

Why Reading is Not a Natural Process

By Ann Dolin and Laura Rheinauer

Picture two students, side by side, reading a fairytale from a storybook. One student easily reads with expression and enthusiasm, "Once Upon a Time". The other student slowly reads "On up a tim." Both students live in the same neighborhood, have educated parents that read to them at night, and were exposed to literature at a young age. So why can the one read and the other cannot? Is it a fairytale story to think that reading is a natural process? The answer, is yes.

Almost 20% of children have a significant reading disability that impacts their ability to acquire reading through traditional teaching methods. Most reading instruction in American classrooms is taught through the whole language approach where students are directed to literacy by focusing on literature, diversity, reading groups and motivation. While this methodology works with many students, critics of the whole language approach state that students also need phonics based and specific skill set instruction.

Reid Lyon, the former head of National Institute of Child Health and Human Development, makes a valid point by questioning why there are so many illiterate adults and children if reading were a natural process. According to a recent article in TIME magazine, there are almost 3 million students in special education classes specifically because they cannot read. Some are dyslexic, others are not. In many instances, the student demonstrates strong reading comprehension, but there is a specific glitch in sounding words out (decoding). Because reading is a combination of decoding and comprehension, a student's decoding skills are vital to the reading process. To learn to decode a student needs to be able to understand that individual sounds make up words. Thus, a reading disability that is not based in comprehension is occurring at the phonemic level. Simply being able to recite the alphabet isn't enough. Children need to know that the written letter equates to a sound. Weak readers have difficulty perceiving various sounds and sound blends, and thus have difficulty decoding new words. These students aren't able to pull apart sounds (segment) and blend them together. Look at this simple example:

When we say the word dog, we hear just one sound. But when pulled apart, the word dog is actually composed of three separate phonemes. The D sound, the O sound, and the G sound. To truly be a good reader we need to be able to segment the three separate sounds rapidly and effectively.

The emergent reader relies heavily on decoding phonemes (pulling the sound apart) and then instantly pushing the sounds back together. This automatic process requires the proper neurological wiring. Scientific data points to specific neurobiological differences between normal readers and those with dyslexia. Three specific regions of the brain work in tandem to analyze printed word, recognize the sounds in that word, and then make the reading process automatic. Functional magnetic resonance imaging (fMRI) scans show the left inferior frontal gyrus, the left parietal-temporal lobe, and the left occipital-temporal area are those exact regions where the reading process occurs. In students with reading disabilities these areas are not as highly developed. The National Institute of Child Health and Human Development within the framework of the National Health Institute continues to support research efforts to understand and address reading failure.

Even students that are not at risk for reading failure (those raised in poverty, limited English proficiency, limited exposure to reading, and speech/hearing handicaps) can and do encounter reading difficulties. This scientific evidence of brain scans show that a glitch in the brain's processing abilities prevents students with reading difficulties to effectively and quickly decode words. Instead, these students over compensate by relying heavily on memorizing words. While this compensatory strategy helps get kids through a school year, without proper treatment, these children flounder as they encounter new words.

So what can be done? Twenty years of research demonstrates that we can remediate almost all reading disabilities. The most important thing is to first seek help and get a diagnosis. Assessment of a student's phonemic awareness as early as the kindergarten level is beneficial so that you can have a strong predictor of potential difficulties in reading that may be encountered down the road. Too often the excuse of a developmental lag is given, and that eventually Johnny will "catch up". Statistics state that 76% of students with a reading problem never do catch up. It

is absolutely crucial that reading-related learning disabilities do not go undiagnosed and untreated. Waiting to seek help can ultimately be even more deleterious. Susan Hall who wrote *Straight Talk About Reading and Parenting A Struggling Reader* states that if help is given in 4th grade rather than in kindergarten when weaknesses were first spotted, it will take four times as long to improve the same skills by the same amount. Once the nature and cause of a student's difficulty is determined appropriate instruction to remediate the deficit can be administered, and accommodations granted. Children and adults that encounter difficulty reading need systematic instruction and intervention so that they don't encounter other difficulties in academics and so that their emotional well being is not impacted.

According to the Learning Disabilities Online (www.ldonline.org) website, one of the biggest indicators of reading comprehension is the fluency (speed and accuracy combined) of reading single words. Going hand in hand with that is the ability to accurately decode those single words, which is directly related to phonemic awareness and the development of that skill. It is therefore essential that reading remediation for most students begin at the phonemic level. One-to-one reading instruction or small group instruction is considered the best approach for students with Learning Disabilities. Explicit and systematic instruction is the most powerful way to improve reading. The focus of instruction should be on decoding, fluency, and comprehension.

In the 1930s, Dr. Samuel Orton and Anna Gillingham developed an approach to reading, a 'course of action' if you will, to provide reading instruction. Instruction can vary from student to student based on particular needs, but ultimately, all Orton-Gillingham lessons build upon the association between the sounds and symbols of the English language (letters and letter combinations). Starting with the smallest unit of sound (phoneme) students practice blending sounds to read individual words and bodies of text, develop automaticity, isolate certain sounds for spelling, read text and focus on comprehension, write, and then generalize these skills to other applications. The Orton-Gillingham approach is multisensory (instruction taps into the visual, auditory and kintesthetic domains) because this approach aids the processing, retention and application of information. Key points of the Orton-Gillingham approach is that it is diagnostic and prescriptive, direct and explicit, multisensory, cognitive, structured, synthetic and analytic,

cumulative, and alphabetic-phonetic. It's important to evaluate a student pre and post specialized reading program to measure both quantitative and qualitative improvements.

Scientific evidence proves that reading is not a natural process. However, with proper diagnosis and treatment, students that are struggling readers will be able to open up their books and be whisked away to magical lands in far away times.