

Learning Disabilities Research: The Urgent Need for Sustained Funding

Over the last several decades, research in the area of neuroscience has revealed that learning disabilities (LD) are brain-based and result from a range of neurological factors. Thanks to continued investments into scientific brain research, we know more than ever about LD and how to support students who have them. However, this same research has also revealed much about how children learn, how their brain develops, and the evidence-based interventions that can help students – with and without LD – succeed.

Unfortunately, research into LD has become less of a priority in recent years. Despite an increasing number of students with LD entering our public schools, federal funding for LD research has not increased in similar ways. Sustained investment in ongoing research is necessary to understanding the science of learning, effective ways to identify learning disabilities, and other complex and confounding factors that influence learning.

How Is LD Research Funded?

Two major federal agencies contribute to the existing research on learning disabilities.

1. The Institute of Education Sciences (IES) conducts research and evaluation on the effectiveness of educational programs and policies, including research focused on the education of students with disabilities at the National Center for Special Education Research (NCSER).
2. The National Institutes of Health (NIH) also funds research on LD within its subdivision called the National Institute of Child Health and Human Development (NICHD). NIH provides the only federal funding for researchers who explore child development and learning disabilities to conduct randomized control trials and explore the relationships between different variables.

NICHD Funding for LD Research

NICHD funds more than 50 research centers across the country on a variety of topics related to child health and development. However, only three of those are related to learning disabilities, despite LD being the most prevalent type of disability in students and impacting more than 2 million students. NICHD currently funds the Learning Disabilities Research Centers (LDRC) Consortium, which was

established in 1989. The LDRCs are tasked with developing new knowledge about the causes and developmental course of learning disabilities impacting reading and writing. Importantly, LDRC research provided key data when IDEA was reauthorized in 2004, providing research that allowed states to consider new approaches to identifying learning disabilities.

There are currently three research centers:

1. Florida State University, Tallahassee: NIH Multidisciplinary Learning Disabilities Center
2. University of Colorado, Boulder: Colorado Learning Disabilities Research Center
3. University of Houston: Texas Center for Learning Disabilities

NICHHD also funds Learning Disabilities Innovation Hubs, which are smaller projects that address understudied populations and research topics affecting learning disabilities, including the juvenile offender population, math comorbidity, reading development, and more. The LD Innovation Hubs are funded through NICHHD's Child Development and Behavior Branch. While there were previously four sites funded, only three sites currently exist:

1. Baylor College of Medicine
2. Florida State University
3. Vanderbilt University

Snapshots of Innovative LD Research

Each research center currently has about five or six ongoing projects that have resulted in significant contributions to the field in areas of policy and practice. A few examples of novel research projects are highlighted below.

National Data Repository

A \$3 million NIH grant enabled Florida State University researchers to build a first-of-its-kind national data repository, called LDbase, containing decades of knowledge about learning disabilities. The goal is that by combining datasets, reaching a sample of about 200,000 children nationwide, researchers will be able to answer more questions about learning disabilities than they would using each dataset alone. This repository will be able to accelerate research on LD. The lead researchers compiling LDbase expect that it will help determine the most valid way to figure out if a child has a reading disability.

Learning Disabilities and English Learners

The research centers in both Florida and Texas seek to more closely examine the intersection between learning disabilities and English learners (ELs), including the study of non-mainstream language environments. A current Florida State project is the first to apply innovative modeling to study influences among reading, math, self-regulation, and language status. Prior to 2018, there was relatively little research addressing middle school ELs with persistent reading difficulties, which is a current focus area of the Texas Center for Learning Disabilities. This center has identified evidence-based approaches to teaching ELs with or at risk for reading disabilities, including recommendations for instruction that are relevant to both policy and practice.

Classification and Intervention

Other contributions to the field include research at the Texas Center for Learning Disabilities that has shown that IQ is not a strong predictor of response to intervention (RTI), and that looking for discrepancies between IQ tests and achievement scores (also called the "discrepancy" approach) is not sufficient for identification. Further findings from studies on RTI have indicated that students with reading difficulties required more intensive interventions prior to middle school. Both research projects have had implications for policy and practice, as districts are allowed to use the RTI process to help determine eligibility for special education and are no longer required to use the "discrepancy" approach under IDEA's 2004 reauthorization.

Genetic and Environmental Causes

A major goal of the Colorado Learning Disabilities Research Center, hosted at the Institute for Behavioral Genetics, has been to assess the genetic and environmental etiologies of reading disabilities and ADHD and their comorbidity, as well as their relationship with reading, language, perceptual processes, and executive function. The research center's studies include longitudinal testing and DNA samples of twins where at least one sibling has LD or ADHD. Their findings showed that genetic influences for reading comprehension were distinct from genetic influences underlying word reading, demonstrating that different learning disabilities have different underlying conditions.

The Importance and Urgency of Continued Funding for LD Research

Funding for the NIH research centers has declined over the years. In the past, NIH funded four LDRCs, but now it only funds three. Many of the LDRCs have received ongoing funding for more than 20 years. However, the current funding for all three NICHD LD research centers ends in 2021, and NICHD's newest strategic plan makes no mention of learning disabilities.

In light of the COVID-19 pandemic and the quickly shifting education landscape, there remains a great need for continued LD research. There is still much to learn about how students respond to interventions for LD, how to better understand and mitigate learning disabilities, and how to address learning disabilities for students who speak other languages and dialects. Further, there is a need to leverage technological innovations in education and ensure that interventions can be used to support struggling learners and underserved populations as we seek to recover from the pandemic.

What Congress Can Do to Support LD Research

As Congress develops its budget for FY2022, it can increase funding for NICHD as well as IES and NCSEER so that these agencies continue to invest in high-quality research. In addition, through report language in the FY22 appropriations bill, Congress can urge NICHD to prioritize LD research in its grant-making and maintain its investment in the Learning Disabilities Research Centers (LDRCs) and Innovation Hubs Program.



For more information, visit www.nclld.org or contact NCLD via email: info@nclld.org

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