Assessing reading skills using accelerated reader program

Literature



Developed in 1984 by American teacher Judi Paul, the Accelerated Reader has been adopted in thousands of schools in the US as well as Europe (Renaissance Learning UK, 2007). Its implementation in the US serves part of schools' response to the No Child Left Behind Policy which seeks to increase students' learning outcomes through standardization. By implementing the Accelerated Reading program, schools provide room for maximizing reading potentials which later leads to improving students' ability in skills other than reading. The Accelerated Reader is a software designed to provide readymade computerized tests for reading.

Mainly, it tests comprehension of the material students read on their own, and provides printout of test report for monitoring progress. At present, a growing number of schools claim the effectiveness of the program in improving reading ability of students. Other studies suggest improvement in students' motivation and attitude toward reading (Mallette et al. , 2004; Guastello, 2002). While most studies confirm the benefits of the program, some critics claim that the AR is limited to knowledge-based tests, leaving behind higher levels of skill.

Some schools also complain the unavailability of the reading materials for testing by the software. The main purpose of this paper is to investigate the usability of the AR by looking into the skills assessed by the software. With the help of AR resources and existing literatures that validate the effectiveness of the program, this study weighs factors leading to recommendation of the program, and suggest possible areas to be considered when adopting the program into the curriculum. Different from

existing studies, this paper focuses on the assessment employed in the program.

In order to gain a valid and reasonable view, it applies skepticism in its analysis of the effects of the program as employed in some US schools. The AR is a self-access reading software that allows students to take ready-made tests after reading a material (short story, picture book, novelette, etc.). In 2006, Renaissance Learning Inc. , the leading distributor of AR had more than 100, 000 books in its database. The process starts with the STAR assessment, which determines students' reading level. After identifying reading levels, teachers guide the students to access books within their zone of proximal development (ZPD).

These are the books found in the school library which are optimal to the students' level. Students are then given chance to read on their own. After reading, the student will access the quiz in the AR and from there a report on reading outcomes can be generated. Student Assessment Four types of quiz that measure reading comprehension are available in the AR. These are reading practice, vocabulary practice, literacy skills, and textbook quiz. They primarily consist of literal questions which measure comprehension.

Importantly, students should maintain an average score of 85% in all the quizzes to signify that they are reading books at the appropriate level. A lower score indicates difficulty of the reading materials, which could mean that the student is not in the appropriate level. Likewise, always getting a perfect score could mean that the books read are too easy for the student. In such cases, adjustment should be made on the reading level of students.

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After taking the Reading Practice Quiz for a book, students can also take the Literacy Skills Quiz.

These quizzes ask questions in the higher levels of thinking, such as such as understanding characterization, forming inferences, and recognizing cause and effect. After the test, the results are automatically noted in the ready to print diagnostic report. This report helps teachers identify students with reading problems, and generate a copy of the report for school record. In addition to the score, the record also gives a complete list of the books the student has read and the scores for each quiz. The report also shows the level of the book and the average of the scores, thus easily identifying the overall average for the entire year.

Books included in the AR are assigned a point value based on the number of words they have in the text and their readability. The formula used for identifying this is derived from the well-known Flesch-Kincaid readability index which considers the number of syllables in words and sentence complexity. Popularly, point values in AR are computed as: AR points = (10 + reading level) x (words in book ? 100, 000) The quizzes in AR vary in number of items (from 5 to 20) depending on the length and difficulty of the book.

These quizzes are in multiple-choice to allow accurate scoring. The computer automatically scores the test, awards the points, and gives a complete record of everything. Students are allowed to answer the quiz on a particular book once only, thus observing validity. Aside from the multiple choice items, tests on literacy skills are also found in the extended version of the https://assignbuster.com/assessing-reading-skills-using-accelerated-reader-

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software. The tests assess students' higher order literacy skills including finding main idea, cause-effect relation, deducing characterization, recognizing plot, and inferential reasoning.

These tests are randomly generated from a 36 to 60-item bank, and may be retaken or used for pre- or post-testing. As such, unlike the practice quizzes, they cannot be considered reliable and valid. Claims Among many studies that claim effectiveness of the AR is that of Peak and Dewalt (1994), which reports that the sample group of 9th graders who used the Accelerated Reader for the previous five years showed better reading scale scores in the California Achievement Test (CAT) than those who did not use the software.

Similarly, Phelps (1999) noted that students in Texas school district showed a growth rate of 12. 3% in reading on the Texas Assessment of Academic Skills for over four years. Similarly, Paul et al. (2006) found that students in grades 3-8 and those in the 10th grade who used AR in their schools outperformed their counterparts in the Texas Assessment of Academic Skills Test. Other studies including Rodriguez (2007), Paul & Topping (1999), Anderson, 2001, Ganter, 2000; and Lawson, 2000, Facemire (2000) and Scott (1999) recognize advantages brought by the AR program.

Criticism Although a good number of research find advantages in the use of AR either in improving student outcomes in standardized testing or in reading motivation, this positive outlook is likewise contested by other researchers. For instance, Mathis (1996) claimed no statistically significant increase in reading comprehension among grades 5-6 despite use of AR. In addition, Rosenheck, Caldwell, Calkins, & Perez (1996), Prince & Barron https://assignbuster.com/assessing-reading-skills-using-accelerated-reader-

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(1998), and Carter (1996) did not support the use of the AR program to significantly improve reading motivation of students.

One important study that challenged the reliability of the AR quizzes was that of Joette Stefl-Mabry (2006). When the author challenged the quizzing element of the AR program, she found no significant research findings that could identify how much academic gain was due the AR program and its quiz/points element. In line with this study, it is good to consider whether assessment of knowledge and comprehension of reading material are enough to promote reading ability of students especially since these two skills are in the lowest levels among the thinking skills.

Payton (n. d.) mentions the argument presented by some educators that AR teaches only reading for recall, not even reading for comprehension.

According to them, the lack of inferential or critical thinking skills is one of the weaknesses of the software. The response of Renaissance Learning to this was that the AR is " not (designed) to assess higher order thinking, teach or replace curriculum, or to supersede the role of the teacher, but to assess whether or not the student has read the book" (Payton, n. d.). Conclusion and Recommendation

Utilized in most schools in the North America, the AR program has been widely implemented. Generally, researchers believe that its application significantly helps teachers monitor student progress in individualized reading program. However, questions regarding its test reliability still pose a challenge to find a more suitable program to promote higher levels of thinking. According to Johnson (2003), "American schoolchildren without

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high levels of reading comprehension face a difficult and uncertain economic future.

The latest innovations in media and technology demand higher levels of thinking and application skills. As such, a reading program that complements this requirement should be sought as early as the primary years. While the AR provides a meaningful way to promote recreational and test-based reading, it may not cultivate higher levels of thinking which are more necessary even in the primary levels. Therefore, finding other means that can supplement the need should be done nationwide to effectively test comprehension and critical thinking of students as far as reading programs are concerned.