Accelerated Reader and its impact on reading comprehension and lifelong literacy

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Abstract
Computerized reading assessment programs such as Accelerated Reader (AR) are becoming prevalent in reading classrooms. After their reading level is determined, students take quizzes over the books they read. Points are earned by answering quiz questions correctly. A reward is often associated with earning a certain amount of points. The assessment program has many advantages. Students are allowed to choose the books that they read, and the program depends upon students having access to a wide variety of trade books. When used correctly, the program has been shown to increase reading scores and encourages students to read independently (Topping & Paul, 1999). However, using AR in the classroom also has some disadvantages. In many cases, AR is not implemented in an appropriate manner. Students are not always allowed adequate class time for reading. Teachers do not give guidance as to developmentally and subject appropriate reading material. The use of the program as an external motivator is also in question. Not all students respond to external motivators such as rewards, and rewards do not create lifelong readers. Accelerated Reader can be an effective tool in increasing reading comprehension and encouraging life-long reading, but only when used as recommended. Teachers and administrators need to be trained in the program's correct implementation and use in the classroom in order for positive results to be achieved.

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Accelerated Reader and its Impact Upon
Reading Comprehension
and Lifelong Literacy

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Submitted to the Division of Instructional Technology
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Master of Arts
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By
Julie Whiston
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Abstract

Computerized reading assessment programs such as Accelerated Reader (AR) are becoming prevalent in reading classrooms. After their reading level is determined, students take quizzes over the books they read. Points are earned by answering quiz questions correctly. A reward is often associated with earning a certain amount of points.

The assessment program has many advantages. Students are allowed to choose the books that they read, and the program depends upon students having access to a wide variety of trade books. When used correctly, the program has been shown to increase reading scores and encourages students to read independently (Topping & Paul, 1999).

However, using AR in the classroom also has some disadvantages. In many cases, AR is not implemented in an appropriate manner. Students are not always allowed adequate class time for reading. Teachers do not give guidance as to developmentally and subject appropriate reading material. The use of the program as an external motivator is also in question. Not all students respond to external motivators such as rewards, and rewards do not create lifelong readers.

Accelerated Reader can be an effective tool in increasing reading comprehension and encouraging life-long reading, but only when used as recommended. Teachers and administrators need to be trained in the program's correct implementation and use in the classroom in order for positive results to be achieved.
Introduction

Importance of Reading

Reading has always been one of the most important reasons for educating children. If students cannot read, chances are great that they will have a difficult time becoming a productive member of society. The amount of reading by a student coupled with how well he or she can interpret the material are perhaps the best measures of how a student will succeed in the real world. Readers need practice in order to read better, but poor readers do not enjoy reading and therefore do not spend the necessary time practicing this skill. This vicious circle perpetuates itself among readers at all ability levels (Topping & Paul, 1999). Although most elementary classroom teachers allocate about 70 minutes per day for reading instruction, students spend only about 7-8 minutes per day reading independently at the elementary levels, and about 15 minutes per day at the intermediate levels (Reutzal & Hollingsworth, 1991). Furthermore, students who read more recreationally profoundly increased their reading ability and literacy development in general (Krashen, 2002). Yet 50% of students spend on average only about 4 minutes per day reading outside of school (Reutzal & Hollingsworth, 1991). Reading also affects the way children learn to deal with emotions and social situations. Students who read are more likely to be able to construct positive social relationships with their peers and adults because they have been exposed to models of such behaviors in books:

1. Reading, whether by parents, librarians or the children themselves, encourages emotional development as a child learns to share in another's happiness or misfortune, broadening interests beyond
themselves.

2. Research shows that children who have been exposed to reading and other cultural experiences before they begin school have a better chance at success in formal learning. ("Kids and Reading," 1996, ¶ 6-7).

Because reading has been proven to be vital to academic, social, and emotional development, educators and researchers have been looking for ways to encourage students to read more. An added benefit for educators is that students who read more will show greater gains in reading comprehension test scores (Topping & Sanders, 2000). With legislation such as No Child Left Behind (NCLB) looming on the horizon, educators need effective tools to aid them in encouraging students to read. The NCLB legislation requires that all children be able to read by third grade.

Although the United States Department of Education has not endorsed any particular program as a means to comply with NCLB, computerized assessment companies are already vying for schools to choose their product (Minkel, 2002).

**Computerized Reading Assessment Programs**

Technology is becoming more and more pervasive in the educational system, and computer assisted learning programs are becoming more prevalent throughout the United States and the world. Each program has a slightly different approach as well as different goals and foci. For example, Earobics is a program for young children that focuses on foundational literacy skills and helps with the transition from spoken to written language (Earobics, n.d.). Crick Software has a similar program called Clicker 4 that can be used through the middle grades, and Siboney Learning Group produces the Orchard program that is similar ("Early Reading Software," 2003).
Odyssey Reading, produced by CompassLearning, incorporates phonics instruction with literacy activities (CompassLearning, n.d.). AceReader is a slightly different type of program that emphasizes reading faster while absorbing more information (AceReader, n.d.). Wireless Generation created the mCLASS Qualitative Reading Inventory-3, an assessment program that allows teachers to track student reading progress using a Palm OS. The data can then be synched at the district level, allowing for easy reporting and tracking of district-wide data ("Early Reading Software," 2003). Scholastic Learning has created READ 180, which focuses on reading activities for children reading below the proficient level (Scholastic, n.d.). READ 180 allows for individualized instruction and instantaneous feedback.

Scholastic has also taken over Electronic Bookshelf and renamed the program Reading Counts (Chenoweth, 2001). This computerized reading assessment program is most similar to the type of reading programs that this paper will focus on.

**Accelerated Reader**

The most popular of the computerized reading programs, however, is Accelerated Reader (AR). Produced by Renaissance Learning, Accelerated Reader is currently in use by over 40,000 classrooms worldwide (Vollands, Topping, & Evans, 1999). Accelerated Reader is a computerized reading system that allows students to self-select trade books, read them either by themselves or with another person, and take a multiple-choice comprehension test. Students earn points by answering test questions correctly; they must attain at least 60% on the test in order to earn any points. Accelerated Reader also contains a component known as the Standardized Testing Assessment and Reporting test (STAR) that will analyze a student’s reading
level and provide guidance for book selection (Pavonetti, Brimmer, & Cipielewski, 2002).

The Accelerated Reader program has many advantages over traditional reading programs. First of all, students can choose their own books rather than rely upon the teacher to select the reading material. This helps to ensure that students are reading high-interest material. Secondly, results are instantaneous. The student does not need to wait for the teacher to grade the quiz; points are immediately rewarded upon completion of the quiz. Finally, the teacher is able to track students' reading more easily and quickly than in traditional programs. A wide variety of status reports are available to the teacher at any point.

But does the AR program enhance reading comprehension? Does the program work? These questions have been asked over and over again by teachers, parents, and administrators. The program costs between $500 and $2,000 just to get started. Most school systems require some proof that the program is going to make a real difference in their children's reading scores before committing to an expenditure of this magnitude (Pavonetti, Brimmer, & Cipielewski, 2002). Furthermore, teachers who utilize the AR program in their classroom need to be aware of the program's strengths and limitations in order to best implement a successful reading program and this does not always occur. Often the district mandates the program and little guidance is given as to the program's use. Reviewing relevant literature, both in favor of and opposed to the program, will not only inform educators as to the use of the Accelerated Reader program but also of AR's effectiveness at creating lifelong readers. This paper will consider published literature on the program, and review the
strengths and weaknesses of the program. Proper implementation strategies will be considered carefully, and conclusions and recommendations will follow.

Methodology

This researcher relied heavily upon EBSCO searches to find material for this review. EBSCO, maintained by the Elton B. Stephens Publishing Company, is an Internet resource that allows users to search a variety of on-line databases. These databases included the Educational Resource Information Center (ERIC), Academic Search Elite, and the Professional Development Collection. Internet search engines such as Yahoo and Google were also used as means to search for sources. Finally, this researcher was exposed to a variety of literature pertaining to literacy during the course of in-service training sessions during the past school year.

When reviewing articles, a prime consideration was the publication date. Since AR is a relatively recent program, only articles published within the last five years were considered for evaluating Accelerated Reader and its impacts. Another consideration was to evaluate the author of the article. Some authors had a vested interest in the program due to their affiliation with Renaissance Learning. Obviously this relationship influenced their opinion of the program and this bias was duly noted.

The articles reviewed also presented a balanced opinion of the program. This researcher made a conscious effort to review articles on both sides of the Accelerated Reader debate so as to avoid a biased viewpoint.
Analysis and Discussion

Positive Influences

Accelerated Reader, when used as part of a reading program, can be effective in encouraging students to read more. As previously stated, students self-choose an ability-appropriate trade book, read it, and take a quiz on the computer. Books are assigned a point value based on length and reading level (Pavonetti, Brimmer, & Cipielewski, 2002). Students earn points according to how well they perform on the quiz. Teachers can use the earned points as an extrinsic motivator, awarding prizes or rewards based on points earned. However, reading comprehension software such as AR only enhances learning effectiveness when used intelligently and consistently by both students and teachers (Topping & Sanders, 2000).

When properly implemented, AR demands that teachers work additional reading time into the curriculum. Topping and Paul (1999) found that students spent only about 20 minutes a day engaged in sustained silent reading, at home and at school combined. However, spending about 60 minutes per day in sustained silent reading is necessary if results are to be seen. Renaissance Learning, the company that produces Accelerated Reader, recommends that this time be added into the school day since many children are not encouraged to read at home. However, many schools do not comply with this suggestion. One hour a day amounts to 15% or more of all instructional time during a school day, and teachers are required to cover so much material that sustained silent reading periods are often sacrificed. This is somewhat ironic, as allowing students to read independently would help to raise reading comprehension test scores in a more lasting and effective method than direct
teacher instruction. Children who participate in sustained silent reading programs at school read more on their own than those who are not in such programs (Krashen, 2000). Smaller schools are more likely to include twice as much additional reading time in the school day than larger schools (Topping & Paul, 1999). Finally, schools must use the program for more than a single year in order for results to be seen. When AR was used for four consecutive years or more, students achieved a 64% higher level of reading practice (Topping and Paul, 1999).

But does Accelerated Reader really increase reading comprehension? There is a great deal of evidence to show that use of the program can help readers in this area. Perhaps AR’s greatest contribution to increasing reading scores is that the program encourages students to spend a substantial amount of time reading. Topping and Sanders (2000) claim that students in AR classes spent twice as much time engaged in sustained silent reading (SSR) as opposed to students who were not in AR classes. Perhaps somewhat surprisingly, most students who are asked to read silently actually do spend the time reading. According to Von Sprecken and Krashen (1999) 90% of middle school students observed during SSR time spent the time reading (as cited in Krashen, 2002).

Further contributing to AR’s positive impact is the increased attention paid to the types of books being read. Students whose schools participate in AR have increased access to books, which leads to better libraries with more books and better staffing, which in turn leads to more literacy development (Krashen, 2002). In order for AR to be effective, students must have access to a wide variety of trade books of varying subject matters and reading levels (Topping & Paul, 1999). Students must be
actively involved in the choice of reading material, for students who have a high interest in the material will be better able to read more difficult material than students who are not interested in the topic (Biggers, 2000). Too often students are allowed to read only what the teacher assigns and this can lead to a resentful attitude towards reading. When students are allowed choice in their reading material, the stigma towards reading is lessened and students are more willing to participate in reading both in and out of school. Furthermore, students who succeed at reading are likely to see that success translate into other subject areas such as social studies and math (Pavonetti, Brimmer, & Cipielewski, 2002).

As standardized testing has become more important due to legislation such as No Child Left Behind, computerized reading assessment programs can help struggling readers pass the tests. For example, Texas has already implemented the Texas Assessment of Academic Skills (TAAS) test. Students must pass the test in order to move to the next grade level. As the principal of Stovall Middle School in Abilene, Texas, Byrd (2001) suggested the following tips for successful implementation of a computerized reading program:

1. Twenty minutes in reading practice sessions Monday-Thursday are most effective. Extra sessions on Fridays are excellent for teacher-selected work, such as small group instruction.
2. Use reading software to practice reading lessons or skills. Use focused instruction by isolating a level and strand (content area).
3. Use teacher coaching time and have students work on computer-generated worksheets for specific needs.
4. Hold conferences to review each student's progress at least every two weeks. It is important to talk with each student frequently.

5. Getting students to adopt personal achievement goals is a great motivator. Giving a letter grade based on time spent involved with direct instruction with acceptable scores encourages students to be accountable for their work.

6. Have students write about their individual views and ask them to read their work aloud to a partner. Encourage independent reading from student selected books combined with writing based on their reading. (Byrd, 2001, ¶ 8)

These are all excellent suggestions that can easily be worked into reading classroom instruction. Some students in Byrd's school gained four years of reading ability in one year of instruction using these tips. Even more remarkable is the fact that some of these same students are not native English speakers (Byrd, 2001). Students and teachers in Byrd's school have great motivation to read: passing the TAAS test. However, high-stakes standardized tests such as the TAAS may soon become reality in schools across the country. Educators would be well-advised to take the lessons presented by Texas schools to heart.

Perhaps most importantly, students do seem to enjoy the program. Many schools, such as Powell Valley Elementary in Gresham, OR, have seen remarkable results after implementing AR:

The students generally liked the program and were eager to come to the library to get new books. Students talked about books that they were reading
and were recommending books to other students. The teachers saw immediate increases in grade level reading ability, from a small increase in proficient readers to more than a year's growth in lower ability readers. We were even able to purchase some of the tests in Spanish. Even students who were on plans of assistance were able to take tests that showed both comprehension levels when read to and when they read alone. (Greer, 2003, ¶ 7)

Book circulation in the library at this school jumped 75% after AR was implemented. It is also interesting to note that no motivational rewards were associated with earning points at Powell Valley (Greer, 2003). Clearly students were reading because they wanted to do so, not because they were being rewarded for doing so.

Limitations

However, AR has many limitations that are often overlooked by educators. First of all, the program is not designed to function as a stand-alone reading program, nor should the program be used as such (Biggers, 2001). Teachers experience considerable pressure to use the system due to the cost of the program. If a school system spends $6,000 to purchase Accelerated Reader, teachers would be well advised to implement AR into the language arts classes in order for the money to be considered well-spent. Because of this pressure, teachers often turn what was intended as a motivational, supplemental reading system into the centerpiece of their curriculum and tie AR test scores to a reading grade (Pavonetti, Brimmer, & Cipielewski, 2002).

Implementation of AR can also lead to a decline in the relationship between teacher and student:
Once the computer program is in place for the entire student body, most serious discussions between the teacher and the student regarding a book's underlying messages, its symbolism, or even character development, come to an end. Instead, books are pulled off the shelves, examined for points, and then, without regard to genre or perhaps true interest, read by students in hopes of passing a 10 to 20 question multiple-choice test. This alone demonstrates that teachers and teacher-librarians are forgoing the instructional concepts of Bloom's taxonomy when it comes to literature instruction. (Brisco, 2003, ¶ 5)

When teachers rely solely upon AR to provide reading instruction, students do not receive the benefit of the teacher's insights. Nor will the teacher benefit from the student's point of view. Answering multiple-choice questions does not promote critical thinking skills. A forum for discussion must be provided by the teacher in order for students to learn how to analyze and critique literature.

In order for AR to work, the program must be worked into an existing reading program. One excellent way that teachers can work AR in is to read along with students or to them. AR still allows students the opportunity to take quizzes over books that they had help reading (Topping & Paul, 1999). When teachers read with or to their students, the possibility for discussion about the book is not lost. Lifelong readers are more likely to be influenced by the attitudes of teachers, parents, friends, and relatives than by the use of a computerized reading system. This support is vital to the success of any reading program (Pavonetti, 1997 as cited in Pavonetti, Brimmer, & Cipielewski, 2002).
Another criticism of computerized reading programs such as AR is the need to assign each child a reading level. In the AR program, the STAR test is used to determine at what reading level the student performs, given in years and months. For example, a student in the seventh grade might read at a 5.5 level, indicating a fifth grade, fifth month placement. Chenoweth (2001) suggested that children should not know what their reading level is because it might lead to frustration. In the example given above, a seventh grade student who reads at the fifth grade level might be embarrassed and view him or herself as a “bad reader” because he or she is not reading at “grade level”. Particularly for younger students, this stigma can be overcome through a system of color-coding or otherwise assigning books to particular categories.

A related issue is the appropriateness of books chosen by students to read. Students pick a book based on the book’s assigned reading level, but the subject matter contained within is years above the maturity level of the student. Pavonetti, Brimmer, and Cipielewski (2002) described a situation where a mother discovered that the AR book her son was reading contained graphic descriptions of a character’s murder. The child, who read at a sixth grade level, was actually only in third grade. The mother justifiably questioned the appropriateness of the book for children her son’s age. Unfortunately, many schools do not provide adequate guidance to students in regards to choosing books. This problem is very much connected to the issue discussed above: schools often treat the AR program as a stand-alone reading program and students are left to fend for themselves when picking a book. The reading level alone does not determine a book’s appropriateness, which is sometimes
not made clear to students, teachers, or parents. The reading level is based upon the length of the book and the difficulty of the reading material, not the subject matter. Complicating the matter is the fact that books are sometimes placed on school bookshelves without an adult having read them. Such was the case at L. T. Ball Junior High School where three books on the AR list were challenged as being inappropriate for junior high age children. A school review committee was formed to ensure that books on the AR list were age-appropriate (Ishizuka, 2002). In order to ensure that students are reading books that are developmentally appropriate, they need a great deal of guidance. Certainly teachers and parents should be conscious of what children are reading, but hiring trained media specialists who are knowledgeable about children's and young adult literature is equally important (Krashen, 2002). Johnson (1999) realized the pivotal role played by media specialists in any reading program. He pointed out that teachers may teach children how to read, but media specialists teach children how to love reading.

The relevance of the quiz questions is another issue. Chenoweth (2001) discovered that it was possible to pass AR quizzes without having read the book. As more books are made into films, the quizzes for these books also have to be altered so that children cannot simply watch the movie and earn points. Some quizzes are rather general while others ask for extremely specific examples. Chenoweth (2001) related the example of a child who failed an AR test because he could not remember what the writing on the character's collar said, even though the child demonstrated complete understanding of the plot. According to Badger (1993), students performed better on reading tests with open-ended questions rather than multiple-choice questions (as
cited in Barry, 1998). Murphy (1995) noted that portfolios and other authentic assessment tools are far better methods for assessing a student’s reading progress than multiple-choice quiz questions. Yet most standardized tests, including Accelerated Reader, do not utilize open-ended questions. Indeed, multiple-choice questions are really the only choice since the program relies upon instant feedback. Answers to open-ended questions cannot be assessed by a computer program, nor can reading portfolios. However, the validity of multiple-choice questions on standardized tests has been challenged:

On a multiple-choice test, the correct answer is right there on the page. It needs a "bodyguard of lies," a set of wrong answers known in the test designer's trade as "distractors." Changing the distractors -- or even the order in which the distractors and the correct answer are arranged -- changes the outcome of a test. If a change just moved everyone's score up or down the same few points, it wouldn't be so bad. But that's not how it works. Change or rearrange the distractors on even one question, and you change the order in which the test-takers score and the extent to which each teacher, student, school, teaching method, district, province, or nation appears to have failed or succeeded. At best, one result might be "valid." Which one, please? (Hynes, 1994, ¶ 16)

Changing the order of words in a question could also dramatically affect scores, as could changing the order of the questions. Furthermore, Hynes stated that "students who spend most of their reading time on test-type activities generally do better on reading tests than those who 'waste' time reading for information or pleasure" (1994,
The more tests a student takes, the better he or she will perform. High test scores on multiple-choice reading tests do not necessarily imply that a student is a good reader. In fact, the student may be a poor reader but has learned how to outthink the test. Test question validity is an area that all test creators must keep in mind. In Accelerated Reader's case, students must have read the book in order to pass the quiz, but the quizzes must not focus upon nitpicky details. If students cannot pass the quizzes or learn that they can pass a quiz without having read the book, the purpose of the program is destroyed. Furthermore, teachers need to be aware that students may earn high scores on AR quizzes because they can outthink the test. These students will still require a great deal of instruction in order to truly understand and appreciate what they read.

Rewards and Competition

Perhaps the most important issue regarding AR is the program's use as an extrinsic motivator. The AR program was designed with the premise that all students will be motivated by its competitive nature—earn points, win prizes or recognition. The use of rewards can be extremely effective, especially for students who are not good readers. Students who speak English as a second language (ESL) also respond well to the use of prizes in the AR program. Hamilton (1997), a librarian at Brownsville High School in Texas, saw remarkable results with ESL students when AR was implemented in her school:

Because our Accelerated Reader program has been in place a full year, we have been able to observe changes in students' reading habits. Although I would prefer that extrinsic rewards not be needed to inspire reading, the fact is
that rewards work! One student, a former ESL student, became an avid reader. I asked her if she enjoyed reading. She said, 'Well, I do now.' The student said she had not read much in the past, but when she discovered that she could earn coupons for soft drinks, pizzas, videos, music compact discs, and even U.S. savings bonds, she began to read avidly for the prizes. Then she discovered that she likes reading! This student was the top reader for last year, the first full year that we used Accelerated Reader with ESL students. (Hamilton, 1997, ¶ 6)

Greer (2003) pointed out that the goal of such motivational competitions is to encourage students to become lifelong readers and to read more challenging books. If the competition becomes more about winning prizes than about reading, AR loses effectiveness.

The problem with using AR as a competition is that not all students respond to external motivators. Biggers (2001) pointed out that external motivators reduce internal motivations to read. Students are less likely to read independently once the reward is removed. A study conducted by Mcloyd (1979) shows that students who were offered a reward for reading to a specific point in the text would read only as much as they had to in order to win the prize. Students who were not offered a reward read almost twice as much, with no extrinsic motivation whatsoever (as cited in Krashen, 2002). Table 1 presents the data collected from this study. Furthermore, students who were motivated by competition showed high levels of avoidance when asked to read difficult material or reading outside of school requirements (Biggers, 2001). If the goal of a reading program is to create lifelong readers, using AR as an
external motivator will apparently not accomplish this goal. In fact, a representative for Renaissance Learning pointed out that using AR solely as a motivational reading program was to use a highly sophisticated reading assessment program in a very simplistic manner (Chenoweth, 2001). AR was not designed to function as a competitive motivational reading program, yet many schools still use the program as such despite warnings from the company and educational researchers.

Also complicating the extrinsic reward issue is the competitive nature of the program. This sets up an adversarial relationship between students despite Renaissance Learning Company's advice that students be placed in heterogeneous reading groups to lessen the competition (Biggers, 2001). However, this is not always practical when dealing with large groups of students. Students will inevitably compare themselves to one another, and a poor reader is apt to become discouraged when he or she finds out how many points a strong reader has earned. Biggers (2001) thought that students who are not strong readers will never be able to reach the high point levels achieved by stronger readers; this does not mean that they are not trying or learning anything. Rather, poor readers also tend to be slower readers and probably are not reading as many books or books of comparable high point value. Students who become frustrated will be less likely to read at all, and this goes against the goal of creating life-long readers.

*Lifelong Reading*

So does AR encourage life-long readers? According to a study by Pavonetti, Brimmer, and Cipielewski (2002), use of AR in elementary school does not result in middle school students who read more relative to middle school students from
elementary schools that did not use AR. Although students read a great deal while they participated in the AR program, the amount of books read dropped dramatically once the students were no longer participating in AR. Furthermore, Topping and Paul (1999) found that there was a dramatic decline in reading as students got older. Perhaps this is because many students tend to view reading as work rather than as pleasure as they progress through the educational system. Students are certainly expected to read more textbooks in high school than in elementary school. Reading for information can be difficult, especially for poor readers, and they are likely to become frustrated with reading entirely. These students are not apt to read for pleasure as adults. Another change that occurs as students get older is that students are not read to as much once they leave elementary school. Again, poor readers are the students who suffer the most because of this shift. Lesesne (1998) claimed that students who are read to by teachers are more likely to read on their own. Furthermore, students who can read but choose not to also find being read to stimulating. Perhaps teachers would be more likely to create lifelong readers if they read to their students on a regular basis instead of offering tangible rewards for earning AR points.

Conclusions and Recommendations

Accelerated Reader is a fine tool to use in reading classes. Many educators would agree with this statement, but what is often overlooked is the use of the word "tool." There are many excellent features to the AR program. The STAR test is an extremely useful feature, enabling teachers to determine the approximate reading level of each student without wasting large amounts of class time. The test takes only
a few minutes to administer and the results can be accessed instantly. This relieves the teacher from spending time correcting reading tests, time that can now be spent on instruction. Furthermore, the STAR test allows teachers with large numbers of students (such as in the middle and secondary grade levels) to better keep track of their students. Teachers at the elementary level may only have 20-30 students during the course of the day. Remembering each child's individual needs becomes far easier when there are only a small number of students to keep track of. Middle and secondary level teachers often deal with over 100 students per day. These teachers cannot keep track of so many students' reading levels in their heads. Through the STAR test, Accelerated Reader offers an excellent way to keep close tabs on all students.

Another excellent feature of the AR program is that the program allows students to choose the books they would like to read. Of course, teachers and parents need to aid students in their selections to ensure appropriateness in both subject matter and reading level. Too often students are told what they have to read, and that makes it far more likely that they will resent not only the reading matter itself but also reading in general. Certainly forcing students to read books they are not interested in is no way to encourage life-long reading. When used as part of a total reading program, a balance can be struck between required reading and choice reading.

The media specialist is a key player in administering an effective AR program. Working with a media specialist who is knowledgeable of the trade books available and who is willing to order both the books and the quizzes is vital to the success of AR. When students have a limited choice of reading material,
understandably they will not be thrilled with the program and may choose not to cooperate. In order for the program to succeed, there must be a large amount and variety of reading material available for students to read and take quizzes over. The media specialist can also help the teacher in providing guidance for appropriate books. The media specialist must read a great deal of the young adult trade literature available and be able to offer recommendations. Giving book talks to reading classes is an excellent way to impart these suggestions. When the school is fortunate enough to employ a trained media specialist, the effective implementation of any reading program becomes much easier.

The use of AR as an extrinsic motivator is perhaps the trickiest area to come to a conclusive decision. Certainly many students are motivated by the idea of earning points, but the poorer readers (who also tend to perform less well academically as a whole) are probably not going to be motivated by points or grades. At any rate, teachers cannot afford to offer prizes for each child who earns points for reading. Unless the school is paying for prizes, a reward program can be financially devastating to the teacher. As the research has proven, setting children in direct competition with each other is not such a good idea anyway. Some children will never be able to compete on the same level as others, which will only foster resentment and frustration. In much the same way as school elections revealing only popular children as candidates, “winning” readers will always prove to be the same subset of students. One way to encourage students to read while not setting them into direct competition is to run a prize program that involves the class as a whole rather than on an individual basis. For example, the class that has the highest percentage of
class members reach or exceed their AR reading goal could earn a party or movie
day. This not only encourages students to read at the individual level, but also
courages the class to work together as a whole. Furthermore, students are not being
singled out as “winning” and “losing” readers because the number of points earned is
less of a factor. More importantly, every child should meet their individual goal
rather than earning as many points as possible.

The problem with Accelerated Reader, or indeed any computerized reading
assessment program, is that many teachers are not trained in the program’s
appropriate use. Oftentimes AR is mandated for use in the reading curriculum, but
teachers are not given any guidance in the program’s implementation. Teachers in
the same building may use AR in completely different ways. Some teachers force
good readers to read only high-level books. These children with extremely high
reading levels find it difficult to discover material that is both interesting and
developmentally appropriate. In order to encourage students to read, students must be
allowed to choose and enjoy what they read, even if the chosen book is lower than the
student’s independent reading level. For example, there are not many young adult
books written at the 12th grade level. Consequently, some middle school students are
informed by teachers that they have to read classics such as *Vanity Fair* by Thackery
(2001) simply because the reading level is appropriate. This is no way to foster a
love of reading.

Another problem that occurs when teachers are not given guidance is that AR
is used as a stand-alone reading program. Teachers simply let the students read and
take quizzes without offering any supplemental instruction. AR was not designed to
be used in such a fashion. In order to be truly effective as a reading tool, AR demands that the teacher supplement the program with direct instructional activities, aid in the selection of books, and perform interventions for struggling readers. The program does allow the teacher to access student records at any time so teachers can know on a daily basis which students are not earning points or failing tests. Yet many teachers do not take advantage of AR as a record-keeping device. They simply total up the amount of points each student has earned by the end of the grading period and call that a reading grade. Teachers need to be modeling good reading behaviors and offering book suggestions.

Another excellent way to encourage reading is to read aloud to students. Reading to children is one of the best ways to build learning skills ("Kids and Reading," 1996). Reading aloud occurs frequently at the elementary level, but decreases as students get older. Yet many students, especially struggling readers, greatly enjoy being read to and claim that being read to makes them more likely to read independently. AR does allow students the option of taking quizzes over books that they have listened to or had help reading, so there really is no reason why teachers should not take the time to do so.

Finally, many schools do not offer increased in-class reading time as part of the AR program. Renaissance Learning recommends an additional hour per day of reading time, yet most schools do not comply. Students are expected to read independently at home, which is not always encouraged by parents. Students of all ages are likely to be home alone for long periods of time outside of the school day; many are lucky if there is an adult at home to feed and clothe them, let alone
encourage them to read. If adequate time is not provided for reading during the school day, many students will struggle.

Accelerated Reader is a tool, not a solution to improving reading test scores or creating life-long readers. For teachers, the program is an excellent record-keeping device and can point out where students are having difficulties. When the program is used appropriately, students can achieve great strides in improving reading skills. But the program quickly loses effectiveness when misapplied. Improved teacher training regarding the implementation of the program is vital to its success. Teachers, parents, media specialists, and administrators must work together to create a consistent program within the school that allows all students the chance to succeed.

Reading is a skill that all students will need in order to live a productive life. Teachers must use whatever tools they can in order to encourage students to read as much as possible when they are young. Computerized reading assessment programs such as AR will become even more common and more sophisticated as time goes by. Teachers and administrators need to be adequately informed about the strengths and weaknesses of these computerized reading programs so that they can use the tools available to them in order to promote lifelong reading skills.
References


Table 1

*Time Spent Reading According to Reward Offered*

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<thead>
<tr>
<th>Group</th>
<th>Time spent reading</th>
<th>% total time</th>
<th>Words read</th>
</tr>
</thead>
<tbody>
<tr>
<td>High reward</td>
<td>195.22 sec</td>
<td>33%</td>
<td>269.89</td>
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<tr>
<td>Low reward</td>
<td>232.56 sec</td>
<td>39%</td>
<td>301.11</td>
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<tr>
<td>No reward</td>
<td>465.11 sec</td>
<td>78%</td>
<td>737.11</td>
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