Children with Developmental Language Disorder will Benefit from New IDEA Guidance

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Speech-language pathologists (SLPs) are familiar with eligibility criteria for school-based special education services under IDEA, the Individuals with Disabilities Education Act. In order for children with speech and language disorders to be eligible for services, they need to fit one of the 13 categories of disabilities (shown in Figure 1). However, these 13 categories don't always align well with current evidence-based diagnoses of neurodiverse conditions. One of these diagnoses is developmental language disorder (DLD), which was formerly called specific language impairment. The mismatch has created many challenges for families, special educators, school administrators, and most importantly, children who are diagnosed with DLD. Trying to match DLD with one of the 13 IDEA-defined categories is complicated, because children with DLD may be eligible for services under one of several categories, such as "speech or language impairment(S/LI)," "specific learning disability (SLD)," or "other health impairment (OHI)." This process not only causes confusion and frustration for all parties involved, but also potentially deprives them of opportunities to seek the right information about DLD and the latest evidence-based intervention.

What is DLD (developmental language disorder)?

DLD is a brain difference that makes talking and listening difficult. It affects about 7% of kinder-gartners, or about 2 in every classroom. Children with DLD are at increased risk of dyslexia, social-emotional concerns, and low academic achievement. Learn more DLDandme and RADLD.

It is because of these challenges that we, as members of the National Artificial Intelligence Institute for Exceptional Education (AI4ExceptionalEd), are particularly grateful to the US Department of Education's Office of Special Education programs (OSEP) for issuing new guidance on the use of DLD to accurately describe the speech and language needs of individual children, no matter what eligibility category they fall into. We are also grateful to members and leaders of the American Speech-Language-Hearing Association (ASHA) for their strong advocacy [1] to raise the community's awareness of this new guidance. The OSEP guidance says that a child may be described as having DLD, regardless of which eligibility category they are classified under.

Based on November 2021 data from the Department of Education, the majority of children served under IDEA were eligible in the categories of SLD, S/LI, and OHI, as shown in Figure 1. Because language difficulties are pervasive in multiple neurodiverse conditions, a very large percentage of children served in each of these categories are likely to have DLD [2]. For example, about half of the children under the category of OHI have DLD [3]. At around age 9, there is a transition point where more children are eligible under the SLD category than the S/LI category. This suggests that the same diagnosis may be classified differently as academic demands change [2]. SLPs can help reduce confusion around changing eligibility categories by documenting which children's special educational needs are related to DLD. Documenting DLD can also raise awareness of the condition and its potential adverse educational impact. And with greater awareness of DLD, many children who are struggling, but not yet identified, may be screened and evaluated for eligibility.

The guidance is also in line with our AI4ExceptionalEd Institute's research vision. The Institute is funded by the National Science Foundation and the Department of Education's Institute of Education Sciences. We aim to advance AI technologies to help SLPs, special educators and other professionals to practice at their full potential, ensuring no child in need of speech and language services is left behind. Children with DLD are among our target users.

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Fig. 1. Number of children in early childhood programs and of school age served under IDEA, Part B, by disability (Nov 2021). Learn more here.

We will support improved identification of children with DLD through development of the AI Screener. It aims to make early speech and language screening more widely available by applying multi-modal AI solutions in early childhood classrooms. Making screening accessible to a greater number of children will increase the number of children who need SLP services. Therefore, AI4ExceptionalEd is also developing the AI Orchestrator. It aims to enhance interventions and enable SLPs to serve more children, more effectively. It will help SLPs, as well as special educators and other service providers, to administer a wide range of evidence-based interventions and assess their effects on meeting children's Individualized Education Program learning targets. The development of both AI Screener and AI Orchestrator will be iterative with multiple phases, and we will partner with SLPs, special educators, other service providers, and parents to ensure our AI design process is inclusive, with all voices heard.

Therefore, our Institute will be another strong advocate for children with DLD so that they can eventually benefit from our Institute's research. We believe that the recognition of DLD as a disability can greatly help these children and their families. Some of those benefits are as follows:

- Having a label helps parents to clearly communicate about their children's needs with service professionals, locate high-quality information, and find community with other families [4].
- Understanding that DLD is a form of neurodiversity helps children and their families to embrace a growth mindset instead of a deficit mindset [5].
- Consistent guidance will increase public recognition of DLD, helping SLPs and families to advocate for policy change. The autism community provides a successful model for such advocacy and activism [4].
- DLD can co-exist with other disabilities, such as dyslexia [6] and attention deficit/hyperactivity disorder [5]; thus, specific, accurate characterization of both language and reading problems leads to better decisions about intervention.

The release of this new guidance will further facilitate our efforts to work collaboratively with families, SLPs, and educators. We will continue to share the rich expertise of our 31 faculty members and the influence of the 9 partner universities of the Institute to help advocate for high-quality services for all children with DLD, dyslexia, and other related speech-language disabilities.

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