



home run research

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Accelerated Reader: Evidence Still Lacking

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In a previously published review of research on Accelerated Reading (AR), I concluded that there was no evidence supporting AR—that it had never really been properly evaluated, despite a plethora of studies.¹

AR consists of four components, which include providing interesting books, time to read (one hour per day), quizzes on the content of the books (with an emphasis on facts), and rewards for points earned on the quizzes. There is strong evidence that the first two components are effective: children who have access to interesting reading material and a time and place to read will read more and make more progress in literacy development.² There is no direct evidence that tests the efficacy of the third and fourth components.

A logical study would be to see how AR compares to a program containing only the first two components; for example, a “book flood” either with or without literature instruction. Such a study has not been done.

Here is an analogy: I invent a new drug, called KALM. It consists of sugar and an antidepressant. It is expensive, costing significantly more than the antidepressant alone. I have given it to a number of people and they say that they feel a lot better. Can I claim to have created a useful new product? Obviously not. It was the antidepressant that had the effect, not the sugar. People would save money by just taking the antidepressant. Moreover, there may be long-term harm in adding sugar to the diet.

In this note, I describe four recent evaluations of AR published in professional journals.

Three appeared since my review was published, and one had escaped my attention. None of the studies provides any clear evidence supporting the use of AR as a means of increasing literacy development or improving attitudes toward reading.

Melton et al. compared 322 fifth graders who did a year of AR with 270 comparison children who had regular instruction.³ All were considered “low” readers. The study divided the children into quartiles, based on pretest reading comprehension test scores. They reported no significant difference in gains in reading for the children in the lowest quartile. For the other

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three quartiles, comparison students significantly outperformed AR students. The comparison group superiority was present when raw posttest scores were used and also when posttest scores were adjusted for pretest scores, gender, and race.

Mallette, Henk, and Melnick compared AR use in two districts among fourth and fifth graders.⁴ In one district AR had been used since first grade and was the entire language arts program. In the comparison district, AR was used as an occasional supplement to a regular language arts curriculum. The study measured student attitudes toward reading using two different measures and reported that AR stu-

dents had more positive attitudes toward academic reading than comparisons did, but there was no difference for recreational reading, except that boys in the AR group who were low-achieving readers had "lower feelings about their reading."⁵

McGlenn and Parrish studied the impact of AR on ten fourth- and fifth-grade ESL students after a treatment of three months.⁶ Five students showed gains in reading level, ranging from 0.4 (four months) to 1.9 (one year, nine months). Reading level was determined by the teacher's evaluation of their comprehension before the treatment began and at the end by the actual books they were reading. Of the students who did not progress, two were identified as learning disabled, one lacked sufficient English competence, and one attempted to read books that were too hard. There was no comparison group.

Johnson and Howard investigated the impact of AR on low SES third, fourth, and fifth graders over one academic year. Those who were high AR users did quite well, gaining 2.24 years on a standardized test of reading. Average users gained 1.52 years, and low users gained .73 years. This looks good until we consider the fact that only 12 percent of the children were high users, and only 36 percent were average. In other words, AR did not succeed in encouraging reading for 52 percent of the sample. The low group read fewer than three books over the year (the average group read three to five). Johnson and Howard conclude that, "In spite of large amounts of encouragement, 52 percent of the students in the sample participated minimally in the program."⁸ Johnson and Howard did not include a comparison group.

Discussion

Three studies evaluated gains with AR. In one (Melton et al.), students in regular language arts programs did as well or better, and in another (Johnson and Howard), 52 percent participated only "minimally." There was no

Study	Grade	Duration	Comparison	Results
Melton et al. gain as much or more	4, 5	1 year	regular inst.	comparisons
Johnson and Howard gain more than expected, but few high users	3-5	1 year	none	high users
McGlenn and Parrish gains	4, 5 (ESL)	3 months	none	half show
Mallette et al. ence in attitudes toward recreational reading	4, 5	4-5 years	regular inst.	no differ-

Figure 1

Recent studies of the effectiveness of accelerated reader

comparison group. In a third study (McGlenn and Parrish), half of the students gained and there was no comparison group. In a fourth study (Mallette Wenk, and Melnick), there was no difference in attitudes toward recreational reading between students in a district dedicated to AR and students in one that used it far less.

Once again, no study used a comparison group that had equal access to books and equal time set aside for recreational reading. Thus we have no idea why gains were present in the subgroups of students who showed improvement: Was it the books and time for reading, or the quizzes and prizes? Was it the antidepressant or the sugar? Two studies used no comparison groups at all. Possibly those who thrived under AR were already dedicated pleasure readers. Also, no study has been done tracking the progress of AR graduates years after they leave the program. This is crucial, as Kohn has argued that rewards given for activities that are already pleasurable can send the message that they are not pleasurable; they turn play into work.⁹

This latest round of studies provides no reason for enthusiasm for AR (see figure 1 for a summary). ●

References

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