



Foundation Paper Supporting Special Education Students with *WiggleWorks*

WiggleWorks® is a multimedia, leveled reading and writing program for grades K-3. The program combines books and technology to provide students with a range of activities that integrate reading, writing, and language development, including listening and speaking. *WiggleWorks* works for all learners, including struggling readers, English Language Learners, and students with special needs.

OVERVIEW OF THE WIGGLEWORKS PROGRAM

The *WiggleWorks* program's three main components—leveled books, interactive software, and teachers' materials—create a practical reading instruction program that has been proven effective at raising reading achievement (Schultz, 1995.) It combines today's best thinking about how children learn to read and write with the power of software to create an innovative model for instruction—a model designed to support young learners in their reading, writing, listening, and speaking development.

WiggleWorks includes the following key components to move every child toward reading proficiency:

- Carefully leveled trade book library
- Complete teaching plans for each leveled book
- Engaging software including an interactive version of each book plus associated activities
- Classroom management tools to individualize instruction
- Assessment materials to monitor students' progress
- Staff development resources to assist teachers in implementing *WiggleWorks* in their classroom


WiggleWorks is designed to support students' language development by providing them with a wide range of activities that integrate reading and writing skills while being suited to a variety of learning styles. It is an effective beginning literacy program for *all* students, including children who are just learning to read, struggling readers, children with special needs, and English language learners. Teachers can customize the software and the instruction to each student's individual needs, thus encouraging all their students to become independent readers and writers.

WiggleWorks provides purposeful practice and reinforcement in the five key areas of reading instruction: Phonemic Awareness, Phonics, Fluency, Vocabulary, and Comprehension.

- **Phonemic Awareness:** Teachers have the ability to individualize phonemic awareness instruction depending on the needs of each student.
- **Phonics:** Students systematically and independently practice new phonics skills and apply what they have learned to both reading and writing about selected literature.
- **Fluency:** Students listen to models of fluent reading, practice oral reading fluency, and monitor their own progress. Teachers have the opportunity to regularly assess their students' level of instruction and fluency.
- **Vocabulary:** Children have multiple opportunities to develop their vocabulary through reading, writing, listening, and making meaning of text.
- **Comprehension:** Children focus on the text structure and meaning both on-screen and through guided reading and discuss of each book.

RESEARCH FOUNDATION

Dr. Lynn Hickey Shultz, Ed.D., of Harvard University conducted a validation study to measure the effectiveness of *WiggleWorks* in promoting early literacy. The results of this validation study quite dramatically demonstrate the effectiveness of the *WiggleWorks* program in increasing reading and writing skills. First graders using *WiggleWorks* made significantly greater gains on standardized reading tests and writing samples than comparison students.

 The *WiggleWorks Validation Study* provides specific information regarding the research foundation for the program. You may download a copy at www.Scholastic.com/wiggleworks

UNIVERSAL DESIGN FOR LEARNING (UDL)

With *WiggleWorks*, students and teachers have access to one of the first Universally Designed curriculum programs that set a precedent for publishers and software developers. It has built-in features and options that help make the program accessible to *all* students. *WiggleWorks*' most important Universal design features include:

- Instructional options such as reading, writing, listening, and book-making
- Customizable presentation options, including text size, background color, recorded sound, and graphics
- Read aloud options, including word-by-word and line-by-line
- Single-switch access
- Customizable settings to support various disabilities and learning styles
- Customizable word lists to enhance spelling skills

WiggleWorks software provides teachers with a variety of ways to customize, personalize, and manage their students' learning experiences. For example, the Software Manager allows teachers to modify the program to meet each student's individual learning, sensory, and physical access needs, thus ensuring that each student receives appropriate instruction and support.

Teachers can select the screen keyboard option for students with visual-motor difficulties. With the screen keyboard, a scanning option allows even a child with a severe motor disability to choose letters by pressing a single switch. These tools ensure that every child can use the computer successfully.

The Center for Applied Special Technology (CAST) has defined three facets of content to support the Universal Design Principles for Learning (UDL). *WiggleWorks* addresses each:

1. *Multiple Means of Representation*, to provide students a variety of ways to learn. *WiggleWorks* provides text attributes that are customizable throughout the program.
2. *Multiple Means of Expression*, to offer students alternatives to show what they know. *WiggleWorks* offers activities with a variety of choices for expression such as writing, drawing, and recording.
3. *Multiple Means of Engagement*, to motivate and challenge students appropriately. *WiggleWorks* offers ways for teachers to structure learning experiences closely or enable students latitude to explore, construct and create.

EXPLICIT, SCAFFOLDED INSTRUCTION

WiggleWorks is a supplemental program that is flexible enough to use with any core reading program. It combines the necessary instruction, reinforcement, and practice in reading, writing, and language development that all beginning learners need. *WiggleWorks* can be used in a variety of classroom settings, and the amount of time spent with the software, with the books, and in instruction can be varied to meet curriculum needs.

Students can spend time with *WiggleWorks* in many different ways in the classroom, including:

- Small–Group Instruction
- Technology Center
- Classroom Library
- Listening Centers
- Independent Reading
- Take-Home Work

Scaffolded Instruction

WiggleWorks is designed to support the needs of all young learners. The program provides specific features to meet the needs of all students, including struggling readers, on-level readers, above-level readers, students with special needs, and English Language Learners.

- **Struggling Readers:** Children are exposed to books and begin to build tracking, decoding, and fluency skills as they read along with professional narrators.
- **Students with Special Needs:** *WiggleWorks* supports students with special needs through text, graphics, speech, sounds, and customizable access features.
- **English Language Learners:** Students benefit from hearing stories multiple times, hearing new words repeated, and seeing pictures that make words more meaningful.

With *WiggleWorks*, children can:

- Practice, record, and listen to their own reading
- Collect words to use in their writing
- Write and draw their own responses to the books
- Write their own books by personalizing the text
- Access reading support by clicking entire passages, phrases, or individual words read aloud
- Gain fluency and confidence with English–language texts
- Explore words and review phonics with the Magnet Board
- Use built-in tools designed to ensure every child can access the books

The *WiggleWorks* software provides each student with a unique scaffolded learning experience. Each title is available on the computer with support options for every child, no matter what his or her instructional needs. Built-in tools and activities support children's developing phonemic awareness, phonics, fluency, vocabulary, comprehension, and writing skills.

1. **Read Aloud:** Children become acquainted with the book while developing their decoding and tracking skills. Students hear the book read aloud and actively read along with the narrator. Accompanying graphics, music, and sound effects enhance students' reading comprehension.
2. **Read:** The options in the Read area help children focus on text structure and meaning of the book. Students build fluency and comprehension as they practice reading the story on their own. They can select words to save for later use in follow-up phonics, vocabulary, or writing activities.
3. **Write:** Students respond to the book with their own writing and illustration. As they write, students can access Story Words, preselected vocabulary words, or words they've saved in their My Words list, as well as sentence starters. They can hear their writing read aloud by a narrator or can record their own expressive narration.
4. **My Book:** A complete blackline version of the book is available for students to modify and print. Students can change both the text and illustrations to create their own version of the story with a new ending, setting, or character. They can also listen to a narrator read their version back to them.
5. **Magnet Board:** Children build phonics skills and increase their phonemic awareness as they explore letters and sounds. Special tools let students highlight specific word parts and focus on certain letter and sound combinations. Teachers can record direction for a specific phonics activity on the Magnet Board and ask students to save their work for review.

ASSESSMENT

WiggleWorks contains computer-based initial placement and continuous assessment instruments that are linked to the software management system. The Teacher's Guide contains a variety of assessment tools and strategies, including diagnostic assessments, informal assessments, observations, surveys, and conferencing.

Informal Assessment

Each Teaching Plan for every book contains questions to help teachers evaluate students' reading and writing abilities and skills.

Observation

Teachers observe students throughout the day in a variety of settings, such as during small-group and whole-class instruction, during independent reading time, or in the classroom library. Observations are systematic rather than random. Teachers focus on one student or several at a time to closely observe reading strategies. They assess oral language facility; attitudes and interests; and specific behaviors related to print, reading, writing, and book handling.

Surveys and Interviewing

The *Teacher's Assessment Guide* provides sample questionnaires that teachers can use to assess student ability and inform instruction.

Progress Monitoring

The software contains record-keeping devices that help teachers monitor student progress.

- **Work Record** helps teachers keep track of which students have worked on which books and with whom they have worked.
- **Student Log** lists for each book the time students' have spent in the Read Aloud, Read, Write, Magnet Board, and My Book sessions.
- **Student Work** displays students' saved work from each of the activity areas, as well as their My Words lists.
- **Portfolio** enables teachers to keep a comprehensive record of students' progress by collecting student work that reflects each student's creativity, challenges, and development over a period of time.

MOTIVATION & ENGAGEMENT

With *WiggleWorks*, children are captivated and motivated by the partnering of books and technology. They are engaged through multiple opportunities for listening, speaking, reading, and writing.

- The *Read Aloud* area, for example, offers children many of the same benefits as listening to a Big Book. Children can use the pictures to decipher text meaning, as well as track the print as it's read.
- In the *Read Aloud* area, children can record their own voices and then listen to themselves reading the book. This activity motivates fluent reading by encouraging children to read with expression and appropriate pacing.
- *WiggleWorks* Books are leveled by the Guided Reading Leveling System. Each successive level presents "just the right amount" of additional challenge to ensure that children stay motivated and continue to grow in their reading skills and confidence.
- Students can use the technology scaffolding to support themselves while reading, including reinforcing letter-sound associations by clicking on challenging words to have them read aloud. Such scaffolding helps students to experience success and enjoyment while reading each book independently.

- Music, sound effects, and engaging illustrations help pique the interests of young children in the text. Each word or line highlights as it's read, encouraging children to focus on the print and meaning.
- With *WiggleWorks*, children have choice and control over their learning experience. They can rewrite the stories and modify the illustrations, or write and illustrate their own stories. In addition, students can explore the phonetic patterns and structures of words on the software's *Magnet Board*.

PROFESSIONAL DEVELOPMENT

Onsite implementation training is included with district-level purchases of *WiggleWorks*. This half-day training helps teachers successfully implement the program to engage students in daily reading and writing practice. During the training, teachers will learn how to effectively use the program, including:

- Reviewing the *WiggleWorks* organization and research-based teaching materials
- Creating an implementation plan to support reading and writing instruction
- Individualizing instruction and monitoring student progress with reports
- Reviewing resources for communicating with families

WiggleWorks is also supported by professional development from *Scholastic RED*. *RED* offers research-based, facilitated online courses that specifically address the essential elements of reading instruction for Grades K-3:

- *Putting Reading First in Your Classroom, Grades K-2*
- *Building Fluency, Grades K-2*
- *Reading Success for English Language Learners, Grades K-3*
- *Building Vocabulary for Reading Success, Grades K-3*
- *Guided Reading: Making It Work in Your Classroom, Grades K-6*
- *Building Decoding Skills and Strategies, Grades 3-5*
- *Improving Reading Comprehension, Grades 3-5*
- *Improving Fluency, Grades 3-8*