

# The Education Innovator

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**What's New**

**From the U.S. Department of Education**

U.S. Secretary of Education Margaret Spellings today [announced](#) the award of more than \$27 million in grants for emergency school repairs under the Department's Impact Aid Discretionary Construction Program. (June 9)

U.S. Deputy Secretary of Education, Ray Simon [visited](#) Franklin Sherman Elementary School (VA) where he paid tribute to American troops as part of the "ThanksUSA" initiative to mobilize citizens to thank the men and women of the armed forces for their contributions to the country. Deputy Secretary Simon stressed the value of American history in schools along with the importance of Memorial Day as a national holiday for recognizing the sacrifices of service men and women. (May 26)

## Feature

### Brain Matters: The Talking Page Literacy Organization's Tutoring Approach

Look at the word "bat." Silently concentrate on reading the word. Now say the word out loud. Surprisingly, the brain uses very different circuits, or pathways, to perform each of these tasks: looking, reading, and speaking. The Talking Page Literacy Organization (TPLO) is employing recent research on how the brain works to inform how it may help children learn to speak, read, write, and understand the English language.

TPLO is a nonprofit organization that offers after-school tutoring services in English to local educational agencies, including school districts, and faith-based organizations using phonics and current research in *Neurolinguistics*. *Neurolinguistics* is the study of how the human brain learns and processes written and oral language. In order to tutor individuals with different learning styles, the program utilizes four "learning pathways to the mind," which include hearing, saying, seeing, and writing. Students first practice how to recognize the sounds of letters, pronounce sounds, form letters, spell whole words, and then write sentences.

According to TPLO, this approach to instruction can be represented in the form of a "linguistics tree." *Phonemes*, *graphemes*, and *morphemes* are the basic foundation of language and constitute the "roots" of the tree, which is where the tutoring program starts. A phoneme is the smallest unit of sound in language that is capable of conveying a distinction in meaning, such as the *b* in *bat* and the *m* in *mat*. A grapheme consists of all the letters and letter combinations that represent a sound, such as *f*, *ph*, and *gh* for the phoneme / *f* /. Next, a morpheme is a language unit that cannot be divided into smaller meaningful units, such as the *-ed* in *walked*. Once a student has mastered these three main roots, he or she can begin practicing how to say and write words and phrases, which make up the trunk of the "linguistics tree." Sentence construction and grammar are the last elements of the program and form the branches of the metaphorical tree.

Martin Chekel, founder and president of TPLO, states, "The design we use is sequenced – we take the fundamental parts of language and then build upon them. In creating this service, I wanted to bring new ideas into classrooms and after-school programs, to change instruction and accelerate it."

TPLO was established in 1998 for the purpose of improving "early childhood literacy in America" and the philosophy that all children should be able to read, spell, and write English by age six. In 1998, TPLO provided research reports and testimonials about effective early childhood writing, spelling, and

Secretary Spellings [launched](#) the fifth meeting of her Commission on the Future of Higher Education in Washington, DC. The Commission discussed access, affordability, accountability, innovation, and workforce development among other topics. (May 19)

Secretary Spellings [announced](#) that Tennessee and North Carolina are the first two States approved and implementing their growth model pilots for the 2005-2006 academic year. Tennessee has received full approval to implement its growth model for this year. North Carolina is approved to implement its growth model, provided that its assessment system is fully approved by July 1, 2006. Six additional States that had applied this year, but did not meet the necessary criteria to be approved for the 2005-2006 school year, will have the opportunity to submit revised proposals for the 2006-2007 school year. (May 17)

Secretary Spellings delivered [commencement](#) remarks and received an Honorary Associate of Arts in Public Service Degree at Montgomery College (MD). She [lauded](#) community colleges like Montgomery noting, "Community colleges can bob and weave to prepare students for new opportunities and better jobs." (May 17)

At the first national summit on

reading programs to Congress, State legislatures, and local school boards. In 2001, TPLO began providing services to school districts in California, where the organization is based.

Currently TPLO offers three programs, "Early Childhood and Family Literacy," "America's English Language Tutoring," and "English Linguistics Literacy." All three programs generally last seven to ten weeks and tutor students in writing, spelling, and reading. Within each TPLO program, trained tutors or teachers lead students. TPLO has developed a series of "Tutoring Academy" workshops for teachers and tutors in which they are trained using specific professional development modules. These modules are designed to support [California's English-Language Arts Standards](#) in kindergarten through eighth grade and focus on topics such as phonemic awareness, decoding, phonics, listening and speaking integration, and vocabulary and writing development. During professional development sessions, teachers and tutors view a presentation on neurolinguistic brain research, observe trained tutors during classroom demonstrations, review instructional materials, learn how to integrate a TPLO-developed audio system into their tutoring instruction, and analyze TPLO-created pre- and post-tests.

Individual mini-lessons for each program generally take five to ten minutes for students to complete. Students then spend time reviewing lesson concepts with their tutors before moving on to the next mini-lesson. TPLO uses explicit instruction with an audio system called SONO. Explicit instruction is a series of required instructional steps or procedures designed to guarantee that students understand explicitly what is expected of them and what is being taught. TPLO tutors speak with students before each mini-lesson about the lesson's objectives. The SONO system delivers the majority of tutoring instruction to students and consists of a headphone and microphone set as well as an audio player capable of voice replay and recording. During a lesson, a student first listens to a recording where a phonemic sound is pronounced. Next, the student repeats that sound into the microphone on the headset. The audio player allows the student to hear his or her own voice saying the phoneme. The student then writes the letter that represents the phoneme using a clock face as a writing guide. To write the letter *g*, for example, the student would start at the number two then trace all the way around the clock back to the number four, making a circle. Then the student would pull the line straight down, rounding the line up toward the number eight. After writing the letter four times, the student says the phoneme again. According to studies from the National Institute of Child and Human Development (NICHD), direct instruction in decoding skills emphasizing the alphabetic code results in more favorable outcomes than does a context-emphasis or embedded approach.

In his 2000 address to Congress, Dr. Reid Lyon, former Chief of Child Development at NICHD, noted, "The average child needs between four and fourteen exposures to a new letter, letters, or words to automatize the recognition in the brain."

By listening to the phoneme, saying it twice, hearing the pronunciation of it, and then writing it four times, each TPLO lesson allows for nine exposures to a particular letter. Review is a large part of the process. Parents whose

the advancement of girls in math and science, Secretary Spellings and co-host Dr. Kathie Olsen, Deputy Director of the National Science Foundation, joined representatives from the National Science Foundation, the National Aeronautics and Space Administration (NASA), Girl Scouts of the USA, Sally Ride Science, and other organizations to [address](#) the math-science gender gap in the nation's schools and its effect on women entering the future workforce. (May 15)

Secretary Spellings sent a [letter](#) to all Chief State School Officers requesting their assistance with more effectively implementing the public school choice and supplemental educational services (SES) provisions of the *No Child Left Behind Act*. The letter also invites States to apply to participate in an SES pilot for the 2006-2007 school year, in which up to seven districts per State would be allowed to offer SES to students who attend schools in year one of improvement. States and districts must meet certain eligibility requirements to participate. (May 15)

Secretary Spellings [delivered](#) the commencement address to the Texas Tech University Class of 2006. As the first U. S. Secretary of Education with school-aged children, she gave graduates advice and reminded them to never forget the lessons their mothers taught them. (May 13)

children participate in the Early Childhood and Family Literacy Program are encouraged to review the lessons with their children as homework.

TPLO has patented the term "SONOgram" to describe the working set of 26 letters and 44 phonemes that are needed to write English speech on paper. Each SONOgram is numbered and then introduced and reviewed in different mini-lessons. During the first five weeks of the program, students learn the sounds of 54 SONOgrams, how to form all the letters in the alphabet, write simple sentences, and spell several hundred words. During the next four weeks, students learn the remaining 16 SONOgrams, additional vocabulary words, and begin to read basic-level books.

The process is informed by the work of Dr. Sally Shaywitz, a neurolinguist and Co-Director of the Yale Center for the Study of Learning and Attention. According to Dr. Shaywitz, "In order to learn how to read, an individual must begin to learn that the letters, the orthography, the graphics that are present on a page, represent the same sound units that an individual hears in spoken language."

TPLO conducts pre- and post-tests for students using two exams. Both tests were developed at the Reading Research Center at Cornell University and are administered by TPLO tutors. First, the tutor tests the student's ability to write the 70 SONOgrams heard in English speech and simple spelling words using the TPLO English Linguistics Assessment Tests that are on the SONO Audio System. Next, the tutor administers TPLO's Diagnostic Reading Test to assess the student's reading comprehension and skills. The diagnostic tests are offered for students in first through fifth grade and another set of diagnostic tests is offered for students in sixth through eleventh grade. Dr. Walter Pauk, director of Reading Research at Cornell University, Linda Browning, and her husband, Glenn Browning, developed both sets of diagnostic tests. The tests provide tutors, teachers, and parents with an indicator of the student's weaknesses and strengths. During the test, the student must be able to recall facts from a given passage, identify the main idea of a passage, draw conclusions, and choose the correct meaning of a vocabulary word from a particular context. The diagnostic tests employ the Fry Readability Scale to determine the student's reading level. The Fry Scale utilizes a special graph to plot the average number of syllables and sentences per 100 words in a piece of writing to ascertain the grade level of the material. Once TPLO tutors have gathered information from all tests, they generate Individual Student Learning Plans for each tutee.

In 2001, TPLO provided 145 Early Childhood and Family Literacy Program Kits to students at Garfield Elementary School in Santa Ana, California. Garfield has a student enrollment of 1,028 Hispanic children who perform significantly below average in English language skills measured by the state's [STAR \(Standardized Test And Reporting\) exam](#). The TPLO kits included student books, SONO audio players, writing papers, lesson booklets, and reading comprehension tests for grades one through five. Students who were reading both below and far below basic in grades two through five were selected to participate in the after-school TPLO program. The organization trained 23 teachers and 20 aides for the project.

The National Center for Education Statistics (NCES) released [The Condition of Education 2006](#). This annual report summarizes developments and trends in education using the latest available data. The 2006 report presents 50 indicators on the status and condition of education and an analysis of international assessments. Secretary Spellings issued a [statement](#) regarding the report's [findings](#). (June 1)

NCES released results of the [National Assessment of Educational Progress \(NAEP\) 2005 science assessment](#), which show national performance in the fourth, eighth, and twelfth grades and state performance for most states in the fourth and eighth grades. Fourth-graders made significant improvements in science over 1996 and 2000 levels, with the lowest-performing students making the largest gains and achievement gaps narrowing. (May 24)

NCES released the [National Indian Education Study \(NIES\)](#), which is a two-part report describing the condition of education for American Indian/Alaska Native students across the country. Part I of the report highlights the performance of these students in grades four and eight on the 2005 NAEP reading and mathematics assessments. Part II of the report is a survey of the educational experiences of these students and their teachers, and will be released

The year before the program was implemented, six percent of second and third grade students and 11 percent of fourth and fifth grade students were reading on grade level. By 2003, after fully implementing the TPLO program and other school-based interventions during the academic day, the percentages increased by 26 percent for the second grade, 18 percent for the third grade, 32 percent for the fourth grade, and 23 percent for the fifth grade.

The Talking Page Literacy Organization is an approved supplemental educational services (SES) provider in California under the federal *No Child Left Behind Act*. Currently, the organization has contracts in diverse areas across the state, some of which include Orange County, San Diego County, Los Angeles Unified School District, San Joaquin County, Pomona Unified School District, and Sacramento County. The term "supplemental educational services" refers to free extra academic help, such as tutoring or remedial help, that is provided to students in subjects such as reading, language arts, and mathematics. This extra help can be provided before or after school, on weekends, or in the summer. Low-income families can enroll their children in supplemental educational services if their children attend Title I schools that have been designated as in need of improvement for more than one year by the State. Across the country, providers of supplemental educational services include nonprofit and for-profit organizations, local educational agencies, public schools, public charter schools, private schools, public and private institutions of higher education, and faith-based organizations. The Office of Innovation and Improvement coordinates the supplemental educational services provision of the *No Child Left Behind Act*.

**Resources:**

- [The Talking Page Literacy Organization](#)
- [Supplemental Educational Services](#)
- [Reading First](#)

**Innovations in the News**