

# Accelerated Reading: Silent Sustained Reading Camouflaged in a Computer Program?

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According to Trelease (2001) there have been no significant change in students' reading scores between 1971 and 2000 despite numerous reform efforts, higher standards, twelve years under a Democratic administration, and eighteen years under a Republican administration. Clearly, there is a strong need to "fix" this reading problem. Over the past two decades computer-aided reading programs have been looked at as ways in which to remedy the reading crisis—and it is indeed a calamity. This paper provides an overview of recent research findings and papers, the majority culled from ERIC, regarding Accelerated Reader (AR), a system of computerized testing and record-keeping and its implications for reading instruction and school libraries.

## Accelerated Reader and the Reading Renaissance Program—The Basics

The AR program was developed by Judith Paul at her kitchen table in 1984. Paul's own children provided the motivation to develop the program. She wanted them to read good books so she incorporated behaviorist motivational techniques coupled with technology—her husband was a technologist—and AR was born (Stevenson and Camarata 2000). The Learning Information System known as AR is a software program designed to facilitate curriculum-based assessment of reading comprehension of real books by students and analyze and summarize the results (Topping and Fisher 2001; Vollands et al. 1999). According to the AR Web site:

Accelerated Reader (AR) is the world's most popular reading management software. Used in nearly 60,000 schools, Accelerated Reader provides teachers with an easy and effective way to monitor all forms of guided reading practice (<http://www.renlearn.com/ar/overview/>).

The main elements of AR are designed to:

empower the classroom teacher to motivate and manage extensive amounts of in-class reading practice time, to monitor student performance, and to intervene with individualized strategies for students. An hour of reading practice daily, in grade appropriate combinations of Read To, Read With, and Independent reading activities (Goodman 1999, 11).

Students using the program select a book of their own choosing (from the preselected AR list) and then take a multiple-choice comprehension quiz on the book at the computer. Students' reading selections (books) are determined by the number of AR quizzes the school has purchased. An average "economy kit" that contains 1,000 quizzes is currently priced at \$1,299.00, plus a .99¢ per student service support package. Schools can select from a list of book titles or create one from AR's current listing of over 73,987 books on the AR list written in English and 5,274 written in Spanish (Mabie 2005). Books are not included in the package and each school must make book purchases independently from AR. The company offers training kits, in-service training sessions, and follow-up professional development for an additional price. Schools can also purchase such supplemental materials as a technical support contract and a selection of motivational materials for students, including T-shirts, book bags, backpacks, and bookmarks (Education Commission of the States 1999).

## AR Selection Process

According to Heidi Mabie (2005), a spokesperson for Renaissance Learning (RL), RL quiz writers make book selections based up on whether there is enough content for them to create five good questions. Quiz writers also make their book decisions based upon the number of requests they receive for a particular book. RL quiz writers include people with educational backgrounds, teachers, and authors. When asked if librarians were also part of the team of quiz writers, Mabie said it was quite possible and likely.

According to an external memo sent to the author by Mabie, RL's goal is to "offer quizzes for as many books as possible that are likely to be in school libraries." In an effort to attain that goal they look for:

- Books that are frequently suggested by customers (through their quiz store on the Web)
- Books that are award winners
- Books receiving positive reviews (from such publications as *School Library Journal*, *Horn Book*, and *Kirkus*)
- Books that are recommended on reading lists (such as State Lists)
- Books written by popular authors
- Books in a continuing popular series (Renaissance Learning 2002).

Each book is assigned a point value based on the number of words it contains and its reading difficulty as determined from a formula based upon the Flesch-Kincaid readability index (Chall and Dale 1995; Flesch 1968, 1974) that considers the number of syllables in words and sentence complexity. Point values are calculated in the following fashion:

$$\text{AR points} = (10 + \text{reading level}) \times (\text{words in book} \div 100,000)$$

Every book has a maximum point value according to its length and difficulty. Each student self-tests and the computer awards points up to this maximum, according to the number of correct test responses (Topping and Fisher 2001). The computer also provides the teacher with an automatically updated analysis of scores for individuals or whole classes, indicating average percent correct, difficulty of books read, points earned, and diagnostic information (Topping and Fisher 2001). Diagnostic reports identify reading problems and allow teachers to intervene as appropriate. A literacy skills chart assesses each student's proficiency on twenty-four higher-

level reading skills, while a student report record provides a list of books read by each student and the scores for each quiz. Reports can also monitor the progress of groups or classes of students (Education Commission of the States 1999). Students take end-of-book tests that “are composed of admittedly literal-recall questions” (Institute for Academic Excellence 1998). There is only one specific correct answer to each question (Pavonetti, Brimmer, and Cipielewski 2002/2003, 308).

## Chronological Highlights of Accelerated Reader Research

Most studies of AR were initially conducted by the Institute for Academic Excellence, a subsidiary of Advantage Learning that provides research and professional development services. Several large developer-administered studies compared schools that purchased AR to schools that did not and found higher scores in multiple subject areas in a majority of schools using the program (Education Commission of the States 1999; Institute for Academic Excellence 1999; School Renaissance Institute 1999; Paul, VanderZee, Rue, and Swanson 1996; Paul, Swanson, Zhang, and Hehenberger 1997; Vollands, Topping, and Evans 1996; Peak and Dewalt 1994). A number of research studies have attempted to explore AR program’s effectiveness. The following section presents brief research highlights over the past six years. (For a more detailed presentation of AR research, see Krashen 2003).

Goodman (1999) evaluates AR as implemented at a middle school in Arizona for a one year period. The total population of 282 students (seventh and eighth graders) participated in the AR program. There was no experimental or control group to compare results. Goodman reports that students demonstrated a statistically significant improvement in vocabulary and a gain in comprehension in grade equivalent scores, but not statistically significant gains. There was no description of how the AR program was being instituted other than the grades themselves were divided to enable each half to meet in the library where they sat at tables and silent-read and had access to four computers to take AR quizzes.

Scott’s (1999) dissertation, involved students with learning disabilities to determine if the AR program had an effect on reading achievement and attitudes toward reading. A treatment group consisted of sixteen middle school students using AR. A control group of twelve middle school students did not use AR. The study took place over a four-month period and followed a pretest-posttest design. Students in both groups completed a STAR reading comprehension test at the beginning and the end of the study. Students were also administered the Estes Reading Attitude Scale at the beginning and end of the project.

Both groups in this study showed gains in attitude. However, the treatment group experienced a much higher percentage gain in attitude than the control group. Students in the treatment group (AR) spent varying amounts of time each day reading independently, however Scott admits, “It is unknown if the control group had regularly scheduled reading times” (45). This reflects a serious flaw in Scott’s methodology because it is impossible to compare students who are reading each day to students who may not have been reading at all.

Vollands, Topping, and Evans (1999) conducted a six month quasi-experimental action research evaluation of AR looking at two elementary schools in Scotland with at-risk readers. In each school there was an experimental and control group. Project A involved two sixth grade classes: the experimental AR class had twenty-seven students and the control non-AR class had twelve.

The experimental class had access to AR for six months from pre- to post-test, access to AR books, public displays of AR points gained by individuals and the opportunity to use points for tangible rewards (Vollands et al. 1999). For five weeks the experimental group received only fifteen minutes of reading time per day, thereafter this was increased to thirty minutes reading time, plus thirty minutes of being read to by the teacher. The control group had regular classroom teaching of reading, including thirty minutes of reading time per day throughout the experimental period. Students also had to complete written feedback to the teacher on each book they completed. A few extra books were provided for students of lower reading ability (Vollands et al. 1999).

In Project B the experimental class was a sixth grade class, but the control group was a fifth grade class. The sixth grade AR class had twenty-four students and had access to AR for six months, including AR books and public display of AR points, but no opportunity to exchange points for rewards. According to Vollands et al., the “quality of implementation of AR was adequate only towards the end of the project” (205).

The control group of twenty-six younger students were more able readers relative to their age than the AR class. The control group experienced regular classroom teaching supplemented by fifteen minutes of individual silent reading time each day and group oral reading on a “restricted selection of novels” (206). During the group reading sessions the teacher quizzed the students on the content of their reading. Homework assignments were given at the end of each book chapter with written comprehension quizzes. The teacher also created reading comprehension puzzles, worksheets, secret messages, and so on for the class to complete either in class or at home (Vollands et al. 1999).

The outcome assessment reading quotients for both the experimental and control group “showed a statistically significant increase over the experimental period, and the control group showed a larger gain from a higher baseline” (Vollands et al. 1999, 206). However, the authors of the study acknowledge that the study was imperfectly controlled and the classes in the two groups were not comparable.

Facemire’s (2000) masters thesis explores the effects of AR on the reading comprehension scores of third graders. Her nine-week study looks at two third-grade classes within the same school. The experimental group of fifteen students used AR and the control group of twenty-one did not. The STAR Reading program was used to pre- and post-test both the experimental (AR) and control (non-AR) group. The experimental group demonstrated significant gains on the STAR Reading program. Although this study involved few children and the time span of nine weeks was short, it demonstrates impressive results in favor of AR. The small sample size does pose problems. Krashen (2003) explains “the AR group . . . contained one child who gained 2.3 years in nine weeks! If we remove this ‘outlier’ the AR mean gain drops to about four months. The comparison group had one child who got much worse, dropping more than one year (1.1) in nine weeks. If we remove this outlier, the comparison mean increases to three and a half months” (12). Still, Krashen (2003) agrees that this study is a step in the right direction as “there is a comparison group, and an attempt is made to note the amount of reading done” (12).

Persinger (2000) designed an in-depth qualitative case study to investigate the AR program within its natural context to identify the factors that contribute to a successful AR program. The sample involved fifteen students and seven faculty members chosen from the third, fourth, and

fifth grade. Most of the students Persinger (2000) interviewed “seemed to read for the recognition their achievement would bring them through the extrinsic rewards both for themselves and their classes” (34). The majority of participants interviewed were happy with AR. The students enjoyed the competitive spirit surrounding AR.

Persinger reported that it was troublesome that some teachers “excluded their remedial reading students from class participation” (34). According to Persinger, teachers felt that including these students would hinder the motivation of their other students by limiting their group’s AR success and points. Persinger (2000) was bothered by the limited choice of reading materials. “Only the part of the collection for which the school could afford AR tests circulated among the students (34).

Teachers liked the ability to control the AR records of their students from their classroom computers. Although Persinger (2000) is not convinced that “AR is or should be the answer to creating a reading community within the school,” Persinger believes “it certainly can contribute to fostering that community in a beneficial way if used with due consideration to the advantages and disadvantages of creating a system of rewards and competition” (34). Persinger recommends the following:

- Teachers should decide on the degree of competitiveness they will encourage
- Teachers and students should be given the chance to opt out of the program without penalty
- Efforts should be made to encourage students to build more internal motivation for reading

Stevenson and Camarata (2000) provide a point-by-point comparison of AR program and the whole language process. They begin by stating that both approaches employ good children’s literature but that is where the similarities abruptly end. Stevenson and Camarata explain that AR is computer-centered and limited to specific books that restrict children’s reading of current recently published books. The whole language is child-centered to help teachers develop a learning environment suited for each child, whereas the child in AR learns that reading is an isolated and competitive activity unconnected to the curriculum. “Reading means correctly answering questions generated by a computer and earning points. . . .” (10). “The Accelerated Reader Program, which depends on technology for delivery, controls both the students and their teachers, while the whole language process allows students and teachers the flexibility to choose their focus” (8).

Biggers (2001) voices concern over the “apparent erosion of well-supported balanced literacy programs due to the adoption of technology such as Accelerated Reader (AR)” (72). She questions the validity of AR’s readability index which does not take any research into reading interest into account. Biggers questions AR’s focus on external motivation and control that she feels fosters competition, explaining that “students who are motivated by competition also show a high degree of reading avoidance” (73) especially for more challenging reading materials or reading outside of the school environment.

One of the most problematic aspect of AR for Biggers is the fact that AR is not an instructional program that provides for differentiation—“there is no literacy instruction to differentiate in AR” (73).

Biggers (as Krashen does in 2003) provides a summary and brief critique of research that Advantage Learning Systems Web site (now Renaissance Reading) lists as “scientific research” in support of AR. In brief she states that of the sixty-four “scientific research” reports in support of AR, twenty-nine are district or school evaluations of AR, sixteen are the company’s own evaluations leaving only nineteen independent studies. Of those nineteen, “five were authored or coauthored by K. J. Topping, who coauthored one of the listed articles with T. D. Paul, the spouse of AR’s creator and the company’s chief executive officer, and who has another article cross-referenced with a company report” (74). Of the remaining fourteen, Biggers explains that ten are campus or district implementation reports, with only one reporting a control group. Two other independent reports cite AR as only one of many components in a comprehensive reading program. She goes on to explain that the one university study appears linked with Advantage Learning Systems. The only study remaining is an independent graduate thesis with questionable results.

Biggers concludes by stating that it is interesting that “the use of a ‘computerized reading tool’ is never cited as a determining factor in the performance of high-achieving students or schools (74).

Kambarian (2001) in his dissertation, examined the effect of AR on the scores of selected at-risk students who were in the second through the sixth grade. The study included 141 students over a three year period at two Title I suburban schools.

Students from one elementary school (experimental group) who were exposed to AR in addition to a district basal reading series were compared to students (the control group) who only used the district basal reading series (albeit a new one). The study was conducted over a three-year period. An extrinsic reward system (AR store) was created to motivate the students in the experimental group to accumulate AR points earned from reading and passing AR tests. Kambarian (2001) acknowledges that “perhaps the most important component [for the experimental group] was incorporating silent sustained reading (SSR) for thirty minutes a day throughout the school using the books from the AR library as a supplement to basal reading instruction” (76). Another component created specifically for the teachers involved with the experimental group involved staff development and training designed to demonstrate to teachers how to provide periodic praise for students, and “intervention and remediation strategies” (76). The control group did not use AR, their teachers did not learn any curriculum strategies or remediation techniques, they did not implement SSR and they did not create an AR library. It goes without saying that to compare these two groups requires quite a leap of faith. One must pause to ponder the ethical issues of withholding reading materials, curriculum intervention, SSR, a library of books, and remediation from at-risk students for three years. As expected the at-risk group from the experimental school demonstrated the greatest rate of improvement with the youngest cohort of second through fourth grade students showing the greatest improvement or gain (Kambarian 2001).

Toro (2001), in her masters thesis explores AR with two second-grade classes (twenty and sixteen students) over a six-week time frame. She reports that the class of twenty students read books selected from the AR list and then took computer-generated quizzes on the readings. The other second grade class of sixteen students read independently at least thirty minutes each night over the same time period. This class did not take any quizzes on their reading. At the end of six weeks each student took a standardized reading comprehension test. Her findings suggest that no

significant difference in the reading comprehension level of those who experienced independent reading and those who experienced AR. There are serious limitations in this study including the limited time frame and the fact that the students received the reading assignments from the principal of the school and not the researcher.

Pavonetti, Brimmer, and Cipielewski (2002/2003), interested in exploring the claim that AR builds lifelong readers, investigated whether seventh-grade students who were exposed to AR during elementary school tend to do more reading of books than those who were not exposed to AR and thus *more likely* to continue higher levels of recreational reading in middle school. There were 1,536 students distributed in ten different middle schools who were used in the final analysis. The overall results of their study did not support the claim that AR creates lifelong readers. In fact, when the AR program was used in elementary school:

it does not result in middle school students who read more relative to those who did not use it. In fact, students who did not have AR in elementary school in these two districts are reading more relative to their AR-exposed peers. (Pavonetti, Brimmer, and Cipielewski, 2002/2003, 308)

Brown (2003) states that although reading-management programs have contributed to an increase in voluntary reading, there are “few reports . . . suggesting that AR programs enhance comprehension or are useful as a tool for reading instruction” (10). In fact, Brown continues “most of the AR quizzes appear to measure recall of factual information only” (10). It is important to note that since AR is a supplemental program used in conjunction with other reading programs “it is impossible to determine from the research how much academic gain is due to the program and how much is the result of other strategies” (Education Commission of the States 1999, 6).

## Implementation Inconsistency

In 2001 Topping and Fisher (2001) released a summary report which highlights a problem persistent in most AR studies—implementation inconsistency. In the majority of the AR studies this inconsistency centers upon insufficient time allocated for SSR (Toro 2001; Scott 1999; Vollands, Topping, and Evans 1999; Topping and Paul 1999; Kambarian 2001). Study after study reveals the importance of schools providing students longer periods for SSR. According to AR goal setting changes put into effect in June 2003 propose the following daily reading practice recommendations for independent readings:

- Elementary school—sixty minutes
- Middle school (sixth–eighth grade)—forty-five minutes\*
- High school (ninth–twelfth)—thirty minutes\*

\* *Students reading below grade level need at least sixty minutes of daily reading practice* (Renaissance Learning, [www.renlearn.com/goalsetting.htm](http://www.renlearn.com/goalsetting.htm) [Accessed Mar. 19, 2005])

Where sustained SSR maximums are implemented and where teachers monitor students and provide feedback and guidance in the selection of appropriate reading material students show

significant rates of improvement on achievement in reading (Topping and Fisher 2001, 29). SSR is the crucial variable that determines the success of AR and quite frankly *any* reading program. This has been documented by research for the past forty years—long before computer assisted programs came into being.

## The Importance of SSR

SSR first was proposed over forty years ago by Lyman C. Hunt, Jr. of the University of Vermont in the 1960s (Trelease 2001). Robert and Marlene McCracken, reading experts, formulated the following recommendations to structure SSR programs:

1. Children should read aloud to themselves for a limited amount of time.
2. Each student should select his own book magazine or newspaper.
3. The teacher or parent must read also in order to lead by example. This cannot be stressed too strongly.
4. No reports are required of the student. No records are kept (Trelease 2001).

In 1985, Anderson et al. released a national report, *Becoming a Nation of Readers* recommending that SSR be implemented into all American classrooms. The report explained that priority needed to be given to independent reading, for the more time students spent reading the greater their reading proficiency (Kirby 2003). Anderson et al. (1985) states “independent reading is more effective in developing reading ability than the skill and drill workbooks and practice sheets normally associated with a basal reading program” (75–76). Originally SSR called for a school-wide daily reading time for teachers and students in which reading material was not monitored nor were students evaluated on their reading. Manning-Dowd (1985) reviewed research on SSR and concluded that SSR has a positive effect on reading comprehension and reading attitudes at all grade levels.

Pilgreen (2000) explains the importance of SSR, and explains eight crucial features needed to set up and properly maintain a sustained silent reading program in an educational setting. They include:

1. **Access.** Students need access to traditional and nontraditional reading materials—books, magazines, newspapers, and other reading materials—in the classroom and at home.
2. **Appeal.** Students need to be surrounded with appealing and provocative reading material that they want to read.
3. **Conducive environment.** Students should have a comfortable place in which to read.
4. **Encouragement.** Teachers and students need a variety of ways to share and discuss what they are reading.
5. **Staff training.** SSR is not a passive process; teachers must be motivated “to learn strategies for linking students with books, highlighting the importance of having all of the participating adults ‘buy into’ the concept of free reading” (14).
6. **Non-accountability.** SSR involves no required tasks or follow-up language work. Learners read without the concern of having to write a book report or make a presentation.
7. **Follow-up activities.** Are carefully designed to keep students excited and engaged readers.

8. **Distributed time to read.** Students need time to read. Setting up independent reading on a daily basis is most effective so that reading becomes a habit and not just an academic exercise.

Trelease (2001) explains that the benefits of SSR are many and vary:

but in its simplest form SSR allows a person to read long enough and far enough so the act of reading becomes automatic . . . Because it is supposed to be informal and free of grades, SSR also can provide students with a new perspective on reading—as a form of recreation (chapter 5, 2).

Although there is no magic cure for students in high school, “it can result in positive attitudinal changes toward the library, voluntary reading, assigned reading, and the importance of reading. This affects the amount students read and thus their facility with the process” (chapter 5, 2). Anderson, Wilson, and Fielding (1988) studied 155 fifth graders who kept activity logs of their out-of-school activities. They found that among all the ways children spend their time outside of school, reading books is the best predictor of several measures of reading achievement, including gains in reading achievement between second and fifth grade.

## The Importance of Recreational Reading

Research has demonstrated time and time again, that consistent exposure to high-quality literature will expand a child’s world and be reflected in their vocabulary (Kambarian 2001; Robbins and Ehri 1994). Students who engage in reading on a daily basis may demonstrate a carry over effect and increase their knowledge across the board in all academic areas (Kambarian 2001). Trelease (2001) explains that when the International Association for the Evaluation of Educational Achievement (IEA) compared the reading skills of 210,000 students from thirty-two countries it found the highest scores (regardless of income level) among children who were read to by their teachers and children who read the most pages for daily pleasure (chapter 5, 1).

Krashen (2003; 1993) argues that there is consistent evidence that those who have more access to books read more and students who have more time for recreational reading demonstrate more academic gains in reading than “comparison students” (2003, 16) and that a lack of reading practice results in a decline in reading ability (1993). Free voluntary reading improves vocabulary, reading comprehension, grammar, and writing among first-language acquirers as well as among second-language acquirers (Cho and Krashen 2001). Cho and Krashen explain that:

reading itself appears to be the most powerful motivator for encouraging additional reading: those who participate in sustained silent reading (SSR) programs show clear increases in the amount of free reading they do outside of school (Pilgreen and Krashen, 1993) and the effect appears to last years after the SSR program ends (Greaney and Clarke 1975). (2001, 170).

This underscores the pedagogical importance of allowing students to have the following:

- the ability to choose from a wide variety of reading material,
- time to read in-class on a daily basis (sixty minutes maximum),

- timely, supportive, and interactive feedback from teachers,
- teachers who will employ motivational strategies that excite students about books, and
- teachers who will ensure that students are provided with reading material appropriately challenging for their reading level.

Notice that all of the above is quite independent of AR. AR offers a quick and easy instantaneous record keeping component for teachers which make their lives easier. In fact, “many districts have corrupted what was designed as essentially a bookkeeping system, converted it to part of the reading program, and encouraged students to read for points tied to report card grades” (Pavonetti, Brimmer, and Cipielewski 2002/2003, 309).

Perhaps the most important advice in considering the use of AR in a school or district is the following from the Education Commission of the States (1999, 6):

Accelerated Reading is designed to be used as supplemental instruction and does not take the place of a main reading program. The multiple-choice format of quizzes is useful in gauging literal comprehension of the texts and assessing students’ reading level, but has no mechanism for helping students explore story ideas or apply the story’s lessons to their personal experiences.

## **AR CANNOT Replace School Library Media Professionals or School Libraries**

The AR program cannot be used as a stand alone program. If educators choose to use AR they must accept its limitations “as a supplemental tool” (Toro 2001, 28). AR cannot be a substitution for school libraries, or school library media professionals. Although Renaissance Learning’s efforts to match quizzes to the books found in a typical school library is laudable, school libraries are distinct learning communities, each of which has unique information and learning needs that extend far beyond just books. School library media specialists, as information professionals, are experts in identifying the information resources their learners (teachers, students, and families) need. Such knowledge includes all traditional text-based media (books, magazines, newspapers) as well as electronic, multimedia, cultural, and community resources as well.

AR’s primary goal is to increase literature-based reading practice (Education Commission of the States 1999). This goal represents an important but substantially smaller portion of the focus of high quality school library media programs which have “moved far beyond a room with books to become an active, technology-rich learning environment with an array of information resources” (ALA 1998, 1). Although AR stresses the importance of enabling children to have access to literature via books, school library media specialists know that to survive in the twenty-first century students need to be familiar with a wide variety of reading and informational material in an extensive array of formats: books, magazines, newspapers, radio, television, movies, electronic sources, databases, Web pages, blogs, and so on. Innovations in traditional printing techniques along with advances in electronic technologies have transformed the ways in which we live, learn, play, and are governed.

AR provides teachers with a more up-to-date record keeping system: a way to use technology tools to assess students’ reading levels, keep track of student progress, and determine whether or

not the student has read the AR books” (Institute for Academic Excellence 1999). Although AR operates under the belief that “practice makes perfect” (School Renaissance Institute 1999, 7) AR does *not* enable students to:

- analyze complex and conflicting presentations of information
- appreciate the variety of perspectives offered by individual viewpoints, scholarly disciplines, and cultural understandings
- use information competently in critical thinking, decision making, and problem solving
- produce new information and create products and presentations that communicate ideas efficiently and effectively
- act responsibly in regard to information, particularly with respect to the difficult issues of intellectual freedom, equitable access to information, intellectual property rights (ALA 1998)

It is the school library media specialist in each school, and the librarian in each library, who, as information professionals, possesses the skill and knowledge to perform all of the above. The school library media specialist, as the informational hub of a school, is the essential link, connecting students, teachers, and community members with the information resources they need. The school library media specialist then “both contributes to and draws from the expertise of the entire learning community” (ALA 1998, 3).

Krashen (1993) states that there is a negative relationship between poverty and the amount of reading at home. Krashen explains that 30 to 97 percent of students obtain their books from some kind of a library. A substantial body of literature of over seventy-five studies dating back over six decades documents the impact of school library media programs on academic achievement (Lance 2002).

No educational software program to date can compete with that performance.

## A Research Challenge

It would be interesting to see a study comparing two schools with a comparable student body, experienced, teachers, qualified school library media specialists, and like-minded administrators. One school would use AR in the best ways endorsed by the company, including of course sixty minutes of sustained silent reading. The other school would do everything the same (including SSR) except they would eliminate the AR quizzing of students. Administrators, teachers and school library media specialists would actively collaborate and design activities that would “connect” students to books and appropriate curriculum enhancement materials. School library media specialists would hold book talks and encourage students and teachers to engage in self-designed book sharing demonstrations with their peers. Students would incorporate the use graphic organizers, images, and drawings to present highlights of the books they were reading. Skits and plays could be performed. The art, music, and physical education teachers would participate and actively contribute their expertise. The building principal would provide support and resources—reading time and reading materials and encourage children, teachers, and parents to read. Teachers and school library media specialists would set up interactive interviews with children to discuss the books they each (teacher and student alike) were reading. Children would help select not only the books they wanted to read, but they would design projects to “showcase” their book or reading with others in the community. At the end of a year it would be interesting

to see if there was a discernable difference between the two groups in both reading attitude and reading comprehension.

## Reading Requires Time

We must accept that fact that there will never be a silver bullet to quickly resolve the reading crisis. We need to acknowledge that in order to develop good reading habits students and teachers need to be provided with regularly scheduled *times* to read, without the typical pressure to demonstrate or *prove* what they have read. Unfortunately, teachers feel uncomfortable when students are allowed to *just read*, a perception Kamarian (2001) attributes to their traditional reliance on basals, direct instruction, and skill development (43). Learners of every age need an environment that encourages them to read recreationally, think creatively, explore with curiosity, and revel in new knowledge (Pavonetti, Brimmer, and Cipilewski 2002/2003). This does not involve a simple decision to allocate funds for a technological book-keeping solution, but rather a philosophical commitment to provide learners (students and teachers alike) with an appropriate collection of reading materials (traditional and nontraditional), time to select, time to read, time to reflect, and time to share. If we want students who are readers we must provide them with the opportunity to read.

Perhaps it is the simplicity of the solution that has us baffled.

## Works Cited

Anderson, R. C., P. T. Wilson, and L. G. Fielding. 1988. Growth in reading and how children spend their time outside of school. *Reading Research Quarterly* 23, no. 3: 285–303.

Anderson, R. C., et al. 1985. *Becoming a nation of readers: The report of the Commission on Reading*. Washington, D.C.: Center for the Study of Reading.

Biggers, D. 2001. The argument against Accelerated Reader. *Journal of Adolescent and Adult Literacy* 45, no. 1: 72–75. ERIC, EJ630745.

Brown, C. 2003. Guiding elementary students to generate reading comprehension tests. *TechTrends* 47, no. 3: 10–15. ERIC, EJ673452.

Cho, K. and S. Krashen. 2001. Sustained silent reading experiences among Korean teachers of English as a foreign language: The effect of a single exposure to interesting, comprehensible reading. *Reading Improvement* 38, no. 4: 170–74. ERIC, EJ642836.

Cuddeback, M. J. and M. A. Ceprano. 2002. The use of Accelerated Reader with emergent readers. *Reading Improvement* 39, no. 2: 89–96. ERIC, EJ651884.

Education Commission of the States. 1999. Accelerated Reader. ERIC, ED447420.

eSchool News. 2005. Renaissance Learning, AlphaSmart to merge. *eSchool News* (Mar. 2005): 34.

Facemire, N. E. 2000. The effect of the Accelerated Reader on the reading comprehension of third graders. Master's Thesis, Salem-Teikyo University, Salem, West Virginia. ERIC, ED442097.

Goodman, G. 1999. The Reading Renaissance/Accelerated Reader Program. Pinal county school-to-work evaluation report. Tucson, Arizona: Creative Research Associates, Inc. ERIC, ED427299.

Howard, C. A. 1999. An evaluation of the Accelerated Reader Program in grades 3–5 on reading vocabulary, comprehension, and attitude in an urban southeastern school district in Virginia. Ph.D. diss., Old Dominion University. ERIC, ED465987.

Institute for Academic Excellence. 1998. *How Accelerated Reader quizzes are designed*. Madison, Wisc.: Institute for Academic Excellence. ERIC, ED421690.

Kambarian, V. N. 2001. The role of reading instruction and the effect of a reading management system on at-risk students. Ph.D. diss., Saint Louis University. ERIC, ED461835.

Kirby, M. C. 2003. The effects of weekly, sustained silent reading time on recreational reading habits and attitudes in a ninth grade English class. Master's Thesis Research, School of Business, Education, and Leadership, Dominican University of California. ERIC, ED479485.

Krashen, S. 1993. *The power of reading*. Inglewood, Colo.: Libraries Unlimited.

Krashen, S. 2003. The (lack of) experimental evidence supporting the use of Accelerated Reader. *Journal of Children's Literature* 29, no. 2: 16–30.

Lance, K. C. 2002. How school librarians leave no child behind: The impact of school library media programs on academic achievement of U.S. public school students. *School Libraries in Canada* 22, no. 2: 3–6.

Mabie, H. 2005. Telephone conversation with the author, Mar. 10, 2005.

Manning-Dowd, A. 1985. *The effectiveness of SSR: A review of the research* ERIC, ED276970.

McCracken, R. A. 1971. Instituting Sustained Silent Reading. *Journal of Reading* (May): 521–24, 582–83.

McGlinn, J. M. and A. Parrish. 2002. Accelerating ESL students' reading progress with Accelerated Reader. *Reading Horizons* 42, no. 3: 175–89. ERIC, EJ669440.

Paul, T., VanderZee, Rue, and Swanson. 1996. Impact of the Accelerated Reader on overall academic achievement and school attendance. Madison, Wisc.: The Institute for Academic Excellence.

Paul, Swanson, Zhang, and Hehenberger 1997. Learning information system effects on reading, language arts, math, science and social studies. Madison, Wisc.: The Institute for Academic Excellence. ERIC, ED421686.

- Pavonetti, L. M., K. M. Brimmer, and J. F. Ciplewski. 2002/2003. Accelerated Reader: What are the lasting effects on the reading habits of middle school students exposed to Accelerated Reader in elementary grades? *Journal of Adolescent and Adult Literacy* 46, no. 4: 300–311. ERIC, EJ659014.
- Persinger, J. M. 2001. What are the characteristics of a successful implementation of Accelerated Reader? *Knowledge Quest* 29, no. 5: 30–35. ERIC, EJ629869.
- Pilgreen, J. 2000. *The SSR Handbook: How to organize and manage a sustained silent reading program*. Portsmouth, N.H.: Heinemann. ERIC, ED438509. [
- Renaissance Learning, Inc. 2002. Reference 11298. Explaining the Renaissance learning quiz selection process. A memo sent via e-mail from Heidi Mabie (Renaissance Learning) to the author, Mar. 10, 2005.
- Robbins, C. and L. Ehri. 1994. Reading storybooks to kindergarteners helps them learn new vocabulary words. *Journal of Educational Psychology* 86, no. 1: 54–64. ERIC, EJ484331.
- School Renaissance Institute. 1999. Idaho statewide implementation of Reading Renaissance: Summary of first year's results. Madison, Wisc.: The Institute for Academic Excellence. ERIC, ED449472.
- Scott, L. S. 1999. The Accelerated Reader Program, reading achievement, and attitudes of students with learning disabilities. College of Education and Instructional Technology in the College of Education, Georgia State University. ERIC, ED434431.
- Stevenson, J. M. and J. W. Camarata. 2000. Imposters in whole language clothing: Undressing the Accelerated Reader Program. *Talking Points* 11, no. 2: 8–11. ERIC, EJ640706.
- Topping, K. and T. D. Paul. 1999. Computer-assisted assessment of practice at reading: A large scale survey using Accelerated Reader data. *Reading and Writing Quarterly* 15, no. 3: 213–31. ERIC, EJ598903.
- Topping, K. J. and A. M. Fisher. 2001. Accelerated Reader: U.K. Pilot, 1999–2000 summary report. Paper presented at the Biennial Meeting of the International Reading Association World Congress on Reading, July 29–Aug. 1, 2002, at Edinburgh, Scotland. ERIC, ED468244.
- Toro, A. 2001. A comparison of reading achievement in second grade students using the Accelerated Reading program and independent reading. Master of Arts Action Research Project, Johnson Bible College. ERIC, ED455510.
- Trelease, J. 2001. *The Read-Aloud Handbook 5th Edition*. Penguin Books adapted for the Web. Accessed Mar. 18, 2005, [www.trelease-on-reading.com/rah\\_chpt5\\_p1.html](http://www.trelease-on-reading.com/rah_chpt5_p1.html).
- Vollands, S. R., K. J. Topping, and R. M. Evans. 1996. Experimental evaluation of computer-assisted self-assessment of reading comprehension: Effects on reading achievement and attitude, University of Dundee, Dundee, Scotland. ERIC, ED408567.

———. 1999. Computerized self-assessment of reading comprehension with the Accelerated Reader: Action research. *Reading and Writing Quarterly* 15, no. 3: 197–211. ERIC, EJ598902.

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