretest comparison group
postC = posttest comparison group
gainE = gain made by experimental group
gain C = gain made by comparison group
diff = difference in gain scores
% diff = diff/number of items on test

Does interruption to focus on print impact other aspects of literacy?

Interruption does not improve performance on tests of sentence structure, word structure and expressive vocabulary when these tests are given immediately after the treatment (Justice et al, 2009, 2010). Piastra et. al. (2012) claim, however, that when tests are given one and two years after treatment, when the children are five and six years old, there is a significant impact on tests of letter-word identification, spelling and "reading comprehension" (the reading comprehension test used was the Woodcock Passage Comprehension test, actually a vocabulary and sentence completion test; children are asked "to indicate which of several pictures are related in meaning, and also to select a picture or produce a word that accurately completes a given phrase or passage." p.813.)

Inspection of table 4 shows that the means for the experimental and comparison groups at the end of year 1 and year 2 are nearly identical. The differences, however, are statistically significant, and the effect sizes, while small, are positive.

Table 4: Results of post-tests given one and two years after treatment

Piastra et al al, 2012 HI-DOSE*	Items	1 yr post: E	1 yr post: C	t/p	ES
Letter-Word Identification	76	20.19 (27%)	21.19 (28%)	2.34 (.022)	0.26
Spelling	59	15.13 (26%)	15.5 (26%)	2.3 (.024)	0.21
Comprehension	47	8.68 (18%)	8.54 (18%)	2.72 (.008)	0.21

Piastra et al al, 2012 HI-DOSE*	Items	2 ry post: E	2 yr post: C	t/p	ES
Letter-Word Identification	76	32.8 (43%)	31.21 (41%)	2.34 (.022)	0.27
Spelling	59	21.23 (36%)	21.17 (36%)	3.19 (.31)	0.31
Comprehension	47	15.84 (34%)	15.64 (33%)	2.28 (.025)	0.26

*Piastra et al included both "hi-dose" (4 sessions per week with reference to print) and "low-dose" (2 sessions per week) treatments. Only hi-dose treatments are included here, as they are more comparable to treatments received by the comparison groups.
ES = effect size, calculated according to Morris (2008)

The reason for this unusual result is that Piastra et. al. controlled for pre-test differences on "preschool emergent literacy skills" (p. 816), that is, phonological awareness and alphabet knowledge. Indeed, comparisons were significantly better than experimental children in these areas. But experimentals were better on a vocabulary test, as shown in table 5. Had Piastra et. al. controlled for vocabulary knowledge, results would certainly have been different. (Note that the experimental group superiority on the pretest in vocabulary is equal to the comparison group's superiority in phonological awareness, both near d = .25, and is larger than the comparison group superiority in alphabet knowledge (d = -.18).

Table 5: Results of pre-tests

	N	Exp.	Comp.	ES
phonological awareness	400	2.21 (3.36)	3.21 (4.29)	-0.26
alphabet knowledge	400	7.82 (8.6)	9.38 (9.2)	-0.18
Vocabulary	396	92.77 (15.2)	89.08 (14.3)	0.25

ES = effect size (mean of experimental group – mean of comparison group)/pooled standard deviation

Interruptions so far have been shown only to produce small long-term effects that appear on tests that do not probe real reading for meaning, and the effects are only visible when researchers control for phonological awareness and knowledge of the alphabet. Researchers did not control for vocabulary knowledge. Despite claims to the contrary, it is not clear that phonological awareness at an early age is causally related to eventual reading ability (Coles, 2000; Krashen, 2001a, 2001b, 2002).

The Disruption Factor: The potential danger of interrupting reading aloud

Justice and Ezell (2000) provide data on the frequency of references to print. As presented in table 6, comments about print were directed at experimental children about four times per minute (comments, questions and requests about print), while nonverbal references (mostly pointing to print) took place nearly 11 times per minute.

Table 6: References to print per minute

	Exp.	Comp.
Verbal	4.04	0.13
Nonverbal	10.71	4.33

Verbal, eg: comments and questions about print
Nonverbal, eg. tracking print, pointing to print (7.91 for experimentals compared to 3.87 for comparisons).
From Justice and Ezell, 2000, table 3

Combining verbal and non-verbal, references to print occurred for experimental group children about 15 times a minute, or every four seconds. Verbal references occurred every 15 seconds. The average duration of each storybook reading was between five to seven minutes (Justice and Ezell 2002, p. 21). Thus, in each story, references to print occurred an average of about 75 to 105 times, with verbal references taking place about 20 to 28 times. In contrast, the comparison children hardly experienced any verbal comments, and nonverbal references to print were made a little more than 4 times a minute, an average of about 20 to 28 times per story.

Justice and Ezell (2000) were aware that excessive focus on print can take the pleasure from hearing stories: " … some parents were overzealous in their incorporation of references to print. Although parental use of these strategies resulted in improvement of children's early literacy skills, it is worth mentioning that overuse of these strategies may detract from children's enjoyment of shared storybook reading" (p. 266).

We don't know if referencing print every four seconds is excessive. There was no measure (or discussion) in any of the studies of how the children reacted to these interruptions, and no discussion, other than the brief section quoted just above, of whether focusing on aspects of print distracted the children from the stories or affected their enjoyment of the stories or interest in hearing more stories. Children's interest in stories and books is the crucial measure, as story reading stimulates an interest in voluntary reading, and continued voluntary reading insures continued progress in literacy development.

In other words: There is good evidence that reading for enjoyment is the source of most of our literate competence: Those who engage in more self-selected reading develop greater reading ability, a better writing style, more vocabulary, better spelling, and better ability to deal with complex grammatical structures (Krashen, 2004). There is also evidence, as noted earlier, that enjoyment of read-alouds is a crucial step toward development an interest in books and a reading habit.

Thus, if increasing the amount of print focus does in fact "detract from children's enjoyment of shared storybook reading," focusing more on print during read-alouds might disturb the development of literacy.

Conclusions

The gains seen in the studies reviewed here are in competencies that children universally develop without being interrupted while hearing stories read to them. Also, a clear long-term advantage for interrupting reading with references to print has not yet been demonstrated, and even if it did result in small gains, the treatment runs the risk of disrupting the role of read-alouds in developing literacy.

Any pedagogical recommendations that story-readers deliberately interrupt stories in order to reference print, based on the series of studies described here, is premature. For now, I suggest we stick to the story when reading aloud to children.

References

Blok, H. (1999). Reading to young children in educational settings: A meta-analysis of recent research, *Language Learning,* 49, (2): 343-371.

Brassell, D. (2003). Sixteen books went home tonight: Fifteen were introduced by the teacher. *The California Reader,* 36(3), 33-39.

Bus, A., M. Van Ijzendoorn, and A.Pellegrini. (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.

Coles, G. (2000). *Misreading reading: The bad science that hurts children.* Portsmouth: Heinemann.

Denton, K., and J. West. (2002). *Children's reading and mathematics achievement in kindergarten and first grade.* Washington DC: National Center for Educational Statistics.

Justice, L. M., & Ezell, H. K. (2000). Enhancing children's print and word awareness through home-based parent intervention. *American Journal of Speech-Language Pathology*, 9, 257–269.

Justice, L.M. and Ezell, H.K. (2002). Use of storybook reading to increase print awareness in at- risk children. *American Journal of Speech-Language Pathology, 11*, 17-29.
Justice, L. M., Kaderavek, J. N., Fan, X., Sofka, A., & Hunt, A. (2009). Accelerating preschoolers' early literacy development through classroom-based teacher-child storybook reading and explicit print referencing. *Language, Speech, and Hearing Services in Schools,* 40, 67–85.
Justice, L. M., McGinty, A., Piasta, S. B., Kaderavek, J. N., & Fan, X. (2010). Print-focused read-alouds in pre- school classrooms: Intervention effectiveness and moderators of child outcomes. *Language, Speech, and Hearing Services in Schools*, 41, 504–520.
Knight, C. and Fischer, K. 1994. Learning to read words: Individual differences in developmental sequences. Journal of Applied Developmental Psychology 13: 377-404.
Krashen, S. (2001a). Low PA can read OK. *Practically Primary,* 6(3), 17-20.
Krashen, S. (2001b). Does "pure" phonemic awareness training affect reading comprehension? *Perceptual and Motor Skills,* 93, 356-358.
Krashen, S. (2002). The great phonemic awareness debate. *WSRA Journal (Wisconsin Reading Association),* 44(2), 51-55.
Krashen, S. (2004). The *power of reading.* Portsmouth, NH: Heinemann Publishing Company, and Westview, CONN: Libraries Unlimited. Second Edition.
Krashen, S. (2011). Need children read "proficiently" by grade 3? Some possible misinterpretations of the "double jeopardy" study, *Language Magazine,* 11,(2), 24-27.
Krashen, S. and McQuillan, J. (2007). Late intervention. *Educational Leadership,* 65(2), 68-73.
Mason, G., and W. Blanton. (1971). Story content for beginning reading instruction. *Elementary English,* 48, 793-796.
Piastra, S., Justice, L., McGinty, A., and Kaderavek, J. 2012. Increasing young children's contact with print during shared reading: Longitudinal effects on literacy achievement. *Child Development,* 83 (3), 810-820.
Morris, S. (2008). Estimating effect sizes from pretest-posttest-control group designs. *Organizational Research Methods,* 11(2), 364-386.
Senechal, M., J. LeFebre, E. Hudson, and E. Lawson. (1996). Knowledge of storybooks as a predictor of young children's vocabulary. *Journal of Educational Psychology,* 88(1), 520-536.
Trelease, J. (2006). *The read-aloud handbook.* New York: Penguin. Sixth Edition.
Wang, F. Y., and Lee, S. Y. (2007). Storytelling is the bridge. *International Journal of Foreign Language Teaching,* 3 (2), 30-35. Available at http://www.tprstories.com/ijflt/