

Florida Center for Reading Research

Thinking Reader

What is Thinking Reader?

Thinking Reader is a supplemental software program designed for struggling readers and special needs students at the middle school level. The goal of *Thinking Reader* is to increase students' reading comprehension by training them to read strategically. *Thinking Reader* uses a CD-ROM to present nine award-winning, grade-level literature books in audio format, using human voice narration. The text version of the novel is presented onscreen and words are highlighted as they are read to the student. The reader can control the reading by going back to re-read, choosing to hear words repeated, and checking the meaning of highlighted words in an online glossary. By choosing a computer-generated voice model, the student can increase or decrease the rate at which the novel is read. Extra support is provided in changeable text size, background and text color choices, and vocabulary words are available in English and Spanish.

This computer supported reading approach can be used in a variety of ways. Teachers may choose selected struggling readers to utilize the computer version of a text while other classmates read the same text in book form independently, allow individual students to use the computer program to assist them in reading selected novels, direct a whole class of students to take turns reading the same novel on computers, or direct an entire class to use the program in a computer lab setting. Time spent using *Thinking Reader* is at the discretion of the teacher.

Throughout each novel, *Thinking Reader* provides seven comprehension strategies with a support system of prompts, hints, models, and feedback. *Thinking Reader* includes five different levels of support so that teachers can adjust the program to challenge individual students as their skills improve. For example, a teacher can choose highly structured response options such as multiple choice, or more open-ended ones, such as writing summaries or generating questions. As the levels increase, support is gradually withdrawn. For example, levels one and two provide a hint and two models, level three provides a hint and one model, level four provides only a hint, and level five gives no support. Teachers can choose to: turn quizzes on or off, have students answer every strategy prompt or only a selected few, choose levels of support for their students or allow students to choose their own levels, and restrict the book voice. At level five, students have the option to pick their own strategies for each passage. This flexibility of choice helps students to develop their reading strategies in a scaffolded support system. In addition, a student management system automatically records students' written responses, quiz results, and time-on-task which can be viewed on-screen, printed, or exported to a spreadsheet format.



Materials consist of 9 titles on CD in a range of readability: *Roll of Thunder, Hear My Cry* by Mildred Taylor, *Bridge to Terabithia* by Katherine Paterson, *Tuck Everlasting* by Natalie Babbitt, *Bud, Not Buddy* by Christopher Paul Curtis, *Dragonwings* by Laurence Yep, *My Brother Sam is Dead* by James and Christopher Collier, *Esperanza Rising* by Pam Munoz Ryan, *A Wrinkle in Time* by Madeleine L'Engle, and *The Giver* by Lois Lowry. Reproducible graphic organizers include a character web, Venn diagram, relationship diagram, story

map, incident summary, strategy response journal, and a cause and effect organizer. The *Thinking Reader* CD also contains quizzes and six reports that track specific student performance and general class progress. Each title (licensed individually for 5-students, 10-students, 25-students, 50-students, or unlimited-students) comes with its own Discussion Guide, some paper copies of each book, and one general Teacher's Guide.

How is Thinking Reader aligned with current reading research?

The National Reading Panel (2000) found seven categories of instruction that appear to have a firm scientific basis for improving comprehension. These are comprehension monitoring, cooperative learning, the use of graphic and semantic organizers, question answering and generating, summarizing, and the use of multiple strategies. *Thinking Reader* is designed to improve reading comprehension by prompting students to practice six of these strategies as they read each novel. Instruction in each strategy is scaffolded with support being gradually withdrawn as students progress through the levels. For example, in Level 1 the student begins reading a book on the computer. A screen pops up saying, "This is a good place to stop and think about the story. At the end of the passage, you will be asked to think about what you have read." Next, directions will appear suggesting that the student use a specific strategy, like visualizing. Then a 'hint' icon and two 'sample responses' come into view that students can choose if they need help. The sample responses show two different characters who share their ideas about how they would answer the question and how they use the strategy to help them think about the story. Finally, the student is prompted to enter his/her response and submit it.

Summarizing and question generating and answering are built into the software for each title offered by *Thinking Reader*. Graphic organizers, whose main effect appears to be on the improvement of the reader's memory for the content that has been read, are provided in the teacher's guide to aid in literature discussions. Finally, a central emphasis of *Thinking Reader* is on helping students monitor their own comprehension, as they learn to become independent strategic learners through interaction with text.

Professional development for *Thinking Reader* is provided in a one-day workshop. Participants learn to implement *Thinking Reader* in their classrooms, to use the student management system to assess student progress, to establish classroom management procedures, and to understand and teach the six reading comprehension strategies that are built into *Thinking Reader*. Emphasis is placed on understanding the research behind the strategies used within the program and helping teachers use the program to fit the diverse needs of their students.

Research Support for Thinking Reader

In 2002, Dalton et. al reported the results of using *Thinking Reader* with middle school students in which 102 students performing at or below the 25th percentile on the Gates-MacGinitie participated. Four schools and fourteen teachers were involved in this quasi-experimental study. One-half of the students received the computer-assisted reading program, *Thinking Reader*, and one-half received classroom strategy instruction over the course of a year. The Gates-MacGinitie posttest showed the computer-assisted students achieved higher comprehension gain scores (GE .53) than their peers receiving traditional instruction (GE .20). However the computer-assisted students and the students receiving classroom strategy instruction did not start with equivalent pre-test averages, and there is no



way to know whether the teachers assigned to the *Thinking Reader* students were stronger, more motivating, or more innovative teachers than those who taught using the other methods. Also, because one or more of the four schools may have provided only one of the two treatments, it is impossible to determine whether the effects observed were due to general school conditions or to the instructional methods being evaluated. Although this study is suggestive of positive impact for *Thinking Reader*, there is not yet causally informative research.

We conclude that the instructional content of *Thinking Reader* is consistent with current research on reading comprehension. Future studies with sound experimental designs including control groups may determine the efficacy of *Thinking Reader* in the classroom.

Strengths & Weaknesses

Strengths of *Thinking Reader*:

- The scaffolded reading environment encourages struggling readers to build metacognitive skills and comprehension strategies.
- The program assists English Language Learners with its built-in reading supports.
- The Universal Design for Learning (UDL-based) software includes adjustable font size, keyboard navigation, text captioning, and screen reader compatibility.

Weaknesses of *Thinking Reader*:

- At this time *Thinking Reader* is limited to nine book titles.

Which Florida districts have schools that implement *Thinking Reader*?

Okaloosa 850-833-3109

Thinking Reader has been purchased by the Florida Diagnostic and Learning Resource System for all 35 resource centers located around the state and may be previewed at these sites:


Alachua	352-591-4300	Lake	407-317-3661
Baker	386-329-3811	Lee	239-337-8127
Bay	850-638-6131	Leon	850-487-2630
Bradford	386-329-3811	Levy	352-591-4300
Brevard	321-631-1911	Liberty	850-638-6131
Broward	754-321-2205	Madison	386-792-2887
Calhoun	850-638-6131	Manatee	941-927-9000
Charlotte	941-927-9000	Marion	352-591-4300
Citrus	352-591-4300	Martin	772-429-4600
Clay	904-348-7805	Monroe	305-274-3501
Collier	239-377-0518	Nassau	904-348-7805
Columbia	386-792-2877	Okaloosa	850-469-5423
Dade	305-274-3501	Okeechobee	772-429-4600
DeSoto	863-531-0444	Orange	407-317-3661
Dixie	352-591-4300	Osceola	407-317-3661
Duval	904-348-7805	Palm Beach	561-434-8971
Escambia	850-469-5423	Pasco	727-462-1587
Flagler	386-329-3811	Pinellas	727-462-1587

Franklin	850-638-6131	Polk	863-534-0950
Gadsden	850-487-2630	Putnam	386-329-3811
Gilchrist	352-591-4300	Santa Rosa	850-469-5423
Glades	863-531-0444	Sarasota	941-927-9000
Gulf	850-638-6131	Seminole	407-317-3661
Hamilton	386-792-2877	St. Johns	386-329-3811
Hardee	863-534-0950	St. Lucie	772-429-4600
Hendry	863-531-0444	Sumter	407-317-3661
Hernando	727-462-1587	Suwannee	386-792-2887
Highlands	863-531-0444	Taylor	850-487-2630
Hillsborough	813-837-7777	Union	386-329-3811
Holmes	850-638-6131	Volusia	321-631-1911
Indian River	772-429-4600	Wakulla	386-792-2877
Jackson	850-638-6131	Walton	850-638-6131
Jefferson	850-487-2630	Washington	850-638-6131
Lafayette	386-792-2887		

For More Information

<http://www.tomsnyder.com/Products/product.asp?SKU=THITHI>

References

 Dalton, B., Pisha, B, EGGLETON, M., COYNE, P., & DEYSHER, S. (2001). *Engaging the text: Reciprocal teaching and questioning strategies in a scaffolded learning environment*. Paper presented at the 51st Annual Meeting of the National Reading Conference, San Antonio, TX.

Gates, A. I., & MacGinitie, W. H. (1989). *Gates-MacGinitie reading tests*. Boston, MA: Riverside.

National Reading Panel (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. National Institute of Child Health and Human Development, Washington, D.C.

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Important Note: FCRR Reports are prepared in response to requests from Florida school districts for review of specific reading programs. The reports are intended to be a source of information about programs that will help teachers, principals, and district personnel in their choice of materials that can be used by skilled teachers to provide effective instruction. Whether or not a program has been reviewed does **not** constitute endorsement or lack of endorsement by the FCRR.

For more information about FCRR go to: www.fcrr.org

