We're overcoming reading problems every day at Decatur High School, although that isn't supposed to happen easily or frequently for adolescents who are struggling readers. I can tell you story after story of Decatur parents who thought that there was little hope of their kids ever going on to college, but after a year or so in our reading program, their sons and daughters are both transformed and college bound.

For the past two years, 100% of our graduating seniors who have taken the Texas Assessment of Knowledge and Skills (TAKS) have passed the language arts/reading portion of that test. That's no small feat for any high school in Texas, especially for one like ours, in which one out of four students is economically disadvantaged.

Recently, federal officials suggested that only 25% of kids who are more than nine years old and who have reading problems will ever become proficient readers (National Institute for Child Health and Human Development, 2002). It is one of the reasons that up until this year most of reading reform has focused on reading instruction in grades K–3. But Decatur isn't experiencing this bleak outcome. In fact, the reverse may be happening—at least three out of four of our students who
are struggling readers are addressing their reading problems successfully. How do we know? Because up to 20% of our last two graduating classes started the ninth grade with significant reading problems and some of the lowest reading test scores we’ve ever seen. Yet these students left our school as successful readers, as evidenced by the fact that they performed very well on the 11th-grade TAKS.

Brain Science
The transformation of our students and our school isn’t happening by accident. Seven years ago, we decided to follow the recommendations of the National Research Council (the predecessor to the National Reading Panel) to explore learning from the point of view of brain science. We made this decision with the hope of making quick changes to our school, which had just been handed a “low-performing” designation from the Texas Education Agency.

We began with an all-staff book study and discussion on how the brain learns. As we continued our study, we went in search of a reading intervention that most closely fit with what we were learning about brain function. We found one—Read Right by Dee Tadlock—and we have never doubted its effectiveness with our students. In the five years that we have used it, the average gain in reading ability for our students, including regular education students, special education students, and English language learners combined, is 2.6 grade levels of advancement in functional reading ability per year (see figure 1). This is nearly unheard of among broad populations of secondary struggling readers. This means that a few of our students are gaining four to five grade levels of reading ability in a single school year, balancing out students who gain one to two grade levels.

New Thinking
Our efforts are transforming most of our students into strong readers, including kids with dyslexia, Down syndrome, and specific learning disabilities. The transformation typically happens in just one or two years. Developed over a 25-year period and tested students in with elementary, middle level, and high school, and with adults in junior colleges and work-force literacy centers, Read Right operates from the following assumptions:

Reading problems are caused when an individual builds a flawed neural network to guide the process of sentence reading. Neural networks guide all functions we perform. The reading field in general has not yet considered that one neural network may guide the process of individual word recognition and another may guide the process of sentence reading. This is significant because most reading instruction in grades K–3 currently focuses on individual word recognition strategies.

Sentence reading may require a different kind of implicit learning. To fix a reading problem, the right materials must be available (e.g., books, not word lists) and the right guidance must be provided by highly trained tutors or coaches who can correctly identify the symptoms of the reading problem and respond with strategies that compel the struggling reader to address all aspects of the sentence reading process. This includes the implicit aspects—those processes that take place below the level of conscious awareness.

The foundation and main event of sentence reading is not necessarily word identification. To read sentences efficiently and effectively, it is likely that excellent readers use multiple neural resources to plan, coordinate, and integrate numerous brain systems so they efficiently and fully comprehend what they are reading. Phonics knowledge is necessary in sentence reading, but excellent readers may not use phonetic information to decode words or otherwise figure out what the words are. Instead, in sentence reading, through their anticipatory systems, excellent readers may integrate strategic phonics information with other relevant knowledge, such as their knowledge of the target language, the structure of language, the world, and cultural influences. This is a highly
complex process. The best way to understand it may be to experience it. Try to read this scrambled message:

B4UASsM2MCH ABT RDNG, cnsdr tht th BRNISWNDRFLY KreaTV & efcnt.

And this one, circulated around the world and familiar to many Internet users:

Aoccdrnig to rseearch, it deosn’t mtttaer in waht ordr the ltteers in a wrod are prsrted. The olny iprmoatnt thng is taht frst & lsat ltteres are at the rghit pclae. The rset can be a toatl mses and you can stll rd it wouthit a porbelm.

Answering the question, How does the brain read scrambled text? has the potential to launch a new debate among reading experts and teachers. Yet several conclusions appear rather obvious: First, as the examples demonstrate, figuring out an author’s message doesn’t require sequential decoding, nor does it rely on whole word recognition. Second, scrambled messages can be read quickly and efficiently when the primary reading goal is to use whatever alphabetic information is available to assist in constructing meaning. And third, locking ourselves into a pattern of sounding out words would, in the case of scrambled messages, produce an ugly and inaccurate representation of the intended message.

The third point raises an interesting question: is it possible that over-emphasis on the sequential left-to-right identification of letters and words (e.g., decoding) actually impedes the development of higher-level reading ability? This has been the premise underlying Read Right’s methodology since it was developed 25 years ago, and from the results our school and others using the methodology have achieved, it appears that the premise has merit.

Implementation
The methodology is delivered in schools as a small-group tutoring program with a ratio of one tutor to four students, structured as either a separate class or pull-out program. It provides seven weeks of intensive hands-on training to certified teachers and classroom aides, with training spread over a school year and students introduced to the program immediately. If you were to visit our reading room, you would see special educa-tion students, regular education students, and English language learners all working together and on task every minute they are in the program.

Students work with a library of 850-plus carefully selected and leveled fiction and nonfiction books. While three students are fully engaged using new strategies with books, audiobooks, and tape players independently, one student works directly with the tutor. The tutor’s focus shifts very quickly from student to student, depending upon three factors: student performance, when students indicate they are ready, and whether students are engaged at the moment in the program’s Excellent Reading or Coached Reading Components. During this intensive work, students are never asked to sound out words and their attention is never, ever supposed to be directed to individual words. Other more sophisticated strategies are used by the tutors and developed by the students.

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Four days of every week that students are in the program, they work in both the Excellent Reading and Coached Reading Components. One day per week, students work together in the Critical Thinking Component. In this component, student-led small groups engage in cooperative activities designed to improve critical thinking skills. Students also are required to do Independent Reading outside of the daily tutoring sessions.

Built into the model is an initial student assessment designed to place students in the appropriate text-complexity level; pre- and post-program assessments with a norm-referenced, standardized reading test; a sophisticated but simple system for
Rapid Reading Improvement

Decatur’s struggling adolescent readers have made significant gains in reading, as evidenced by at least three standards of measure: the state TAKS test for students in grades 11 and higher; gains in functional reading ability, as measured regularly by the program’s tutors; and pre- and posttesting using the Gates-MacGinitie Reading Tests.

The following reflects average annual gains in functional reading ability for Decatur students. Gains in functional reading ability reflect a reduction in symptoms of the reading problem and the ability to read increasingly complex text.

Functional Reading Ability Per Student Per Year Averaged Over Five Years (2001–05)

Gain in NCE Scores for Reading Per Student Per Year

The following reflects the average NCE gains per student, documented for the past three years. In general, researchers consider a gain of 1.9 to 3.2 NCEs to be meaningful (Borman, Hewes, Overman, & Brown, 2003):

*As freshmen, approximately 20% of the students in these classes had significant reading problems. At graduation, 100% of students in both classes eligible by federal guidelines associated with the No Child Left Behind (NCLB) act had passed the language arts/reading portion of the 11th-grade Texas Assessment of Knowledge and Skills (TAKS). NCLB guidelines mandate that no more than 1 percent of students can be exempted from state testing.

Source
tracking daily student progress; monthly analysis and reporting related to the daily student data; and a highly structured format for keeping students engaged and on task throughout the daily program activity.

The program doesn’t look like any other program we’ve ever used or observed. There are no artificial reading activities. As the students participate in the program, they work only with authentic fiction and nonfiction books. Each student is held accountable to a high standard of performance, and tutors are trained to know what kind of intervention will provide the support required to achieve the standard. Students are actively engaged in figuring out how to make excellent reading happen. Students are expected to correctly judge their own reading excellence, and this information becomes the internal benchmark they use to overcome their reading problems. In the program, excellent reading is very specifically defined as reading that is always comfortable, always as natural as conversational speech when performed orally, and always results in full understanding of the author’s message (as long as students possess sufficient background knowledge to understand the content—the 850-book library of fiction and nonfiction books helps students acquire background knowledge).

Over time, students in this environment remodel the neural network that guides the reading process so they achieve excellent reading skills with many different kinds of text. Essentially, the tutors are training students to experiment with reading until they achieve reading excellence and then to settle for no less than excellent reading with each and every attempt.

**Conclusion**

The human brain is a remarkable thing. From neuroscience, we know that it possesses natural plasticity and that it can change itself. But, to accomplish this, the right strategies and techniques must be used. Our staff members have benefited tremendously from developing a better understanding of how the brain functions. It is clear to us that we are on to something that is of great significance: a lasting and effective solution for adolescents who struggle with reading. PL

**Reference**