



**Talking Fingers, Inc.
Company Backgrounder**

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Company Overview

Founded by neuropsychologist, Jeannine Herron, Ph.D., Talking Fingers, Inc. was launched in 1994. It was originally established as a subsidiary of California Neuropsychology Services, a 27 year-old non-profit organization for research and professional development in education. The mission of the company is to empower generations of children with excellent writing, reading, and thinking skills that they can use to enrich their personal lives, earn a livelihood, and contribute toward a more literate and thoughtful society.

Talking Fingers' flagship software program, *Read, Write & Type*, for children ages 6-9, was first licensed to The Learning Company in 1994. Funded, in part, by the National Institute of Child Health and Human Development (NICHD), it offers a unique approach to learning to read and write, based on recent brain research. Its speech-based method reverses traditional phonics instruction and teaches phoneme awareness, phonics, reading, writing, and typing by using writing as a route to reading. Since its publication, *Read, Write & Type* has been consistently praised and recommended by experts in the field of reading and is currently being used in thousands of homes and schools in the United States and abroad.

In 2006, Talking Fingers released a second program, *Wordy Qwerty: Foundations of Reading and Writing Fluency*, also funded by the NICHD. *Wordy Qwerty* picks up where *Read, Write & Type* leaves off. This program, for 2nd through 4th grade students, builds reading and spelling fluency by helping children recognize patterns in words and learn essential spelling rules. It includes an audio CD of 20 songs that help children remember the rules.

Company History

The parent non-profit, California Neurology Services (CNS) was established in June 1982, in San Rafael, California, as an organization for research and education on issues related to the brain and learning. CNS researched the effective use of computers as tools for learning, and developed high-quality professional development courses in the fields of health, psychology and education. In addition, CNS designed and produced over 50 conferences in major U.S. cities on topics such as learning disabilities, brain organization, and intervention strategies for brain injury.

In 1992, Leslie Grimm, creator of the best-selling *Reader Rabbit* software program, joined the CNS team as a designer and producer. Over the next 5 years, CNS tested *Read, Write & Type* with children in numerous California schools and incorporated its findings into the first CD-Rom version of the product. That version was released for both Macintosh and Windows platforms in 1994, under a publishing and distribution arrangement with The Learning Company, a major publisher of educational software for the home and school markets.

In 1994, the for-profit Talking Fingers, Inc. (TFI) was established to further develop software and other educational materials for teaching phonics, reading, writing, keyboarding and word processing to young children. The company's name is taken from the Apple IIe software which

was the original version of *Read, Write & Type*, developed by CNS, and emphasizes that children can learn to “talk” to the computer with their fingers while using writing-based software.

In 1998, TFI received its first \$850,000 Small Business Innovative Research grant from the National Institute for Child Health and Human Development (NICHD) to update and create an assessment component for *Read, Write & Type*. With this grant, Talking Fingers developed a second program CD, *Spaceship Challenge*, which gives additional instruction, monitors student progress and provides prescriptive help in areas where a child needs more practice. The grant also allowed TFI to add extensive auditory help in Spanish, for second language learners, and to develop other classroom materials.

Read, Write & Type is now available online and is being used around the world for anyone learning to read and write in English. Voice-over help and instructions are available in Spanish, Bahasa Melayu, Arabic, Farsi, Mandarin, Japanese, and Tagalog. Bahasa Melayu and Arabic help were added as part of Talking Fingers’ international education projects in Malaysia and Qatar.

In 2002, TFI received another SBIR grant from the NICHD to develop an assessment software package, in collaboration with Drs. Joseph Torgesen and Patricia Mathes. This product was licensed to Imagination Station and is currently distributed online as a component of the iStation Learning System.

In 2003, TFI received an SBIR grant from the NICHD to develop *Wordy Qwerty*, the follow-up program to *Read, Write & Type*, for grades 2-4. Both programs have received iParenting Media Awards. The *Read, Write & Type* and *Wordy Qwerty* CDs have been packaged together as the *K-4 Reading Bundle*, for a comprehensive supplemental curriculum in English literacy.

In 2005, TFI received an SBIR Phase I grant to develop a software component for inventor/designer Christian Holljes’ stationary cycling toy, linked to a TV monitor, to teach 3 and 4 year-olds colors, shapes, letters, etc. This toy was subsequently licensed to Fisher-Price, released as the Smart Cycle and chosen as 2007 “Toy of the Year” by the Toy Industry Association.

Company and Product Philosophy

Jeannine Herron did not set out to be a software developer. However, it became clear as she investigated the uses of technology in education, that existing software did not fulfill her vision of how computers could help children learn to read and write.

Writing is probably the most difficult task elementary students face. TFI has proven that computers can be used as a tool to implement the latest in brain research, and make both reading and writing easier for all children, including those who are at-risk for reading difficulties and those who are learning English as a second language.

The TFI team became intrigued by the notion that, if children could learn to keyboard and use a word-processor in first grade, they could use the computer as a tool for writing all the way through their elementary years and beyond. All they had to do was learn a finger stroke or combination of finger strokes for every speech sound. Since there was no software available that would teach typing-by-sound in this fashion, the plan to develop *Read, Write & Type* was born.

Three important principals have guided the TFI approach: (1) to use a speech-based approach (writing as a route to reading) in order to activate left hemisphere areas of the brain for more efficient neural pathways for reading; (2) to integrate phonics, encoding, decoding, word-processing and keyboarding into one system of learning to read and write; and (3) to make programs engaging and fun for children.

Drawing on the experience of 20 years of neuropsychology research, both *Read, Write & Type* and *Wordy Qwerty* have been built on a solid base of information about how the young brain learns. Safety nets have been built in for those children who have difficulty with language tasks or who are learning English as a second language.

With both *Read, Write & Type* and *Wordy Qwerty*, children practice phonics continuously, as they type meaningful words, phrases, sentences and stories within a plot-based context. This unique approach is what makes the Talking Fingers' programs so powerful. Children use their eyes, ears, mouths, and fingers simultaneously, which greatly strengthens learning. They pronounce the words to themselves, mentally "hear" the sounds, feel the association in their fingers, and see the letters and words appear on the screen.

The unique premise of this method is that spelling out words develops fluent phonics skills and is a powerful route to reading fluency. Using the keyboard makes spelling out words and writing much easier and more fun for young children who find keyboarding simpler than using a pencil. Children listen to spoken words or sentences, then sound-out and spell them. As they spell out the words, they read and get visual and auditory feedback from the computer to correct their own errors. Because they are highly motivated to complete the story-based programs, children enjoy this continuous practice, which develops an easy fluency with the phonics code.

Results

Several studies have confirmed the effectiveness of the Talking Fingers approach: In a study conducted by Joseph Torgesen, at Florida State University, in 1998, a group of first graders identified as at-risk for reading failure were evaluated over a two-year period in a program using *Read, Write & Type*. The children showed significant gains in reading skills from pre to post-tests, with significant gains in fluency and accuracy. Reading comprehension scores were also higher than expected, based on the children's general verbal ability. Dr. Torgesen's research was published in the February, 2010 edition of the *Annals of Dyslexia*, under the title "*Computer-assisted instruction to prevent early reading difficulties in students at risk for dyslexia*:"

Outcomes from two instructional approaches.” A summary of the research can be found on the Talking Fingers web site, at: <http://www.talkingfingers.com/research/fsu.html>

In a classroom study conducted at Millard School in Fremont, California, from 1996 - 1998, first graders received instruction, using *Read, Write & Type*, in two one-hour sessions per week, for a 7-month period. The performance of these children was compared to that of 50 first graders from a comparable elementary school who started with higher reading levels than the students from Millard School. The Millard School children achieved significantly higher end-of-year scores on phoneme blending, reading non-words, and spelling.
(<http://www.talkingfingers.com/research/wagon.html>)

In a project funded by the NICHD, sixteen Spanish-speaking 6-7 year olds attended an after-school class for 60 hours using *Read, Write & Type*. Their progress in reading was compared to that of 16 comparable students who either went home after school or attended day-care or after-school tutoring. All 32 students were struggling to read and were in the lowest 40% of the class on reading scores, and their Quick English Start (QSE) scores classified them with Limited English Proficiency (LEP). The RWT group showed significantly greater improvement on the English Word Attack ($p < .02$) and English Word Identification ($p < .01$), suggesting that an after-school program using *Read, Write & Type* can be very effective at improving reading scores significantly for LEP primary students who are struggling to read.

Because students received no direct instruction in Spanish reading skills, a more surprising finding was that the RWT group also improved significantly on the Spanish Word Attack ($p < .01$), suggesting that the development of phonemic awareness and phonics skills in English may affect those skills in Spanish as well. Learning to segment words into their component phonemes (phonemic awareness) and to link those sounds to letters involves the same process in both languages and are critical steps to reading fluency.

Distribution

Additional information and videos are available on the Talking Fingers website at www.talkingfingers.com.

Online and CD Editions of *Read, Write & Type Learning* and *Wordy Qwerty* may be ordered from the Talking Fingers Website (<http://www.talkingfingers.com/store>) .