Dyslexia is a term for a brain-based difficulty in reading now simply called a “Reading Disorder.” It is one of many disorders referred to as Learning Disorders in the DSM-IV, a manual often used for diagnosis. The DSM-IV indicates a Learning Disorder exists when a score on an individually administered achievement test of reading, writing, or mathematics is substantially below expectations for age, schooling, and level of intelligence.

Dyslexia is a relatively common disorder (2-10%) and is likely hereditary in many cases. Perinatal injuries, medical disorders, lead poisoning, fetal alcohol syndrome, and chromosomal abnormalities have also been associated with learning disorders. Reading disorders are more common in males (3-4 males:1 female).

Learning disorders typically do not resolve. Many children with learning disorders will experience difficulties which will pose challenges throughout their academic and occupational careers. The impact on achievement, motivation in school, peer relationships, and self-esteem is often significant. DSM-IV reports that the dropout rate for children with learning disorders is 1.5 times the average. Adults with Learning Disorders often experience social and occupational difficulties.

Reading disorders are likely due to very subtle brain difficulties in processing visual and/or auditory material. Children may have difficulties with the visual and scanning aspects of reading. They may have difficulty in the phonological or “sounding out” aspects of reading. Children with combinations of both or multiple difficulties often exhibit the most severe reading difficulties.

Reading is a complex process. In order to read well, one must quickly be able to appreciate the small differences which distinguish letters. One must then automatically scan and translate groups of these visual images (graphemes) into their auditory representations (phonemes). These phonemes then need to be efficiently blended into words. Then the words need to be recognized and understood. Visual clues indicating where words and sentences start and stop must be processed. Rules of grammar must also be understood for accurate comprehension.

Many children with reading difficulties are identified early through the school system. Teachers are often good at recognizing what is typical at a given age. Brighter children may “power” their way through early reading demands using their intelligence to assist their reading. Many children are referred for further diagnostic testing when large differences between skills are seen...
on standardized group tests conducted by schools.

Many if not most children with reading disorders will also exhibit writing difficulties. For some children reading and writing difficulties may be part of a general language disorder. These children may be very good at putting puzzles together, building things or drawing but may not be very verbally communicative. Some children with reading difficulties may also have attention problems. This may compound the reading difficulty by reducing frustration tolerance, the ability to pay attention for sufficient periods of time, and the ability to sit still and focus.

The diagnosis of a learning disorder entitles the child to special services. Special services are geared to provide a “free and appropriate education” in the “least restrictive” environment. Special resource classes and a modified curriculum are often available. Some children require accommodations. In later grades and college some of these children may qualify to have tests read to them, extra time for reading assignments, or may be able to utilize books on tape.

The school system and government establish criteria which are used to qualify a child. A difference of at least 1 to 1½ standard deviations (usually about 15 points on the most common tests) between an IQ score and a reading score is usually required.

Diagnosis requires individual administration of a standard IQ tests such as the Wechsler or Stanford-Binet. Individual administration of achievement tests such as the Wechsler or Woodcock-Johnson Achievement tests are also necessary. Evaluations are performed by a licenced psychologist or school psychologist. Parents may obtain their own independent evaluation and to have this information considered in the determination by the school.

Accurate diagnosis is essential for an effective treatment plan. Appropriate testing is often time-consuming. Unfortunately, insurers often do not provide for private diagnostic or treatment services for these neurodevelopmental disorders. Services are often denied since they are “educational in nature.” Evaluators vary in experience and costs are often determined by how limited or comprehensive the testing is. Educators, family physicians, and pediatricians often can provide the names of psychologists who have expertise in providing these evaluations.

Once diagnosis is made an Individual Education Plan (IEP) is created for the child. The IEP is subject to approval by the parents. This may involve extra assistance and instruction by a learning specialist, speech and language therapy if necessary, use of a resource class, or in more severe cases full-time placement in a resource class. Schools have a description of rights and entitlements related to learning disabled students available.

Children with greater verbal than visual strengths may benefit more from phonological reading approaches. Children with visual processing strengths may benefit from “sight” reading approaches.

Multi-disciplinary programs often involve intensive individual assessment, therapy, individual and small group instruction. Area multi-disciplinary programs include the Ross-Mercer Clinic at the University of Florida and the Morris Development Center in Gainesville. Some children
with milder reading difficulties find programs such as those offered through Sylvan Learning Centers helpful.

Dr. Mel Levine, a developmental pediatrician with interests in learning disability has authored excellent books for professional, teachers, and students. Dr. Levine has stressed the importance of early help for learning disorders while establishing “islands of competence.” He recommended creating areas of expertise by encouraging and developing the child’s natural strengths and interests. These islands can help bolster self-esteem and reduce frustration when tackling new tasks.

References:
