# Jeannine Herron, Ph.D., Research Neuropsychologist Developer of the Read, Write & Type! Learning System

"I want to change the way kids learn to read. Parents and teachers need to understand that reading and writing go hand in hand. In fact I think writing is the most powerful, the most active, and the most interesting way to become fluent at reading. It also turns out to be the best way to build efficient neural pathways for reading in the brain."

Students often see writing as a chore. They have so many things to say, but the mechanics of writing slows them down and stifles their enthusiasm. *Read, Write & Type!* makes writing easy. And seeing kids boost their reading scores time after time with this program convinces me that writing is an absolutely magical route to reading!"

#### Jeannine Herron is a true visionary.

A number of years ago, our nation released reports that reading instruction was failing an alarming number of students. (Close to 70% of American students cannot read or write proficiently to this day). Many of our elementary school-age children are not getting the tools they need to master the written word. The approach of traditional curricula is from print-to-speech—that is, a focus on decoding words (reading) from the start. In the **Read, Write & Type!** Learning System, this process is reversed. Taking a speech-to-print approach, Dr. Herron incorporates writing as a powerful pathway to reading - a revolutionary concept in reading instruction, and one which is being supported by current brain research. Children are bursting with thoughts and ideas, and with **RWT!** they read as they write, and write as they read, gaining confidence in self-expression, and developing a life-long love of books and learning.

### <u>Co-Founder/Program Director of first Head-Start in the U.S.</u>

Dr. Herron has been involved in children's education since 1955. Her deep and abiding belief that children are our most precious asset and that their welfare and growth must be at the heart of every choice we make as parents and educators, has informed her work for over forty years. This mother of two and grandmother of five has been teacher, activist, research scientist, adventurer, editor, writer, and educational software developer. She began her career as an American teacher in the mid-fifties, teaching English, Mathematics, and General Science to middle and high school students in Ramallah, Jordan. It was there that she met her husband, Matt Herron, an American photojournalist, also working as a teacher overseas. They were married in Beirut, Lebanon in 1956.

Seven years later, she and Matt, and their two small children moved to Mississippi to be active in the civil rights movement. It was there that Jeannine became Co-founder and Program Director of the first Head Start project in the United States, the Child Development Group of Mississippi, an organization that served over 5,000 children.

**Investigates Dyslexia at UCSF's Langley Porter Institute** 

Jeannine Herron received her Ph.D. from Tulane University Medical School, and went on to Stanford Research Institute as a neurobiologist and neuropsychologist. In 1974, she was awarded a postdoctoral research fellowship at UC San Francisco from the National Institute of Health (NIH) to investigate the cerebral organization in left-handers, right-handers, and ambidexters. This research culminated in the publication of her book, *Neuropsychology of Left-Handedness*, by Academic Press in 1980. From 1976 to 1984 she continued at Langley Porter (UCSF) as research psychologist, contributing to all aspects of the NIH-funded project studying the correlates of dyslexia.

## **Embarks on Voyage to West Africa**

In 1970, Jeannine and Matt, with their children, Matthew, age 13, and Melissa, age 11, sailed *Aquarius*, their thirty-foot sloop, from New Orleans to West Africa. For a year and a half, the Herrons visited countries from Mauritania to Ghana, including a 300-mile inland trip up the Gambia River. It was an experiment in alternative education for the children who read more than 100 books, learned to type, studied French, math, marine biology and navigation, while absorbing geography and African culture. Matthew and Melissa were encouraged to keep a journal of their thoughts and experiences. This activity underscored Jeannine's view of writing as a powerful educational tool, and led to the book *The Voyage of Aquarius*, a fascinating account of their travels authored by all four members of the family. The book was published in 1974 by EP Dutton.

## **Establishes Research Organization**

Her experiences with children in Mississippi, her history in the classroom, her research in dyslexia, and her discoveries from teaching her own children to write, fueled her desire to develop practical tools to help children learn to read and write. In 1982, she established California Neuropsychology Services (CNS), a non-profit organization whose purpose was to research and develop teaching tools and host more than 50 three-day seminars across the country. CNS seminars informed teachers, speech pathologists and psychologists about the most current research on the brain and how it influences learning and behavior. Dr. Herron and her staff at CNS investigated how computers and existing software could be used more effectively in all aspects of education. Recognizing the potential of computers as non-judgmental tools for mastering the basics in the sometimes frustrating task of learning to read, she set out to find the best in educational

software for early readers. Finding no writing-based software that was both engaging and educationally sound, she spent several years developing *Read*, *Write & Type!*<sup>TM</sup> (the prototype was the Apple computer program, Talking Fingers<sup>TM</sup>). A 1998 grant award from the National Institute for Child Health and Human Development (NICHD) launched Talking Fingers, Inc.(TFI) the CNS for-profit subsidiary. NICHD funds were used in the development of new materials and the research for the new *Read*, *Write & Type! Learning System*<sup>TM</sup> for 5-7 year olds.

At the same time, from 1990-1996 Dr Herron was directing the Media Learning Center on the campus of Dominican University in San Rafael, California, where she provided Technology in Education classes to preservice and in-service teachers.

A subsequent \$850,000 NICHD grant enabled TFI to develop a second software product, Wordy Qwerty, for 7-9 year olds, to provide instruction in more advanced phonics, word patterns and families, and 20 spelling rules (accompanied by 20 spelling songs).

An additional \$850,000 NICHD grant enabled the development of a K-3 software-based assessment package in collaboration with Drs Torgesen and Mathes, that was licensed to Imagination Station and has become part of their iStation Learning System.

A fourth NICHD grant provided funds for the development and testing of an educational toy for 3 and 4 year olds—a stationary cycle linked to a TV monitor where children can steer their "cycle" to various virtual "lanes" to capture colors, shapes, letters, etc. This product was licensed to Fisher-Price and became their "SmartCycle", winning the Toy-of-the Year Award.

Dr. Herron has published journal articles in Science, Brain and Language, Journal of Electroencephalography, Journal of Learning Disabilities, Neuropsychologia, and International Journal of Neuroscience, and a feature article in Psychology Today. She has been a contributing editor for Science, and Brain and Language, has led many workshops for teachers, and has lectured widely. A new book, Raising Skilled Readers and Writers, is scheduled for publishing in 2010.

Page (http://www.talkingfingers.com/press) to download a three minute Quicktime video which includes Jeannine discussing the importance of writing as a route to reading.