

RESEARCH ADVISORY ADDENDUM

Dyslexia

Response to the International Dyslexia Association

n a <u>posting on its website</u>, the International Dyslexia Association (IDA, 2016) has raised questions about the International Literacy Association's (ILA, 2016) <u>research advisory on dyslexia</u>. Because the advisory was intended to be a brief statement, it did not provide details on the breadth of the research on which it is based. Consequently, ILA is grateful for the opportunity to extend the conversation.

In responding to what will be referred to as the IDA document, ILA does not in any way wish to diminish the very real problems and distress faced by children who experience difficulty learning to read and write, or by their families. Nor is the intention to minimize the urgency of the attempts of educators—whether teachers, school leaders, researchers, or policymakers—to address productively those problems. Quite the opposite: ILA represents a large community of professionals who, on a daily basis, face the challenges of teaching the full range of children to become literate.

Although there is a considerable degree of overlap in the arguments and concerns presented in the IDA document, these concerns (foregrounded in italics) will be addressed in the order in which they were raised.

1. Best Method

There is no difference of opinion about the best method for teaching children with dyslexia to read. That method is systematic, explicit, phonics-based reading instruction. It is the same approach to reading instruction that was recommended for all children by the National Reading Panel (2000) in its landmark report....[Consequently the] IDA does not agree that the research cited in the ILA research advisory supports ILA's statement that "...there is no certifiable best method for teaching children who experience reading difficulty (Mathes et al., 2005)." (IDA, 2016)

This assertion rests on a misinterpretation of the National Reading Panel (NRP) report, so first clarification is needed on what the NRP report really showed:

• The Panel compared three different approaches to phonics instruction (synthetic, larger unit phonics, and miscellaneous phonics approaches) and found no difference between them—thus the approach advocated by IDA cannot be claimed to be preferable:

There is no certifiable best method for teaching children who experience reading difficulty.

In [the National Reading Panel] report on the effects of specific programs, the Orton-Gillingham program had the lowest average effect size.

The conclusion supported by these findings is that various types of systematic phonics approaches are significantly more effective than non-phonics approaches in promoting substantial growth in reading. (p. 2-93)

- Only 24% of the effect sizes computed for the review had outcomes that measured reading of continuous text. For the rest, the outcome was single word reading or spelling.
- In their report on the effects of specific programs, the Orton-Gillingham (O-G) program had the lowest average effect size (0.23). The remainder of the programs ranged from 0.35 to 0.68 (p. 2-160). Looking further, only two of the O-G studies assessed comprehension, and the average effect size on comprehension was -0.03. Only one study reported a delayed assessment of comprehension, and the effect size was -0.81 (six months after the completion of the intervention). That is *minus* 0.81—thus participation in an O-G program appears to have had a large negative impact on reading achievement in comparison with other intervention methods evaluated in the study.
- Phonics instruction had a greater impact for K-1 than for children in grades 2–6. For grades 2–6, the overall effect size, across all types of outcome measures, was 0.27—considered to be small by the Panel. When comprehension was the outcome measure for this grade range the effect size was 0.12 and not significantly different from zero. (p. 2-159)
- Among studies that measured long-term impacts of an intervention (six months to one year after the intervention) only Orton-Gillingham had a net negative effect size (-0.47). All others had a positive effect, ranging from 0.28 to 0.86.
- Phonics instruction for older struggling readers had an effect size of 0.32, and for low-achieving (not IQ discrepant) readers the effect size was 0.15.
- Systematic phonics instruction yielded an effect size of 0.51 on reading comprehension for first graders but only 0.32 for disabled readers above first grade and 0.12 for older low-achieving readers.
- The report calls for teacher education so that teachers can evaluate the evidence of the effectiveness of phonics programs and determine how such programs can be used in their own classrooms.

The conclusion of the NRP's executive summary reads as follows:

As with any instructional program, there is always the question: "Does one size fit all?" Teachers may be expected to use a particular phonics program with their class, yet it quickly becomes apparent that the program suits some students better than others. In the early grades, children are known to vary greatly in the skills they bring to school. There will be some children who already know most letter-sound correspondences, some children who can even decode words, and others who have little or no letter knowledge. Should teachers proceed through the program and ignore these students? Or should they assess their students' needs and select the types and amounts of phonics suited to those needs? Although the latter is clearly preferable, this requires phonics programs that provide guidance in how to place students into flexible instructional groups and how to pace instruction. However, it is common for many phonics programs to present a fixed sequence of lessons scheduled from the beginning to the end of the school year. Finally, it is important to emphasize that systematic phonics instruction should be integrated with other reading instruction to create a balanced reading program. Phonics instruction is never a total reading program. In 1st grade, teachers can provide controlled vocabulary texts that allow students to practice decoding, and they can also read quality literature to students to build a sense of story and to develop vocabulary and comprehension. Phonics should not become the dominant component in a reading program, neither in the amount of time devoted to it nor in the significance attached. It is important to evaluate children's reading competence in many ways, not only by their phonics skills but also by their interest in books and their ability to understand information that is read to them. By emphasizing all of the processes that contribute to growth in reading, teachers will have the best chance of making every child a reader. (pp. 2-96-97)

There have, of course, been critiques of both the National Reading Panel (2000) and National Early Literacy Panel (2008) reports (e.g., Pearson & Hiebert, 2010; Schickedanz & McGee, 2010; Teale, Hoffman, & Paciga, 2010), and it is worth noting that those national reports offer some (not all) important parameters for instruction rather than "an approach." Nonetheless, ILA generally agrees with these observations with some caveats.

First, students who experience difficulty acquiring literacy require more careful and responsive application of consistent principles by knowledgeable, well-prepared teachers who understand how to teach for comprehension, text fluency, phonemic awareness, phonics, automatic word recognition, and vocabulary (and, ILA would add, writing) in ways that motivate

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children to read (and write) widely. Second, if IDA were truly aligning with the NRP's guidance, it would be calling for a broader, more responsive instructional approach rather than focusing solely on systematic phonics.

ILA agrees with Mathes et al.'s observation in the IDA document that their study "was not intended to determine the best method." Although Mathes et al. do not actually use the term *dyslexia* in their study or in their comments to refer to the students who were involved in their study, their study's conclusion is consistent with that of ILA and worth quoting:

These findings suggest to us that there is likely not "one best approach" and not one right philosophy or theory for how to best meet the needs of struggling readers.... Schools and teachers can be granted some latitude in choosing an approach to providing supplemental instruction.... Both interventions [in the study] provided for instruction in key reading skills, balanced with opportunities to apply reading and writing skills in connected text ... [They] were comprehensive, integrated approaches to reading instruction. (Mathes et al., 2005, p. 179)

ILA agrees with Mathes et al.'s (2005) conclusions that interventions would need to include at least these components but might vary in their "theoretical viewpoints."

To return to the question of the role of phonics in intervention efforts, it should be pointed out that, on the basis of the description of the intervention approaches in Mathes et al.'s study, the students in the Responsive condition appear to have received substantially less phonics instruction but ended up showing the same degree of growth as the students in the Proactive condition on all measures other than Word Attack.

A related study by Scanlon et al. (2005) had a similar outcome. In that study, in comparisons of the phonics skills emphasis and the text reading emphasis conditions, there was no mean difference between the two groups at the end of the intervention study. Students in the Phonics Emphasis condition received three times as much phonics instruction as the students in the Text Emphasis condition.

It is also important to note that Mathes et al. (2005) report that there was little evidence that child characteristics at the outset of the study interacted with the condition to which they were assigned. Theoretically, if intensive and scripted phonics instruction were necessary for the most impaired readers there should have been such an interaction—with those with

the lowest skills at the outset doing better in the Proactive condition than in the Responsive condition.

2. Decoding

IDA does not agree that "Reviews of research focusing solely on decoding interventions have shown either small to moderate or variable effects that rarely persist over time, and little to no effects on more global reading skills." (IDA, 2016)

This concern is puzzling in the context of the IDA document's support of the NRP findings advocating a broader set of instructional imperatives than solely decoding (including automatic word recognition, text fluency, vocabulary, and comprehension strategies). As stated in the research advisory, ILA agrees with the importance of phonological awareness reiterated in the quoted comments from Mathes and Fletcher (2008). Indeed, there is ample evidence for the importance of phonological awareness without the need for comparative use of brain scan technologies. Among other things, failure to attend to phonemic awareness and alphabetic coding would make it very difficult for children to write independently or to learn to read the huge number of words that are not specifically taught but that proficient readers are able to read with automaticity.

Mathes and Fletcher's (2008) reference to brain scan studies does not shed additional light on the problem. So far these studies simply suggest that when struggling readers have engaged in more reading in the course of an intervention, they shift to processing print in a way that is more like the processing done by more proficient readers, and thus brain activity is more like that of proficient readers. This does not mean that the same advantage would not accrue from some other form of intervention that got the participants doing more reading.

3. Unitary Approach

IDA does not agree that the research cited in the ILA research advisory supports ILA's statement, "Rather, students classified as dyslexic have varying strengths and challenges, and teaching them is too complex a task for a scripted, one-size-fits-all program (Coyne et al., 2013; Phillips & Smith, 1997; Simmons, 2015)." (IDA, 2016)

The alternative to this statement is that children classified as dyslexic all have the same strengths and weaknesses that can readily be addressed by a scripted program. No study has

There is ample evidence for the importance of phonological awareness.

shown that all students' literacy difficulties can be adequately addressed by such a program, even within the bounds of the sample of students included in a given study. In the Coyne et al. (2013) study on any given measure, students sometimes varied by 50 or more percentile points, suggesting that a standard, relatively scripted program would not readily accommodate such differences. In addition, it seems likely that individual profiles across measures varied considerably. Indeed, one of the resources cited in the IDA document (Bowers & Wolf, 1993) also makes this argument, noting,

As Wolf cautioned, we are by no means arguing here for a unitary explanation of reading breakdown: 'The history of dyslexia research, the heterogeneity of dyslexic children, and the very complexity of the reading process' (1991: 137) argue against any unitary view. (p. 78)

4. Teachers' Professional Expertise

IDA does not agree that the research cited supports the statement, "Optimal instruction calls for teachers' professional expertise and responsiveness, and for the freedom to act on the basis of that professionalism." (IDA, 2016)

It is not clear why IDA rejects the need for professional expertise, particularly because the referenced IDA resource "Effective Reading Instruction for Students With Dyslexia" includes the following:

Diagnostic Teaching. The teacher must be adept at individualized instruction. That is instruction that meets a student's needs. The instruction is based on careful and continuous assessment, both informally (for example, observation) and formally (for example, with standardized measures).

Teachers need to have the expertise and resources to teach early literacy effectively.

However, ILA concedes that it should perhaps have offered a clarification regarding professional expertise. It is certainly the case that teachers need to have the expertise and resources to teach early literacy effectively. As is indicated in the IDA document, and noted earlier, teachers should understand children's literacy development, how to notice and responsively adapt to differences in that development, and how to teach for comprehension, text fluency, phonemic awareness, phonics, automatic word recognition, vocabulary, and writing in ways that motivate children to read and write widely.

5. The Dyslexia Construct

Dyslexia is, above all, a condition that impedes reading acquisition. (IDA, 2016)

This is the final claim in the IDA document. However, it would be more accurate to say that some children experience difficulty acquiring literacy, which is often related to inadequate phonological analysis skills along with instruction that does not address comprehension, text fluency, phonemic awareness, phonics, automatic word recognition, vocabulary, and writing in ways that motivate children to read and write widely.

There is no evidence for the value of inserting the construct *dyslexia* into this claim. Indeed, the empirical studies cited in the IDA document (including Coyne et al., 2013 and Mathes et al., 2005, as those authors note in their comments), either do not identify their subjects as dyslexic or arbitrarily describe students having difficulty acquiring literacy as dyslexic. None of the intervention studies has a control group of students having difficulty acquiring literacy but not classified as dyslexic.

Stanovich and Siegel (1994) distinguish between "poor readers" and "children with reading disabilities," but the conclusion of their study was the validation of the "phonological-core variable-difference model of reading disability" along with discrediting the IQ-Achievement discrepancy definition of disability. In other words, there is no empirical basis for the use of the term *dyslexic* to distinguish a group of children who are different from others experiencing difficulty acquiring literacy.

Conclusion

Like IDA, ILA hopes to be able to work with other organizations to optimize literacy learning for all children. ILA's position is that teachers do not need to spend substantial amounts of time learning about dyslexia, which, as has been argued, is a construct of questionable utility. Nor should teachers be obligated to learn a specific and poorly researched approach to preventing and remediating reading difficulties. As documented in the NRP report, phonics instruction is an important component of comprehensive literacy instruction, but there is no evidence that the form of phonics instruction IDA advocates is better than or even as effective as other approaches to literacy

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instruction and intervention. Any research published after the NRP report and the review by Ritchey and Goeke (2006) that contradicts the NRP conclusions could not be found.

On the other hand, there is abundant research documenting that teachers, not programs, are the most powerful in-school influence on student success (e.g., Konstantopoulos & Sun, 2012; Nye, Konstantopolous, & Hedges, 2004; Tivnan & Hemphill, 2005). Teachers need to know how to teach literacy well and how to respond when students do not develop literacy as quickly as expected. Teaching well requires being able to plan and provide instruction that is responsive to what students know and are able to do across the many aspects of literacy learning. As the NRP summary on phonics instruction states:

Phonics should not become the dominant component in a reading program, neither in the amount of time devoted to it nor in the significance attached. It is important to evaluate children's reading competence in many ways, not only by their phonics skills but also by their interest in books and their ability to understand information that is read to them. By emphasizing all of the processes that contribute to growth in reading, teachers will have the best chance of making every child a reader. (pp. 2-96–97)

REFERENCES

Bowers, P.G., & Wolf, M. (1993). Theoretical links among naming speed, precise timing mechanisms and orthographic skill in dyslexia. *Reading and Writing*, *5*(1), 69–85. doi:10.1007/BF01026919

Coyne, M.D., Simmons, D.C., Hagan-Burke, S., Simmons, L.E., Kwok, O.-M., Kim, M., ... Rawlinson, D.A.M. (2013). Adjusting beginning reading intervention based on student performance: An experimental evaluation. *Exceptional Children*, 80(1), 25–44.

International Dyslexia Association. (2016). *IDA urges ILA* to review and clarify key points in dyslexia research advisory. Retrieved from http://dyslexiaida.org/ida-urges-ila-to-review-and-clarify-key-points-in-dyslexia-research-advisory/

International Literacy Association. (2016). *Dyslexia* [Research advisory]. Newark, DE: Author.

Konstantopoulos, S., & Sun, M. (2012). Is the persistence of teacher effects in early grades larger for lower-performing students? *American Journal of Education*, 118, 309–339. doi:10.1086/664772

Mathes, P.G., Denton, C.A., Fletcher, J.M., Anthony, J.L., Francis, D.J., & Schatschneider, C. (2005). The effects of theoretically different instruction and student characteristics on the skills of struggling readers. *Reading Research Quarterly*, 40(2), 148–182. doi:10.1598/RRQ.40.2.2

Mathes, P.G., & Fletcher, J.M. (2008). Dyslexia. In N.J. Salkind (Ed.), *Encyclopedia of educational psychology* (pp. 289–293). Los Angeles, CA: Sage.

National Early Literacy Panel. (2008). Developing early literacy: A scientific synthesis of early literacy development and implications for intervention: A report of the National Early Literacy Panel. Retrieved from http://lincs.ed.gov/publications/pdf/NELPReport09.pdf

National Reading Panel. (2000). Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction. Retrieved from www.nichd.nih.gov/publications/pubs/nrp/Documents/report.pdf

- Nye, B., Konstantopolous, S., & Hedges, L.V. (2004). How large are teacher effects? *Educational Evaluation and Policy Analysis*, 26(3), 237–257. doi:10.3102/01623737026003237
- Pearson, P.D., & Hiebert, E.H. (2010). National reports in literacy: Building a scientific base for practice and policy and practice. *Educational Researcher*, 39(4), 286–294. doi:10.3102/0013189X10370205
- Phillips, G., & Smith, P. (1997). A third chance to learn: The development and evaluation of specialised interventions for young children experiencing the greatest difficulty in learning to read. Wellington, NZ: New Zealand Council for Educational Research.
- Ritchey, K.D., & Goeke, J.L. (2006). Orton-Gillingham and Orton-Gillingham-based reading instruction: A review of the literature. *The Journal of Special Education*, 40(3), 171–183. doi:10.1177/0022466906040 0030501
- Scanlon, D.M., Vellutino, F.R., Small, S.G., Fanuele, D.P., & Sweeney, J.M. (2005). Severe reading difficulties—can they be prevented? A comparison of prevention and intervention approaches. *Exceptionality*, 13(4), 209–227. doi:10.1207/s15327035ex1304_3

- Schickedanz, J.A., & McGee, L.M. (2010). The NELP Report on Shared Story Reading Interventions (Chapter 4): Extending the story. *Educational Researcher*, 39(4), 323–329. doi:10.3102/0013189X103 70206
- Simmons, D. (2015). Instructional engineering principles to frame the future of reading intervention research and practice. *Remedial and Special Education*, *36*(1), 45–51. doi:10:1177/0741932514555023
- Stanovich, K.E., & Siegel, L.S. (1994). Phenotypic performance profile of children with reading disabilities: A regression-based test of phonological-core variable-difference model. *Journal of Educational Psychology*, 86(1), 24–53. doi:10.1037/0022-0663.86.1.24
- Teale, W.H., Hoffman, J.L., & Paciga, K.A. (2010). Where is NELP leading preschool literacy instruction? Potential positives and pitfalls. *Educational Researcher*, *39*(4), 311–315. doi:10.3102/0013189X10369830
- Tivnan, T., & Hemphill, L. (2005). Comparing four literacy reform models in high-poverty schools: Patterns of first-grade achievement. *The Elementary School Journal*, 105(5), 419–441. doi:10.1086/431885

International Literacy Association: Literacy Research Panel

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About the International Literacy Association

The International Literacy Association (ILA) is a global advocacy and membership organization dedicated to advancing literacy for all through its network of more than 300,000 literacy educators, researchers, and experts across 75 countries. With over 60 years of experience, ILA has set the standard for how literacy is defined, taught, and evaluated. ILA collaborates with partners across the world to develop, gather, and disseminate high-quality resources, best practices, and cutting-edge research to empower educators, inspire students, and inform policymakers. ILA publishes The Reading Teacher, Journal of Adolescent & Adult Literacy, and Reading Research Quarterly, which are peer reviewed and edited by leaders in the field. For more information, visit literacyworldwide.org.



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