Learning Disabilities Summary

Michael L. Woodward, Ed.S.
Lisa L. Persinger, Ph.D., NCSP
Northern Arizona University

Learning Disabilities are the most prevalent category of special education within the United States. Recent U.S. Department of Education statistics indicate over 2.3 million school-aged (ages 6-21) students are currently eligible for special education services under the category of a Specific Learning Disability. These students encompass 3.5% of the U.S. school-aged population, and nearly 40% of all students eligible for special education services.

The term learning disability did not formally emerge until the 1960’s. However, research on individuals struggling to read dates back to the 1870s, when European clinicians identified adults with acquired brain injuries that resulted in reading and language deficits. From the 1920s -1960s, U.S. clinicians regularly found children and adults, who despite having average or higher intelligence were incapable of acquiring basic academic skills. This lead to the first definitions of learning disabilities in the 1960’s. Although numerous definitions emerged, the majority described a learning disability as a disorder of neurological functioning that causes problems in learning, and manifests itself in academic skill weaknesses.

In 1975, the United States government enacted the Education for All Handicapped Children Act (P.L. 94-142). This legislation provided the first legal definition and criteria
for public education agencies to identify learning disabilities. This law has been reauthorized four times since its inception, with the most recent changes being made in 2004 when the act was renamed Individual with Disabilities Education Improvement Act (IDEA, 2004). IDEA 2004 currently defines a Specific Learning Disability as a disruption to a basic psychological process which impact academic skills such as spelling, reading, writing, or mathematics. These disorders may be developmental or caused by injury or illness, but not a result of visual, hearing, or motor disorders or arise from emotional or intellectual disorders.

Definitions of learning disability, including IDEA 2004’s, have relied upon describing conceptual features and lack objective criteria for identification. Because of this, multiple methods of identification emerged. In 2006, Federal Regulations outlined three methods of classification states could adopt to identify learning disabilities.

**Ability-Achievement Discrepancy.** Many of the initial definitions of learning disabilities described *unexpected underperformance* in academic achievement due to a disorder in neurological functioning. The Ability-Achievement Discrepancy was an attempt to operationally define this underperformance. A learning disability could be identified if a student demonstrated a statistically significant difference between ability (measured by I.Q. assessments) and academic achievement. The rationale of the method was that a student’s academic skill acquisition should align with their intelligence, or natural ability. If underperformance is found, it can be inferred neurological deficits are the cause of underperformance. Although this was a laudable attempt to operationally define learning disabilities, a myriad of issues have been identified. The discrepancy between ability and achievement can be the result of many factors besides a learning
disability: language, culture, and educational disadvantage being a few. This is believed to have led to over identification of students, specifically those with cultural and language diversity. Another concern is that special education services cannot be provided until this discrepancy exists. It has therefore been labeled a “wait to fail” method because although students may struggle, they cannot be eligible for special education services until their academic skills fall to a specific level below their ability.

**Response to Intervention.** Response to Intervention (RTI) systems developed in reaction to the many concerns with the discrepancy method. RTI is a structure of multi-tiered systems within schools to identify and intervene in academic and behavior problems. Tier 1 involves providing research-based instruction to all students within the school, and universally screening each student to identify those who do not have the expected academic skills. Students who are identified from these universal screenings are provided scientifically based interventions to remediate academic concerns. If a student does not make expected progress within the targeted intervention, more specific and intense interventions are provided at the individual level. Identification of a learning disability within these systems often occurs after a student continues to show a lack of response to interventions. Positives of RTI systems include requiring empirically sound instruction, the use of data in decision-making, and early intervention of academic skills. However, critics state RTI-only identification only infers a learning disability exists due to non-responsiveness. In addition, each school may have differing guidelines within their RTI system, leading to different decisions on learning disability eligibility.

**Alternative Research Based Procedures.** The third option provided to states for identification of a learning disability is “the use of other alternative research-based
procedures.” There are several methods identified within this category. The most
commonly used procedure within this category is referred to as a “pattern of strengths
and weaknesses” (PSW) approach. This involves standardized assessment of specific
cognitive processing areas and academic achievement. A student with a learning
disability should demonstrate overall average cognitive ability, with unexpected
underperformance in one or more areas of cognitive processing and academic
achievement. The weaknesses in cognitive processing should be empirically related to the
areas of academic weakness. This model of identification also includes the need of
*unexpected underperformance*, as seen within the Ability-Achievement Discrepancy
model. The primary difference being the PSW approach identifies specific cognitive
weaknesses that can be targeted within interventions and special education services.

Treatments and interventions provided to students with learning disabilities vary
depending upon the severity of the disability and academic area of deficit. The majority
of research into treating learning disabilities has focused on reading. Empirically
validated reading interventions exist that target the different processes involved in
reading: phonemic awareness, phonics, visual processing of letters, etc. Ideally, students
identified with a learning disability are given services and interventions that align with
their individual needs. Within schools, this often involves special education teachers
providing additional services to students in the general education classroom, and/or in
smaller group settings.

**Further Reading**

Executive Summary.