

# United States Senate

April 22, 2019

The Honorable Betsy DeVos  
Secretary  
U.S. Department of Education  
400 Maryland Avenue, SW  
Washington, D.C. 20202

Dear Secretary DeVos:

The ability to read, comprehend what is read, and write well are crucial learning abilities for educational achievement and lifelong success. Young students, who are unable to read in the same manner as their peers, struggle to catch up to their peers later on in school and must exert extra focus and attention to read at the same level as their peers.<sup>1</sup> This unexpected difficulty to read can present adverse long term effects in many forms, including career outcomes<sup>2</sup> and the potential for legal trouble later on in life.<sup>3</sup> Of the students who are unable to read in the same manner as their peers, it is understood that a significant percentage have dyslexia, which is known to affect 1-in-5 Americans (20 percent).<sup>4</sup>

Understanding that 1-in-5 Americans are affected by dyslexia, I worked with my colleagues on the Senate Health, Education, Labor, and Pensions (HELP) Committee to establish the National Center on Improving Literacy (NCIL) in the 2015 passage of the Every Student Succeeds Act (ESSA).<sup>5</sup> One of the primary charges of NCIL was to conduct a thorough review of the literature available and provide assistance on how to improve identification of dyslexia at an early age. In doing so, NCIL was to identify or develop professional development recommendations for schools to better understand dyslexia, identify evidence-based screeners, implement evidence-based instruction, and disseminate the findings to States and local school districts.<sup>6</sup>

Unfortunately, as the primary author of the provision that authorizes funding for the center and as the father of a child with dyslexia, I find the most recent evidence of NCIL's work deeply

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<sup>1</sup> Ferrer, Emilio, et al. "Achievement Gap in Reading Is Present as Early as First Grade and Persists through Adolescence." *The Journal of Pediatrics*, vol. 167, no. 5, 2015, <https://www.ncbi.nlm.nih.gov/pubmed/26323201>.

<sup>2</sup> William Wood, *Literacy and the Entry-Level Workforce: The Role of Literacy and Policy in Labor Market Success* (Employment Policies Institute, 2010), [https://www.epionline.org/wp-content/studies/Wood\\_10-10.pdf](https://www.epionline.org/wp-content/studies/Wood_10-10.pdf).

<sup>3</sup> [Moody KC et al., \*Prevalence of Dyslexia among Texas Prison Inmates\* \(Tex Med, 2000\), <https://www.ncbi.nlm.nih.gov/pubmed/10876375>.](https://www.ncbi.nlm.nih.gov/pubmed/10876375)

<sup>4</sup> "Dyslexia FAQ," The Yale Center for Dyslexia & Creativity, "2017." <http://dyslexia.yale.edu/dyslexia/dyslexia-faq/>.

<sup>5</sup> Every Student Succeeds Act of 2015, 20 U.S.C. §§ 2244-2245 (2015-2016).  
<https://www2.ed.gov/documents/essa-act-of-1965.pdf>.

<sup>6</sup> *Federal Register*, vol 81., No. 110 (U.S. Department of Education, 2016).  
<https://www.federalregister.gov/documents/2016/06/08/2016-13587/applications-for-new-awards-comprehensive-centers-program-national-comprehensive-center-on-improving>.

Unfortunately, as the primary author of the provision that authorizes funding for the center and as the father of a child with dyslexia, I find the most recent evidence of NCIL's work deeply troubling. NCIL's recent paper "Screening for Dyslexia,"<sup>7</sup> published on March 2, 2019, painted a picture of dyslexia that is foreign to my family's lived experience. Furthermore, it lacks the serious scholarship that a \$1.5 million center<sup>8</sup> should produce on behalf of taxpayers and the millions of families in the United States with loved ones who struggle to read because of dyslexia.

Perhaps the most objectionable aspect of the paper is the number of outdated references, references that are omitted in the reference list, and references entirely missing from the paper. If one were to look past the significant issue of inaccurately referencing key 'facts' to support NCIL's argument, which on its own presents serious questions regarding the legitimacy of the paper's scholarship, one would find that NCIL's suggestions and recommendations to improve efforts to effectively screen for dyslexia are sloppy and misguided, at best. At worst, the paper's scholarship is ideologically skewed in an effort to advance a specific agenda to help struggling readers read, rather than the stated purpose of the paper, which is to provide evidence-based recommendations when screening young children for dyslexia.

In an academic setting, the existence of just one or two improper citations or references is enough to invalidate and cripple an entire argument or study. The reason for this is clear: the ability to hold the argument or study up to rigorous testing depends on the validity and application of the information presented in the paper, assuming that the information presented is traceable, reliable, and presented in good faith. If one is unable to trace down the underlying point cited or referenced, the reader will have no way of knowing if the statement in the paper is based on fact, whether it is an opinion expressed by a reputable author, or if it is entirely fabricated and falsely attributed for the purpose of advancing a special interest.

In the case of NCIL's "Screening for Dyslexia" paper, it takes the reader only a handful of pages to find examples of egregious errors. In discussing the prevalence of dyslexia, it references an outdated statistic by Sally Shaywitz, M.D., claiming that 5-17 percent of children have dyslexia.<sup>9</sup> The paper failed to use the most up-to-date statistic from the same Dr. Shaywitz, which shows that 1 in 5 children, or 20 percent, have dyslexia.<sup>10</sup> While there are varying degrees of dyslexia found in children and adults, it is widely understood that far more than 5-17 percent of children have dyslexia.

Another example on the same page of the paper (6) that demonstrates the failure of NCIL to use up-to-date information is the International Dyslexia Association's (IDA) definition of dyslexia,

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<sup>7</sup> Yaacov Petscher et al., *Screening for Dyslexia* (National Center on Improving Literacy, 2019), <https://improvingliteracy.org/whitepaper/screening-dyslexia>.

<sup>8</sup> "U.S. Education Department Awards \$4.4 Million to Improve Literacy and Education Outcomes for Students with Disabilities." U.S. Department of Education, 3 Oct. 2016, [www.ed.gov/news/press-releases/us-education-department-awards-44-million-improve-literacy-and-education-outcomes-students-disabilities](http://www.ed.gov/news/press-releases/us-education-department-awards-44-million-improve-literacy-and-education-outcomes-students-disabilities).

<sup>9</sup> Petscher, *Screening for Dyslexia*, 6. <https://improvingliteracy.org/whitepaper/screening-dyslexia>.

<sup>10</sup> "Dyslexia FAQ," The Yale Center for Dyslexia & Creativity, "2017." <http://dyslexia.yale.edu/dyslexia/dyslexia-faq/>.

which is more than 15 years old. While some states do use the IDA definition, the First Step Act, which was signed into law in December 2018, includes a federal definition for dyslexia and an evidence-based way to screen for dyslexia. The First Step Act definition for dyslexia and the required approach to screening are as follows:

Dyslexia Definition:

*Dyslexia means 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 the phonological processing (the appreciation of the individual sounds of spoken language), which affects the ability of an individual to speak, read, and spell.*<sup>11</sup>

Dyslexia Screening Program:

*Dyslexia Screening Program is a screening program for dyslexia that is:*

- (A) evidence-based (as defined in section 8101(21) of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801(21))) with proven psychometrics for validity;*
- (B) efficient and low-cost; and*
- (C) readily available.*<sup>12</sup>

Understanding the unexpected nature of dyslexia and the absence of an effect dyslexia has on an individual's intelligence is critical to understanding what dyslexia is and is not. Additionally, employing an evidence-based, cost-effective, and readily-available screening mechanism is critical to ensure a screener's large-scale effectiveness and feasibility.

The IDA definition for dyslexia states that “**difficulties [with dyslexia] typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction.**” While the IDA definition recognizes the phonologic and unexpected nature of dyslexia (underlined), it implicitly blames teachers and classroom instruction as the reason why some individuals are dyslexic (bolded). Defining dyslexia in this way is harmful and neglects the fact that individuals with dyslexia are born with the difficulty. Dyslexic individuals have an inherently harder time than their non-dyslexic peers when learning to read and write well, and speak foreign languages.

If using outdated statistics, definitions, and neglecting to mention existing federal definitions and screening requirements for dyslexia is not enough to convince one of the lack of serious scholarship on the authors' part, then page 7 of the paper makes it abundantly clear that the authors did not put in the effort necessary to publish a reputable document. On page 7, six separate references are listed that do not appear on the paper's reference list. Those sentences and the corresponding references are listed below:

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<sup>11</sup> First Step Act of 2018, 18 U.S.C. § 3635 (2018). <https://www.congress.gov/bill/115th-congress/senate-bill/3747/text>

<sup>12</sup> First Step Act of 2018, 18 U.S.C. (2018). <https://www.congress.gov/bill/115th-congress/senate-bill/3747/text>

- *Students may be at risk for not attaining full literacy skills for a variety of reasons. For example, students may be at risk because they are English learners who are struggling to learn literacy skills in two languages simultaneously (Gersten, 1996).*
- *Of course, single-cause explanations rarely capture the complexity behind a student's struggle to develop strong literacy skills (Maughan & Carroll, 2006; Snowling, 2012).<sup>13</sup>*
- *Multiple risk factors may be interacting with each other to make literacy problems more pronounced than they might be if only one risk factor was present (Muter & Snowling, 2009).*
- *This includes providing intervention to students with (yet) undiagnosed literacy-related disabilities, including dyslexia, as well as those students who are experiencing literacy-related difficulties for other underlying reasons (Shaywitz, 2014).*
- *Whether the literacy-related difficulty is caused by dyslexia or a disability other than dyslexia, another factor (e.g. low oral language skills), or a combination of factors, early and intense intervention to address the difficulties is the best way to prevent early problems from becoming more severe over time (Connor, et al., 2014).*

If one did not read the rest of the paper, they might look at these clear omissions and think that the authors accidentally left references for page 7 off the reference list. That would be a mistake. The trend of omitting references continues throughout the paper. My tabulation shows that the following references and the corresponding pages were omitted from NCIL's reference list.

1. (Gersten, 1996), pg. 7
2. (Maughan & Carroll, 2006), pg. 7
3. (Snowling, 2012), pg. 7
4. (Muter & Snowling, 2009), pg. 7
5. (Shaywitz, 2014), pg. 7
6. (Connor, et al., 2014), pg. 7
7. (Ozernov-Palchik & Gaab, 2016), pg. 11; Not referenced as "a" or "b"
8. (Langer et al., 2015), pg. 11
9. (Gough & Tunmer, 1986), pg. 11
10. (Longian, Burgess, & Schatschneider, 2018), pg. 11
11. (Alabama State Board of Education, 2016), pg. 12
12. (Nevada Department of Education, 2015), pg. 12
13. (Poulsen et al., 2017), pg. 14
14. (Breux et al., 2017a), pg. 14
15. (Gillis, 2017), pg. 14
16. (Good, Kaminski, Simmons, & Kame'enui, 2001), pg. 15
17. (Juel, 1988), pg. 15
18. (Shaywitz, Escobar, Shaywitz, Fletcher, & Makuch, 1992), pg. 15
19. (Torgesen, 2000, 2001), pgs. 15, 16

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<sup>13</sup> Maughan & Carroll, 2006 and Snowling, 2012 are both missing from NCIL's list of references.

20. (Adams, 1991), pg. 16
21. (Good, Simmons, & Kame'enui, 2001), pg. 16
22. (Snow, Burns, & Griffin, 1998), pg. 16
23. (Stanovich, 1986), pg. 16
24. (Catts et al., 2008), pg. 17
25. (Adams, 1990), pg. 17
26. (O'Connor & Jenkins, 1999), pg. 17
27. (Spector, 1992), pg. 17
28. (Consortium on Reading Excellence, 2008), pg. 25
29. (Kamil et al., 2008), pg. 25
30. (Spencer, Wagner, Schatschneider, Quinn, Lopez & Petscher, 2012), pg. 41
31. (Anastopoulous, Beal, Reid, Reid, Power, DuPaul, 2018), pg. 44

As a gastroenterologist, if I published an academic paper that was funded by the Department of Health and Human Services on the best ways to screen for colon cancer but failed to properly reference 31 of my sources, would you feel comfortable distributing that document to physicians nationwide as a guide to “better screening?” I certainly hope not.

Thus is the problem with NCIL’s “Screening for Dyslexia.” It is abundantly clear that the authors of the paper never sought any form of peer review. If it was reviewed by their peers, any of the 31 missing references would have been flagged. A proper peer review not only would have revealed the absence of listed references, it would have invoked significant scrutiny on NCIL’s numerous assertions without any form of citation or reference.

For example, on page 8, one page after which six references were cited but not listed in the reference list, not a single assertion is cited and listed in the reference list. This is despite the fact that the authors went on a 479-word tangent on the neuroscience behind early screening for dyslexia. Early screening and intervention is critical for dyslexic students and there is good research available regarding the neuroscience of dyslexia;<sup>14</sup> however, the lack of any such reference to the research available raises the question of whether the information is presented as fact or simply the opinion of a few individuals.

Instead of focusing on screening for dyslexia as the title implied, the paper is about screening for struggling readers and multi-tiered systems of support (MTSS), which is most often implemented in schools through Response to Intervention (RtI). The paper paints a very favorable review of MTSS—and RtI by extension—despite the 2015 study by the National Center for Education Evaluation and Regional Assistance titled “Evaluation of Response to Intervention Practices for Elementary School Reading.” The study, which was commissioned through the Department of Education, demonstrated the weaknesses and shortcomings of RtI, going as far as to say, “for

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<sup>14</sup>Emily S. Finn, et al., *Disruption of Functional Networks in Dyslexia: A Whole-Brain, Data-Driven Approach to fMRI Connectivity Analysis* (The Yale Center for Dyslexia and Creativity, 2013). <http://dyslexia.yale.edu/research-science/ycdc-research/disruption-of-functional-networks-in-dyslexia-a-whole-brain-data-driven-approach-to-fmri-connectivity-analysis/>.

those students just below the school-determined eligibility cut point in Grade 1, assignment to receive reading interventions did not improve reading outcomes; it produced negative impacts.”<sup>15</sup>

Finally, pages 17 and 18 of the paper discuss how dyslexia screening assessments should be implemented from kindergarten through the beginning of high school. The entire paragraph, starting with “Dyslexia screening assessments” and ending with the five bullet points on page 18, is opinion masquerading as fact. There is no evidence to support the assertions made by the authors. To the degree that sources are cited in the section, they are nowhere to be found in the reference list. If screening is conducted with an evidence-based screener, a student only needs to be screened for dyslexia once because dyslexic students are born with dyslexia—it is not acquired over time. The paper also neglects to mention the availability of affordable, evidence-based screeners that schools can use to help identify dyslexic students. If schools were to use a screener to help better identify students, they would save significant resources that are currently spent on RtI and other offerings of MTSS. Not only will the use of an effective screener save school districts precious time and resources as they try to identify students with dyslexia, an effectively employed screener and the necessary follow up testing can then ensure dyslexic students get the evidence-based instruction they deserve and need at an earlier date than would otherwise be provided.

It is clear to me that NCIL does not have the expertise or interest in properly identifying or screening for dyslexia, as is demonstrated by the significant lack of quality, peer-reviewed scholarship. Should the current grant recipients at the University of Oregon apply for another grant through the Comprehensive Centers Program, I strongly recommend that the Department of Education go in a different direction.

Thank you for considering the many concerns I laid out for you with NCIL’s “Screening for Dyslexia” paper. If I can be of further assistance to you or your staff, please do not hesitate to let me know.

Sincerely,

A handwritten signature in blue ink that reads "Bill Cassidy, M.D." The signature is written in a cursive, slightly slanted style.

Bill Cassidy, M.D.  
United States Senator

cc: Assistant Secretary Johnny Collett  
cc: Assistant Secretary Peter Oppenheim  
cc: Assistant Secretary James Blew

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<sup>15</sup>Rekha Balu, et al., *Evaluation of Response to Intervention Practices for Elementary School Reading* (National Center for Education Evaluation and Regional Assistance, 2015), 17.  
<https://ies.ed.gov/ncee/pubs/20164000/pdf/20164000.pdf>.