Interactive Computer Books: Do Children Make Use of the "Special Effects"?

STEPHEN KRASHEN

Are interactive computer books worthwhile? A recent study suggests they are not. Chu (1995) examined the reaction of three first grade children to interactive computer books, developed by Discis Knowledge Research. The children read the books off the screen, which also contained pictures, and could exercise the following options:

1. They could click on the pictures and see text identifying what was portrayed on the picture and/or hear a pronunciation of the label.
2. They could click on individual words for pronunciation and/or an explanation of the word's meaning.
3. They could click to hear portions of the story or the entire story read to them.
4. They could click to turn pages.

Chu's analysis strongly suggests that the children treated the interactive computer books as real books. They found them "exciting, meaningful, and... enjoyable" (p. 301). Chu suggests that the interactive computer books could be "similar to real books except for the special effects" (p. 362).[1]

Chu's careful analysis of the use of the special effects provided by the computer, however, shows that the effects were probably irrelevant to the children's enjoyment of the books they read. The three students read five books.[2] Their use of the computer options steadily decreased until, by the time they got to the fifth book, the only option they used was the click for page turning. In other words, as Chu notes, the novelty effect wore off.

Table 1 is adapted from Chu's table 2 and presents clicks done by each boy for each book, not counting clicks used for page-turning.[3] Note that the data for all three boys

TABLE 1: **Use of special effects on the computer**

| boy | total clicks, not counting page turning | | | | |
	1	2	3	4	5
1	120	97	92	11	0
2	10	41	0	0	0
3	16	5	0	0	0

from: Chu (1995)

is similar: use of computer options other than page turning was zero by book five. It is important to point out that the boys did not read the same book five times; five different books were used.

In my view, these results show that computers are no better than real books. They are, however, a lot more expensive. Since a clear relationship has been found between reading ability and access to books (research reviewed in Krashen, 1993), as well as books in school libraries and reading ability (Elley, 1992; Lance, Welborn, and Hamilton-Pennell, 1993; Krashen, 1995), real books

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1. Chu did not use a control group to compare reactions to interactive computer books to real books. Nevertheless, Chu provides ample evidence that the children enjoyed the interactive computer books, and there is abundant evidence that children enjoy real books (e.g., see Trelease, 1995, Krashen, 1993). It would, however, be interesting to see which the children prefer, especially over a long term.

2. The books used were electronic versions of *The Tale of Peter Rabbit* (Potter), *Scary Poems for Rotten Kids* (O'Hulgin), *The Paper Bag Princess* (Munsch), *Cinderella* (Perrault), and *Benjamin Bunny* (Potter).

3. Clicking for page turning clearly declined after the first book:

Book	number of clicks for page-turning
1	20
2	5
3	6
4	5
5	5

STEPHEN KRASHEN *is a professor of education in the School of Education at the University of Southern California in Los Angeles.*

appear to be a much better investment than computers. (Interactive computer books are also a lot harder to carry around for casual reading at odd moments.)

Chu's study only looked at one version of interactive

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computer books. It can be argued that different interactive computer book systems have gimmicks and special effects that children do use. The evidence we have now, however, strongly suggests that our money is better spent on real books.

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