



RESEARCH
REPORT

Reading PowerWorks®

Executive Summary

Introduction

Reading PowerWorks is a supplemental content area reading program based on state and national standards for social studies, science, and math. The comprehensive program provides reading instruction that addresses: phonemic awareness and phonics, comprehension, vocabulary, and fluency through balanced literacy approaches within thematic units.

Reading PowerWorks Thematic Unit Components

A **Read Aloud** with a quality children’s fiction or nonfiction literature book introduces the theme and concepts.

Shared Reading with a Big Book and accompanying small versions of the book teaches the theme content, nonfiction text features and structures, and reading skills and strategies.

Small Group Reading with Shared Learning provides differentiated instruction with paired fiction and nonfiction books at three reading levels. Students read to explore the concepts of the theme and practice reading skills and strategies.

Self-selected Reading extends the theme with a fiction and nonfiction trade book library.

PowerSkills materials and activities provide additional support for teaching phonemic awareness, phonics, comprehension, vocabulary, and fluency throughout the thematic unit components.

The purpose of this document is to demonstrate how *Reading PowerWorks* was developed to “link” research on effective reading instruction

with the literacy approaches—read aloud, shared reading, small group reading with shared learning, and independent reading. To address the research recommendations of the National Reading Panel, this document is organized into the following areas of reading instruction: Phonemic Awareness and Phonics Instruction, Text Comprehension Instruction, Vocabulary Instruction, and Fluency Instruction.

The format of each instructional area includes the following sections:

Research Findings

This section references specific recommendations of the *Report of the National Reading Panel: Teaching Children to Read* and *Put Reading First: The Research Building Blocks for Teaching Children to Read* and cites recent research studies and summaries.

Research Implications

This section highlights specific instructional features of the *Reading PowerWorks* components—Read Aloud, Shared Reading, Small Group Reading with Shared Learning, and Independent Reading—which support the teaching of phonemic awareness and phonics, comprehension, vocabulary, and fluency.

Key Research Findings in Support of Reading PowerWorks®

Phonemic Awareness and Phonics Instruction

Research Findings

- ✓ Along with phonics instruction, young children should be solidifying their knowledge of the alphabet, engaging in phonemic awareness activities, and listening to stories and informal texts read aloud to them. They should also be reading texts (both out loud and silently) and writing letters, words, messages, and stories. (*Put Reading First 2001, p.15*)
- ✓ Several studies using experimental designs investigate the effects of storybook reading as a regular classroom practice on children's achievement in various aspects of literacy development. In these investigations the children in the experimental classrooms who were read to daily over long periods scored significantly better on measures of vocabulary, comprehension, and decoding ability than did children in the control groups who were not read to by an adult. (*Morrow & Gambrell 2001, p. 351*)
- ✓ [Instruction] that heightens phonological awareness and that emphasizes the connections to the alphabetic code promotes greater skill in word recognition—a skill essential to becoming a proficient reader. (*Blachman 2000, p. 495*)
- ✓ [P]honological awareness training indeed stimulates reading skills, but it is not the single strongest predictor [of reading success].... The results show that reading skills are stimulated more by phonemic training including letters or reading and writing practice than by purely metalinguistic games and exercises. Therefore, the results strengthen the case for a balanced perspective on reading instruction. (*Bus & van IJendoorn 1999, p. 413*)
- ✓ Results indicate that phonological abilities were highly associated with word decoding but did not have an additional influence on further development of word decoding after first grade. For reading comprehension, word decoding and vocabulary, and listening comprehension appeared to exert additional influences on its further development after first grade. (*de Jong & van der Leij 1999, p. 51*)
- ✓ All instruction, including phonics instruction, must help learners develop cognitive clarity and become engaged with what they are learning. All instruction, including phonics instruction, must be as multifaceted and multilevel as possible. Guided reading, self-selected reading, and writing instruction are the methods and components of a complete reading program that best follow these general principles of teaching. (*Cunningham & Cunningham 2002, p. 106*)
- ✓ Phonemic awareness can be developed through a number of activities, including asking children to: identify phonemes, categorize phonemes, blend phonemes to form words, segment words into phonemes, delete or add phonemes to form new words, and substitute phonemes to make new words. (*Put Reading First 2001, p. 10*)

Research Implications

Reading PowerWorks thematic units provide instruction in phonemic awareness and phonics that helps students learn the sounds of spoken language and understand the relationships between letters and sounds in written language. The activities support students as they practice and apply their growing knowledge; as they listen to oral reading, read words, sentences, and texts; and as they write.

Reading PowerWorks activities that help students build phonemic awareness include:

- identifying single consonant sounds
- identifying short and long vowel sounds
- adding, deleting, or substituting phonemes to form new words
- blending phonemes to form one-syllable words
- segmenting phonemes in one-syllable words
- distinguishing syllables in multisyllabic words
- recognizing rhyming words

Reading PowerWorks activities for systematically and explicitly teaching phonics focus on:

- names of consonant sounds and letters
- short and long vowel sounds
- digraphs
- consonant clusters
- r-controlled words
- variant vowel sounds
- silent letters

Read Aloud

- The daily read aloud session is the time when students listen and hear the sounds of language and make connections to letter and sound relationships as the teacher reads.

Shared Reading

- The oral re-reading of the Big Book provides opportunity to practice activities that focus on specific phonemic awareness skills.
- PowerSkills Rhyme Card activities reinforce phonemic awareness skills by engaging students as they identify sounds in words and practice with phonemic awareness activities

such as segmenting. Teacher support information is provided to adapt activities to meet the needs of ELL (English Language Learning) students.

- PowerSkills Rhyme Card activities reinforce phonics skills by engaging students as they identify target phonics patterns in words in the rhyme, list words with the pattern, sort words, and build word walls.

Small Group Reading

- Matching students to the appropriate nonfiction and fiction leveled texts (below-, on-, and above-level) provides them with an opportunity to decode and apply phonics skills. The oral reading assessment is used for matching students to the appropriate books.
- Lesson teaching prompts and questions guide students as they decode and use phonics skills to problem solve and make meaning from text.
- Lesson teaching prompts focus on specific phonics skills taught in the thematic unit.
- Phonics blackline masters support listening, reading, and writing practice of phonics skills taught in the thematic unit.

Self-selected Reading

- Listening to and reading paired fiction and nonfiction books with audiocassettes gives students additional practice in hearing the sounds of language, making connections to letter and sound relationships, and applying phonemic awareness and phonics skills with below-, on-, and above-level books.
- Reading and writing activities for Extending the Theme engage students as they practice and apply phonics skills and make connections to the theme.
- Self-selecting texts from the fiction and nonfiction trade book library gives students opportunity to apply phonics skills independently and to extend the theme concepts.

Text Comprehension Instruction

Research Findings

- ✓ Text comprehension is important because comprehension is the reason for reading. Text comprehension is purposeful and active. (*Put Reading First 2000, p. 57*)
- ✓ The model of comprehension instruction we believe is best supported by research does more than simply include instruction in specific comprehension strategies and opportunities to read, write, and discuss texts—it connects and integrates these different learning opportunities. Instructional method includes explicit description of strategy, teacher and/or student modeling of strategy, collaborative use of strategy, guided practice using the strategy with gradual releases of responsibility, independent use of the strategy. (*Duke & Pearson 2002, pp. 208–209*)
- ✓ Reading stories as an act in itself does not necessarily promote literacy: attitudes, and interactive behaviors enhance the potential of the read-aloud event for promoting literacy development.... During story reading, the adult helps the child understand the text by interpreting the written language based on experiences, background, and beliefs. (*Morrow & Gambrell 2001, p. 351*)
- ✓ [T]o engage fully in the type of analytical thought that is most beneficial, children need to become part of a teacher-student dialogue by actively contributing or by attending to the responses of others. (*Dickinson & Smith 1994, p. 118*)
- ✓ The experiment demonstrates that explicit, teacher-led instruction in think-aloud is an effective means to enhance students' comprehension monitoring abilities. (*Baumann, Seifer-Kessell & Jones 1992, p. 164*)
- ✓ The results of the experiment indicate that the SBE (Shared Book Experience) is effective in reducing young children's oral reading errors, improving their reading fluency, and increasing their vocabulary acquisition. Reading errors, reading fluency, and vocabulary knowledge all affect reading comprehension. It is then not surprising that the SBE had its greatest impact on students' reading comprehension. (*Eldredge, Reutzel, & Hollingsworth 1996, p.221*)
- ✓ A set of specific comprehension strategies that have firm scientific basis for improving text comprehension include: monitoring comprehension; using graphophonic and semantic organizers; answering questions; generating questions; recognizing text structure; summarizing. (*Put Reading First 2000, pp. 49–53*)
- ✓ Effective teachers of comprehension enact practices that reflect the orchestration of knowledge about readers, texts, purposeful activity, and contexts for the purpose of advancing students' thoughtful, competent, and motivated reading. (*RAND Reading Study Group 2002, pp. 29–30*)
- ✓ Results show that story maps can be used to improve comprehension of both narrative and expository text. Using a story map helps teachers and students to: organize readers' efforts toward specific comprehension objectives; focus questions and discussion on the important aspects of the text; provide a visually coherent summary of the text; encourage students to think about and monitor their reading. (*Reutzel 1985, p. 403*)
- ✓ [Teachers] can guide students to analyze the reading task, to make efficient plans for purposeful reading, and to use appropriate strategies to enhance their ability to comprehend and reason from the text. (*Tregaskes & Daines 1989, p. 58*)

Research Implications

Reading PowerWorks thematic units provide comprehension instruction that explicitly teaches and models comprehension strategies, guides students as they practice the strategies, and gives students time and opportunity to apply the strategies to their reading and writing. Comprehension strategies taught within *Reading PowerWorks* lessons include: activating background knowledge, determining cause and effect, drawing conclusions, determining main idea, and sequencing. Creating graphic organizers engages students before, during, and after reading to help them build prior knowledge, set a purpose for reading, and focus on learning content.

Read Aloud

- The quality literature introduces the theme and activates and builds background knowledge.
- The teacher models the comprehension strategies used by fluent readers when reading the book, thinking aloud, and interacting with the students.

Shared Reading

- The whole group oral reading of the nonfiction Big Book presents key concepts of the thematic unit.
- The nonfiction Big Book introduction helps students activate and build background knowledge and make connections to the Read Aloud.
- Previewing and teaching nonfiction features and structures helps students learn to recognize the features and structures and practice using them as they read.
- During the oral rereading of the Big Book students collaboratively practice specific comprehension strategies taught in the thematic unit.
- PowerFact cards and activities provide additional practice for students to read and apply comprehension strategies to learn content. Teacher support information includes

modifications of activities to meet the needs of ELL students.

Small Group Reading

- Matching students to the appropriate nonfiction and fiction leveled texts (below-, on-, and above-level) provides them with an opportunity to apply comprehension strategies.
- Lessons are structured in a sequential format: set a purpose for reading, guide the reading, respond to the reading—to engage students before, during, and after reading, and to gradually release responsibility for comprehension strategy use to the students.
- The book introductions help students build connections between their own background knowledge and the book concepts and help them set a meaningful purpose for the reading.
- Nonfiction text structures and features are previewed and taught to help students access and process nonfiction texts.
- Lesson teaching prompts engage students as they practice and apply comprehension skills and strategies to learn content.
- Shared learning sessions where students come together to share theme-related content engage students in meaningful discussions. Graphic organizers help to organize and communicate their understanding.
- PowerSkills Comprehension Check questions and graphic organizers help students learn to summarize their understanding of thematic concepts.

Self-selected Reading

- Rereading paired fiction and nonfiction books with audiocassettes provides comprehension strategy practice with below-, on-, and above-level books.
- Self-selecting texts from the fiction and nonfiction trade book library gives students an opportunity to apply comprehension strategies independently to extend the theme concepts.

Vocabulary Instruction

Research Findings

- ✓ Vocabulary can be developed indirectly, when students engage daily in oral language, listen to adults read to them, and read extensively on their own and directly, when students are explicitly taught both individual words and word learning strategies. (*Put Reading First 2001, p. 45*)
- ✓ Children acquired new vocabulary from listening to stories, with both frequency of exposure and teacher explanation of the target words enhancing vocabulary learning. (*Penno, Moore & Wilkinson 2002, p. 23*)
- ✓ The two experiments...provide evidence that reading stories aloud to children is a significant source of vocabulary acquisition, that teachers' additional explanation of words as they are read can more than double such gains, that the new learning is relatively permanent.... (*Elley 1989, p. 185*)
- ✓ Vocabulary instruction is most effective when learners are given both definitional and contextual information, when learners actively process the new word meanings, and when they experience multiple encounters with the words. (*Graves & Watts-Taffe 2002, p. 143*)
- ✓ Graves and his colleagues (Graves et al. 2001) suggest different methods for different learning goals, including teaching students to read words already in their oral vocabularies, teaching new labels for known concepts, teaching words representing new concepts, and clarifying and enriching the meanings of already known words. (*Graves & Watts-Taffe 2002, p. 143*)
- ✓ Children whose teachers provided multiple opportunities to interact with vocabulary words learned more book-related vocabulary compared with children who were exposed to just the books. Through the interactive book reading, the teachers introduced vocabulary words in meaningful context. (*Wasick & Bond 2001, p. 247*)

Research Implications

Reading PowerWorks thematic units provide opportunities for teachers to support direct and indirect vocabulary instruction and for students to apply new vocabulary words in reading, writing, and speaking contexts. Within the thematic units, students are taught specific words and word learning strategies that include:

- using context clues to determine meaning
- using a dictionary to explore meaning
- using a glossary
- using knowledge of antonyms, synonyms, multiple meanings, and word association to identify a word

Read Aloud

- Reading aloud provides an opportunity for the teacher to read words in his/her students' oral vocabulary and to enhance and clarify meanings of known words.
- The teacher explains new words to introduce theme concepts and key vocabulary words frequently presented in texts throughout the unit.

Shared Reading

- The nonfiction Big Book introduction teaches specific key words of the thematic unit and use of the glossary.
- Focusing on boldfaced words during the Big Book reading teaches specific words and word learning strategies such as using context clues and the glossary and provides frequent exposure to key words.
- PowerSkills vocabulary card activities provide vocabulary practice with key vocabulary words within the context of sentences. The vocabulary cards are in English and Spanish for instruction with ELL students.

Small Group Reading

- Below-, on-, and above-level nonfiction books include content-related specialized vocabulary words that are displayed in bold print, explained in context, and defined in the glossary.
- The book introductions help students build connections between their own vocabulary knowledge and the book concepts and help teachers focus on specialized vocabulary in the discussion.
- Rereading the book provides multiple encounters with the words to help students process new word meanings and enhance their understanding of concepts.
- Response to the reading activities provides opportunities for students to write and practice the vocabulary words from the book to increase their reading, speaking, and writing vocabulary.
- Vocabulary building games and activities provide for practice and multiple exposure to key vocabulary words taught in the unit.

Self-selected Reading

- Reading paired fiction and nonfiction books with audiocassettes adds to the multiple opportunities for students to listen to and read vocabulary words taught in the unit.
- Self-selecting texts from the fiction and nonfiction trade book library gives students the opportunity to practice reading new words in different contexts and to use word learning strategies.

Fluency Instruction

Research Findings

- ✓ You can help your students become more fluent readers (1) by providing them with models of fluent reading and (2) by having students repeatedly read passages as you offer guidance. (*Put Reading First 2001, p. 26*)
- ✓ The results of the experiment indicate that the SBE (Shared Book Experience) is effective in reducing young children's oral reading errors, improving their reading fluency, and increasing their vocabulary acquisition. Reading errors, reading fluency, and vocabulary knowledge all affect reading comprehension. It is then not surprising that the SBE had its greatest impact on students' reading comprehension. (*Eldredge, Reutzel & Hollingsworth 1996, p. 221*)
- ✓ Fluency is the ability to read a text accurately and quickly. Fluency is important because it provides a bridge between word recognition and comprehension. Because fluent readers do not have to concentrate on decoding words, they can focus their attention on what the text means. (*Put Reading First 2001, p. 22*)
- ✓ The panel concluded that guided repeated oral reading procedures that included guidance from teachers, peers, or parents had a significant and positive impact on word recognition, fluency, and comprehension across a range of grade levels. (*National Reading Panel 2000, p. 12*)
- ✓ Repeated reading provides students with the necessary practice to build fluency, acquire new information, and maintain established information. (*O'Shea, Sindelar & O'Shea 1985, p. 140*)
- ✓ Students profited when encouraged to apply a specific oral reading strategy while engaging in small-group reading instruction. This technique proved to be a simple, effective addition to the teachers' ongoing reading program. (*Allinder, Dunse, Brunken & Obermiller-Krolikowski 2001, p. 54*)
- ✓ The major findings of this study are that (a) both repeated readings and listening-while-reading treatments were effective in improving the reading fluency of third grade students and (b) neither treatment was superior to the other in improving students' reading fluency. Both methods appear to be effective in promoting reading fluency and general proficiency in reading. (*Rasinski 1990, p. 149*)
- ✓ Adequate progress in learning to read English (or any other alphabetic language) beyond the initial level depends on sufficient practice in reading to achieve fluency with different kinds of texts written for different purposes. (*Snow, Burns & Griffin 1998, p. 223*)
- ✓ There are several ways that your students can practice orally re-reading text, including student-adult reading, choral (or unison) reading, tape-assisted reading, partner reading, and readers' theatre. (*Put Reading First 2001, pp. 27-28*)

Research Implications

Reading PowerWorks thematic units provide opportunities for teachers to model fluent reading and for students to practice fluency by rereading nonfiction and fiction texts. Fluency activities for re-reading include reading with an audiocassette, echo reading, unison reading, antiphonal reading, and paired reading.

Read Aloud

- The teacher models fluent reading with expression as students listen and interact.

Shared Reading

- Students work collaboratively as they listen and practice orally reading the Big Book or parts of the book with the teacher.
- With each rereading of the Big Book for a specific instructional focus, students also practice fluency.
- Small versions of the Big Book are available for individual and partner readings and for center work to support fluency.
- PowerSkills Rhyme Card activities support repeated reading practice of rhymes. Teacher support information includes modifications of activities to meet the needs of ELL students.

Small Group Reading

- Small group instruction engages students in reading paired nonfiction and fiction texts for different purposes as they build reading fluency.
- Students listen to the teacher and other students orally read the book or parts of the book in a small group setting.
- Suggested teaching procedures to help students with fluency practice with the paired books are provided. The teacher guides students as they are invited to reread orally specific text passages that are identified in the guide.
- The teacher observes and informally assesses students while listening to students read.

Self-selected Reading

- Reading paired fiction and nonfiction books provide opportunities for reading along with an audiocassette, partner reading, or reading alone to practice fluency.
- Self-selecting texts from the fiction and nonfiction trade book library gives students opportunity to practice silent and oral reading.

References

- Allinder, R.M., Dunse, L., Brunken, C.D. & Obermiller-Krolkowski, H.J. (2001). Improving fluency in at-risk readers and students with learning disabilities. *Remedial and Special Education, 22*, 48–54.
- Put reading first: The research building blocks for teaching children to read—Kindergarten through grade 3*. Armbruster, B.B., Lehr, F. & Osborne, J. (2001). Washington, DC: National Institute for Literacy.
- Blachman, B.A. (2000). Phonological awareness. In M. Kamil, P. Mosenthal, P. Pearson & R. Barr (Eds.), *Handbook of reading research: Vol. 3* (483–502). Mahwah, NJ: Erlbaum.
- Baumann, J.F., Seifert-Kessell, N. & Jones, L.A. (1992). Effect of think-aloud instruction on elementary students' comprehension monitoring abilities. *Journal of Reading Behavior, 24*(2), 143–172.
- Bus, A.G. & van IJzendoorn, M.H. (1999). Phonological awareness and early reading: A meta-analysis of experimental training studies. *Journal of Educational Psychology, 91*(3), 403–414.
- Cunningham, P.M. & Cunningham, J.W. (2002). What we know about how to teach phonics. In F.E. Farstrup & S.J. Samuels (Eds.), *What research has to say about reading instruction* (87–109). Newark, DE: International Reading Association.
- de Jong, P. F. & van der Leij, A. (1999). Effects of phonological abilities and linguistic comprehension on the development of reading. *Scientific Studies of Reading, 6*, 51–77.
- Dickinson, D.K. & Smith, M. W. (1994). Long-term effects of preschool teachers' book reading on low-income children's vocabulary and story comprehension. *Reading Research Quarterly, 29* (2), 104–122.
- Duke, N.K. & Pearson, P. D. (2002). Effective practices for developing reading comprehension. In F.E. Farstrup & S.J. Samuels (Eds.), *What research has to say about reading instruction* (205–242). Newark, DE: International Reading Association.
- Eldredge, J.L., Reutzel, D.R. & Hollingsworth, P.M. (1996). Comparing the effectiveness of two oral reading practices: Round-robin and the shared book experience. *Journal of Literacy Research, 28*, 201–225.
- Elley, W. (1989). Vocabulary acquisition from listening to stories. *Reading Research Quarterly, 24*(2), 174–187.
- Graves, M.F., Juel, C. & Graves, B.B. (2001). *Teaching reading in the 21st century* (2nd ed). Boston: Allyn & Bacon.
- Graves, M.F. & Watts-Taffe, S.M. (2002). The place of word consciousness in a research-based vocabulary program. In F.E. Farstrup & S.J. Samuels (Eds.), *What research has to say about reading instruction*. (140–165). Newark, DE: International Reading Association.
- Morrow, L.M. & Gambrell, L.B. (2001) Literature-based instruction in the early years. In S.B. Neuman & D.K. Dickinson (Eds.), *Handbook of early literacy research*. (348–360) New York: Guilford Press.
- 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 Health Pub. No. 00-4769). Washington, DC: National Institute of Child Health and Human Development.
- O'Shea, L.J., Sidelar, P.T. & O'Shea, D.J. (1985). The effects of repeated readings and attention cues on reading fluency and comprehension. *Journal of Reading Behavior, 17*(2), 129–142.
- Penno, J.F., Moore, D.W. & Wilkinson, I.A.G. (2002). Vocabulary acquisition from teacher explanation and repeated listening to stories: Do they overcome the Matthew effect? *Journal of Educational Psychology, 94*(1), 23–33.
- RAND Reading Study Group. (2002). *Reading for understanding: Toward an R&D program in reading comprehension*. Santa Monica, CA: RAND.
- Rasinski, T.V. (1990). Effects of repeated reading and listening-while-reading on reading fluency. *Journal of Educational Research, 83*(3), 147–150.
- Reutzel, D.R. (1985). Story maps improve comprehension. *Reading Teacher, 38*(4), 400–404.
- Snow, C.E., Burns, M.S. & Griffin, P. (Eds.) (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.
- Tregaskes, M.R. & Daines, D. (1989). Effects of meta-cognitive strategies on Reading comprehension. *Reading Research and Instruction, 19*(1), 579–593.
- Wasick, B.A. & Bond, M.A. (2001). Beyond the pages of a book: Interactive book reading and language development in preschool classrooms. *Journal of Educational Psychology, 93*, 243–250.