About Dyslexia
Act 206, passed in the Spring 2020 Legislative Session and defines dyslexia. “The term ‘dyslexia’ shall be defined as an unexpected difficulty in reading for an individual who has the intelligence to be a much better reader, most commonly caused by a difficulty in phonological processing, which affects the ability of an individual to speak, read, write, and spell. “Phonological processing” means the appreciation of the individual sounds of spoken and written language.

This definition is scientifically up to date and applies to dyslexics regardless of location, race, or gender. Variations in the presentation of dyslexia will be seen but this definition allows all to understand what dyslexia is and the difficulties encountered by students the vast majority of the time. The diagnosis is a clinical one based on the synthesis of the student’s academic history, interviews with the student and parents, and test results (Overcoming Dyslexia,2nd ed., p.21).

Speaking occurs naturally and has been in existence for thousands of years and involves a phonemic module that assembles phonemes into words for the speaker and disassembles the spoken word back into phonemes for the listener. It is an effortless process (Overcoming Dyslexia,2nd ed., p. 45). Reading and writing is a newer process wherein the reader must take print which are lines and circles and convert them into the phonemic code. Twenty percent of the population has difficulty with the task of attaching the sounds of the spoken word to print and understanding that words are made up of smaller units of the spoken word, the phoneme (Dyslexia affects 1 in 5, Ferrer, et al, Psychological Science, 2010).

“Phonologic awareness” includes all levels of awareness of the sound structure of words while “phonemic awareness” is more specific and refers to the more advanced ability to notice, identify, think about, and manipulate the smallest particles of words, the phoneme. Phonemic awareness has the strongest relationship to later reading (Overcoming Dyslexia,2nd ed., p.172). Dyslexic students use a different part of the brain for language and therefore the dyslexic child has difficulty with phonemic awareness, the building block for reading. It causes difficulty with spelling, speaking, and often learning a second language (fMRI’s from multiple institutions around the world).

Manifestations of Dyslexia
The child’s difficulty to match the spoken word with print can be detected when the child has a difficulty in learning to rhyme, or learning the alphabet, or reading. Often people associate dyslexia only with a reading problem but understanding the difficulty in matching the spoken language to print helps educators understand that spelling represents this same deficit. In that
same vein, the child can also have difficulty with writing and speaking. The definition above allows the educator to understand a bright child who struggles in writing and spelling doesn’t have a new entity but this represents the underlying difficulty in matching the spoken word to print. When the child cannot immediately retrieve the correct answer or struggles with the word “on the tip of my tongue” the teacher will respond patiently rather than causing the child embarrassment.

Again, reflecting the underlying phonologic weakness, children with dyslexia have problems in spoken and written language. Spoken language difficulties can be manifested by mispronunciations, lack of glibness, lack of speech fluency (pauses and “ums”), and difficulties in getting the correct word out quickly and accurately when questioned. In summary, struggles in decoding and word recognition vary depending on age but the cardinal signs are a labored, effortful approach to reading when involving decoding, word recognition, and text reading. Spelling and handwriting difficulties reflect the phonologically based difficulties observed in oral reading. (Nelson Pediatric Textbook, 21st ed, 2019, Chapter on Dyslexia).

Screening and Identification

The “unexpected difficulty in reading” is based on published data that shows that IQ and reading are not “dynamically linked” in dyslexic students as they are in non-dyslexic students (see Figure A). This is important for all dyslexic students, even for very bright students who struggle to read on an expected level but do not. Identification as dyslexic is key as it gives a student insight and truth about their intelligence as most judge others as if reading ability and IQ are equivalent. Even if a dyslexic student’s accuracy has achieved an “average range”, the work of reading is hard. The dyslexic is reading using a less efficient system in the front and right of the brain which makes reading less automatic and slow. Non-dyslexics read using left posterior systems in the brain (see Figure B). Accommodations of extra time address this less automatic system and labored reading.

Many dyslexic children reveal subtle language problems early in life including speech delay. During preschool and kindergarten, difficulties can be seen with rhyming, learning the alphabet, and remembering letter names. Since the achievement gap is present and persists as early as the 1st grade, screening and identification should begin in kindergarten (Ferrer, E. et al, Journal
of Peds, 2015). Since we have a large body of evidence about dyslexia and the untoward consequences if not identified and addressed, screening should be specific for and psychometrically valid for dyslexia. The screener should evaluate all aspects of the phonologic deficit as pertains to oral and written language. Children found to be at-risk should then have further assessments and, if diagnosed as dyslexic, should receive evidence-based interventions. Dyslexia is a clinical diagnosis and therefore academic history and early oral language history is important. The SBLC or testing entity must look at the history, testing results, observations of the child speaking, reading, and writing as well as an interview with parents and student and decide if there are unexpected difficulties in reading (based on IQ, grade and education) and associated problems at the phonologic processing level.

Dyslexia is different from other entities as the phonologic deficit is circumscribed and does not intrude into other linguistic or cognitive domains. The testing should include tests of phonology, reading including real and pseudowords, oral reading fluency, and IQ tests.

The failure either to recognize or to measure the lack of fluency in reading is perhaps the most common error in the diagnosis of dyslexia in older children. Simple word identification tasks will not detect dyslexia in a person who is accomplished enough to be in honors high school classes. Tests relying on the accuracy of word identification alone are inappropriate to use to diagnose dyslexia because they show little to nothing of the struggle to read (Nelson Textbook of Pediatrics, 2019.)

This paradigm is a major shift from the current Bulletin 1903. The Bulletin was written in 1992 and last revised in 2000. We have a large body of scientific evidence about dyslexia in 2020 that we did not have previously. It is imperative that the Bulletin reflect current science and should include a pathway for trained teachers that have significant knowledge about dyslexia to lead the process of identification and teaching dyslexic children.

**Teacher Training and Curriculums**
Act 411, passed in the 2018 legislative session, outlines criteria for ancillary certifications at the dyslexia practitioner (CALP) and therapist (CALT) level. This significant legislation allows for recognition of certified dyslexia professionals in the state of Louisiana aligned with the high standards of other professional organizations that certify dyslexia professionals across the nation. Receipt of this ancillary certification represents an individual who has received rigorous training in dyslexia and the structure of the language paired with supervised practicum and passage of a competency exam qualifying them to provide services specifically for students with dyslexia. Individuals at the therapy level have received over 200 hours of instruction in providing structured language therapy, 700 clinical hours of applicable teaching experience, and a minimum of 10 observations with feedback from a Qualified Instructor. These individuals have demonstrated a knowledge of dyslexia and application of that knowledge in teaching students with dyslexia as they improve speaking, reading, and writing skills in their students.
We now can train teachers in Louisiana as opposed to those interested in training for the CALT and CALP going to Mississippi or Texas.

Trained teachers on the school level that provide instruction to students with dyslexia not solely based on a discreet set of skills, but instead based in a body of knowledge about the continuum of dyslexia and the acquisition of reading and writing skills will allow dyslexic students to obtain reading and writing fluency. Curriculums should be in line with the professional organizations outlined above that certify teacher training. Curriculums that are shown not to be effective on WhatWorksClearinghouse.gov should not be used.

In summary, the new Bulletin should reflect current science and if aligned with science including the body of pediatric literature the continuum of care between medical entities and education would be seamless and best for the child and parent. This alignment allows dyslexic students to reach their full potential.

References available upon request.