

# Position Statement on Supporting Students with Dyslexia in Ontario Public Schools

Ontario Branch of the International Dyslexia Association (ONBIDA)  
March 2019

## Position

The Ontario Branch of the International Dyslexia Association (ONBIDA) takes the following position:

Students with dyslexia experience systemic discrimination in the Ontario education system because:

- There is limited and inequitable access to **effective, evidence-based ‘structured literacy’ instruction** (p. 7) that is aligned with the science of reading and what is known to be essential literacy instruction for students with dyslexia as well as other struggling readers. Offering evidence-based structured literacy instruction in every classroom benefits *all* students.
- The Ontario Language Arts/Reading Curriculum relies on the Three-Cueing System. This approach is primarily based on ‘guessing’ strategies, an **ineffective teaching approach** for students with dyslexia and other struggling readers.
- There is a lack of **early identification** of children with reading/writing difficulties and a lack of **effective, evidence-based ‘structured literacy’ intervention programs**, especially at the age when intervention is most effective (e.g. Kindergarten to Grade 1). The widespread use of the ‘*wait to fail*’ model denies children remediation at the age scientifically-proven to be most beneficial (i.e. Kindergarten to Grade 1).
- There is a lack of **training for classroom and resource teachers** in the science of reading, evidence-based structured literacy instruction, and knowledge of learning disabilities, including how to identify and effectively remediate dyslexia.
- The Ontario Ministry of Education and many school boards refuse to **recognise and use the term “dyslexia”**.

These inequities mean that children with dyslexia are denied the opportunity to learn to read, spell and write to the best of their ability. These consequences are lifelong, impacting self-esteem, achievement,

and success. In order to change this outcome, the existence of dyslexia must be recognized and acknowledged, and critical aspects of the education system and teacher training must be changed. Improving literacy for all students reduces the mental, social and economic repercussions of reading failure, resulting in a better-educated workforce, higher salaries, stronger tax base, and less use of community services such as mental health and substance abuse programs, judicial services and incarceration.

ONBIDA calls on the Ontario Government to implement the recommendations contained in this Position Statement to remedy the systematic discrimination that students with dyslexia currently experience in the Ontario education system.

## Background

### The Challenge

Given appropriate instruction, most children will learn to read successfully in the first couple of years at school. However, a significant number of children struggle with learning to read and require more intense instruction over a longer period. Many of these children have **dyslexia**, a learning disability, otherwise known as a 'reading disability' or '*Specific Learning Disorder with Impairment in Reading*' (see Terminology section, p. 5). Dyslexia is characterised by difficulties with accurate and/or fluent word recognition, and by poor spelling and decoding abilities. (International Dyslexia Association (IDA), 2013; NIH, 2017).

The Ontario Branch of the International Dyslexia Association (ONBIDA) is a charitable organization dedicated to providing tools, information and resources about dyslexia. Every day, ONBIDA receives enquiries from parents and teachers wanting to know how to best help children who are struggling with the acquisition of early literacy skills (including rhyming, letter knowledge, alphabetic principles, phonological awareness, reading and spelling), and those who demonstrate ongoing difficulties with written language (i.e. reading, writing, spelling and comprehension).

Parents ask:

- *“Why is my child struggling to learn to read when they learn everything else so easily?”*
- *“My grade 1 child cries and doesn’t want to go to school anymore because he/she can’t read.”*
- *“My son/daughter is starting to get in trouble at school. What can I do?”*
- *“Why isn’t the school doing anything when they see that she is not progressing as expected?”*

- *“Should my child be assessed?”*
- *“Could my child have dyslexia?”*
- *“Why is my son/daughter not getting effective help at school?”*

Teachers ask:

- *“In my classroom, every year I come across bright children who have difficulty learning to grasp many reading concepts and I’m unsure what to do. Even with individualized, extra help they fail to make the progress that I think they should as many of them are very bright and succeeding in other areas of the curriculum.”*
- *“I’ve been a classroom teacher for 15 years and have completed my reading specialist course among other Additional Qualifications courses. I feel that there’s a gap in my knowledge which hinders my ability to teach children that are struggling in literacy. I’d like to better help my students but am unsure how to do this.”*
- *“As a grade 1 teacher, I help set foundations for my students. I feel like I was never properly taught about the foundations of English or teaching it to children. I would like to learn more to help support all my students, but especially the ones that aren’t learning the way that I’m teaching. I think some of them might have dyslexia.”*

Parents are trying to find ways to help their children academically and emotionally but find themselves dealing with a school system that is not sufficiently informed or equipped to deal with their child’s reading difficulties. Teachers are looking for effective teaching strategies to help the struggling readers in their class. Parents discover that there are long waits (months or years) for psycho-educational assessments in the school system so, if they can afford it, they pay for it privately. Similarly, they discover that very effective interventions are available, but only from private reading specialists. Parents ask, *“If a private reading specialist can teach my dyslexic child to read, why can’t the school?”*

**Why are schools failing to teach these students to read when clearly, they can learn to read?**

Failure in learning to read comes at a high cost to both individuals and society. What starts out as a reading problem frequently snowballs into challenges with mental health, employment and the legal system. Children with dyslexia and other learning disabilities:

- have higher rates of anxiety, poor self-esteem and depression (Canadian Council on Learning, 2009; Alexander-Passe, 2006; Boyes et al., 2016);
- are less likely to graduate from high school and transition to post-secondary education (McCloy & DeClou, 2013; National Center for Learning Disabilities, 2017; Quinn et al. 2005); and

- are at increased risk of issues with substance abuse (Macdonald, Deacon & Merchant, 2016; National Center on Addiction and Substance Abuse, 2000).

Lower literacy level is associated with lower income (Heisz, Notten & Situ, 2016) and unemployment (OECD & Statistics Canada, 2000). Prevalence rates of learning disabilities and illiteracy are also much higher in the prison population (Crawford, 2002; Mallet, 2014; Mizrahi et al., 2016; PACER Inc., 2013; Sapers, 2013).

A 2002 report for the Learning Disabilities Association of Canada (Roeher Institute, 2002 (Rev. 2007)) estimated that the simple incremental cost of a learning disability (LD) from birth to retirement is \$1.982 million per person with LD. Assuming an LD prevalence rate of 5 per cent (conservative estimate), the simple incremental cost of LD (to all individuals with LD, their families and to public and private programs in Canada) was estimated at \$3,080 billion from birth to retirement. Dyslexia (reading disability) is the most prevalent learning disability (Lyon, 1996; Cortiella & Horowitz, 2014). It has been estimated that for about 80% of learning disabled students, the primary academic problem is reading (Lerner, 1989).

Considering the prevalence of dyslexia and its personal and societal costs, it is extremely important to know that dyslexia is a learning disability that is very responsive to intervention, as opposed to some other learning disabilities that must be accommodated rather than remediated.

Currently, dyslexia is typically not acknowledged or identified in Ontario schools. General classroom and resource teachers are not trained to recognise the early signs of dyslexia. Nor have they been trained in the instructional methods that have been shown to be effective for students with dyslexia, and indeed, all struggling readers. Furthermore, confusion over terminology (e.g. avoidance of the term 'dyslexia') makes it difficult for parents and students to access the information, support and solutions that they need.

## **What is Dyslexia?**

Dyslexia is a type of learning disability that makes it difficult to learn to read accurately and fluently. Children with dyslexia have difficulty with the "mechanics" of learning to read words, that is, they have difficulty with 'decoding' words. Spelling and written expression are also usually affected (Berninger et al. 2008, Cortiella & Horowitz, 2014; Lyon et al., 2003). There are many misconceptions about the term

dyslexia. Dyslexia is not the result of a vision problem (Handler & Fierson, 2011). It is also unrelated to intelligence; many very intelligent people have dyslexia (Tanaka et al., 2011).

The International Dyslexia Association (IDA) defines dyslexia as:

*“Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties 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. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge.”* (IDA, 2019; see Lyon et al. (2003) for a detailed description).

Students with dyslexia also frequently have trouble with written expression. For example, they may write short sentences and paragraphs may be poorly organized. Students with dyslexia may have weaknesses in rapid automatized naming (the ability to name objects and symbols quickly and accurately (Norton & Wolf, 2012)), orthographic mapping (establishing the process to store written words in long-term memory (Kilpatrick, 2015) and/or working memory (remembering and mentally manipulating information; Kilpatrick, 2015). Dyslexia is often hereditary (Ozernov-Palchik et al, 2016) and exists on a continuum of severity, ranging from mild to moderate to severe.

Estimates of the number of people with dyslexia varies from 5-20% of the population (Gabrieli 2009; Katusic et al. 2001; NIH, 2017; Shaywitz, 2004; Shaywitz et al, 2000; Siegel, 2006; NIH, 2017). Learning disabilities are the most common reason for formal identification as an “exceptional” student by an IPRC in Ontario (OME, 2017a), and dyslexia (reading disability) is the most prevalent learning disability (Lyon, 1996; Cortiella & Horowitz, 2014).

## **Terminology**

ONBIDA supports the use of the term dyslexia as it specifies that the student is having a decoding (word-level) problem, which informs the type of intervention required. As well, using the term dyslexia enables parents and students to access information, support and solutions supported by scientific publications and offered by [many organizations who use the term.](#)

There are many equivalent terms used to describe dyslexia, which, unfortunately, leads to confusion among parents, educators and other professionals. In psycho-educational assessments, private psychologists often use the term '**specific learning disorder**' or '**specific learning disorder with impairment in reading**' which is characterized as *"one where people have difficulties with word reading accuracy, reading rate or fluency and reading comprehension"* (from The Diagnostic and Statistical Manual of Mental Disorders (DSM-V), 5<sup>th</sup> Edition, 2013, The American Psychiatric Association). Other equivalent terms are 'specific learning disability', 'reading disability', 'decoding disability.' These equivalent terms, including dyslexia, refer to the same condition of difficulty with word-level reading (decoding), spelling (encoding) and writing. The DSM-V stipulates that *"dyslexia is an alternative term used to refer to a pattern of learning difficulties characterized by problems with accurate or fluent word recognition, poor decoding and poor spelling abilities."*

Ontario school board psychologists usually use the diagnostic term 'Learning Disability', based on the recommended practice guidelines from the Learning Disabilities Associations of Ontario & Canada (LDAO 2002 and ratified in 2015 (LDAC, 2015)). Unfortunately, these guidelines do not use the specific term 'dyslexia', just 'learning disability'. The LDAC document (2015) provides a comparison of the LDAO learning disability definition and the DSM-V Specific Learning Disorder definition. Kozey & Siegel (2008) provide a summary of definitions of learning disability used in various provinces across Canada.

Recently the Ontario Psychological Association (OPA) has released a new document "OPA Guidelines for Diagnosis and Assessment of Children, Adolescents, and Adults with Learning Disabilities" (OPA, 2018). This document also, unfortunately, uses the general term 'Learning Disability' and does not refer to 'dyslexia'.

## **The Science of Reading and Dyslexia**

### **Decoding and Reading Comprehension**

Since the purpose of reading is to understand what we read, it is necessary to teach reading comprehension skills. However, it is important to recognize that decoding is a precursor skill to understanding. Decoding is the ability to accurately and quickly read the words on a page and it plays a critical role in reading comprehension. When a child struggles with decoding, fluency is decreased, accuracy is compromised, errors occur, and the energy needed for comprehension is depleted by the effort required to simply decode. Gough & Tunmer (1986) proposed the widely accepted view that

reading comprehension (R) has two basic components: word-level decoding ability (i.e. word-recognition) (D) and listening (language) comprehension ability (C) (i.e. how well one understands spoken language). It is called the 'Simple View of Reading' (Farrell et al 2010, Wren 2001):

$$\text{Reading comprehension (R)} = \text{Decoding ability (D)} \times \text{Listening Comprehension (oral) (C)}$$

Good readers have strong abilities in both components of reading. Gough & Tunmer, among others, have identified 'dyslexia' as a disability in decoding ability (D, the first component of the reading model). **This is why the use of the term 'dyslexia' is so important, as it indicates that the intervention for this reading difficulty must be targeted on the weak decoding skills.** Difficulties in oral comprehension but not decoding, is much less common; this has been termed 'reading-comprehension impairment,' and is related to oral comprehension problems (Hulme & Snowling, 2011). Different interventions are needed for each underlying problem.

Other investigators have further developed the Simple View of Reading by elaborating on the cognitive foundations of decoding (D) and listening comprehension (C). Wren (2001) elaborates that decoding ability (D) is a function of knowledge of print concepts, letter knowledge, phoneme awareness and knowledge of the alphabetic principle (linking letters with sounds) (Wren, 2001). Scarborough also includes sight recognition of familiar words (Scarborough, 2001). Listening/language comprehension (C) is a function of background knowledge, phonology, syntax and semantics (Wren, 2001); Scarborough (2001) also includes vocabulary, verbal reasoning and literacy knowledge.

### **Dyslexia is neurobiological in origin**

Neuro-imaging methods have revealed the brain regions involved in reading that develop as children gain word-level reading skills. Functional and structural differences have been found in parts of the brain used for reading in people with dyslexia compared to normal readers and these differences have been found prior to learning to read (Norton et al, 2015; Ozernov-Palchik et al., 2016). Differences in connectivity efficiency between the areas of the brain in reading have also been reported (Saygin et al, 2013; Saygin et al., 2016; Raschle et al., 2011; Vandermosten et al., 2016). Dyslexia runs in families and several candidate genes for dyslexia susceptibility have been identified (Ozernov-Palchik et al., 2016). There is concrete evidence from neuro research that decoding difficulties can be remediated with appropriate intervention. Recently, studies have shown that effective remediation/instruction is associated with increased activation or normalization of regions that typically show reduced or absent activation in dyslexia (Barquero et al, 2014; Gabrieli, 2016).

## What Works? - 'Structured Literacy' Instruction

Numerous reviews and reports on early literacy instruction have concluded from decades of reading research that the most effective way to teach children to read is through explicit, systematic instruction in the basic skills required for reading (Armbruster, Lehr & Osborn, 2001; Hawken, 2008; Hempenstall, K., 2016; National Center for Family Literacy, 2008; National Reading Panel, 2000; Wren, 2000; Spear-Swerling, 2013).

IDA has developed [Knowledge and Practice Standards for Teachers of Reading](#) which explicitly sets forth the knowledge and skills that all teachers of reading should possess to advance students' reading and writing profiles in classroom, remedial, and clinical settings. These standards reflect the current state of the scientific research base and are the result of a rigorous development and vetting process that included the input of a wide range of stakeholders, including researchers, educators, higher education faculty, clinical specialists, parents, and advocates.

The approach to literacy instruction that is described in the Standards has been termed "structured literacy". Structured literacy instruction is beneficial for all children but is necessary for children who encounter more difficulty in learning to read (IDA, 2013; National Center for Family Literacy, 2008; Galuschka, et al., 2014; Lyon 2003; Rose, 2009), including adolescents (Parrila et al, 2010). Without this appropriate instruction, more than 74% of children entering first grade who are at-risk for reading failure will continue to have reading problems into adulthood (Lyon 2003).

Structured literacy is multifaceted, supporting the in-depth development of decoding skills, reading and language comprehension, spelling and writing skills.

To support the development of both decoding ability and language comprehension, structured literacy instruction is characterized by the provision of systematic, explicit instruction that integrates listening, speaking, reading, and writing and includes the following elements (IDA, 2018; Birsch, 2011):

- Phonology (the structure of language across the speech sound system)
- Handwriting
- Orthography (the spelling system)
- Syntax (the structure of sentences)
- Morphology (the meaningful parts of words)
- Fluency
- Vocabulary
- Semantics (the relationships among words)
- Listening and reading comprehension

- Written Expression
- Organization of spoken and written discourse.

This instruction is the basis for developing accurate and fluent reading, comprehension and writing skills. These instructional methods also meet the criteria for all three instructional approaches recommended by the Ministry of Education of Ontario (Universal Design for Learning, Differentiated Instruction and a Tiered Approach to Prevention and Intervention) in their document *“Learning for All, a Guide to Effective Assessment and Instruction for All Students, K to Grade 12”* (2013).

## **Reading Instruction Methods Currently Used in the Regular Classroom as per the Ontario Curriculum**

The current Grade 1 Language Arts / Reading curriculum (p. 40) specifies that:

“By the end of Grade 1, students will:

### ***Reading Unfamiliar Words***

#### ***3.2 . predict the meaning of and solve unfamiliar words using different types of cues, including:***

- ***semantic (meaning) cues*** (e.g., familiar words, phrases, sentences, and visuals that activate existing knowledge of oral and written language);
- ***syntactic (language structure) cues*** (e.g., predictable word order, predictable language patterns, punctuation);
- ***graphophonic (phonological and graphic) cues*** (e.g., blending and segmenting of individual sounds in words; visual features of words such as shape and orientation; sound-letter relationships for initial, final, and medial sounds; onset and rime; common spelling patterns; words within words”).

This is known as the “Three-Cueing System”, which primarily promotes guessing words based on semantic (meaning) and syntax (sentence structure). This approach and programmes based on this approach are not supported by reading research. Recent critiques of this method have been published by Kilpatrick (2015), Hempenstall (2017), and Seidenberg (2017). In his review, Kilpatrick (2015) concludes the *“three cueing systems model is inconsistent with research on the nature of reading... The evidence suggests the three cueing systems approach is not effective with weak and at-risk readers, and it may actually be counterproductive with such students (Tunmer et al., 2002).”*

We know that there are children in every classroom who fail to learn to read. This is not acceptable.

The 2016-2017 EQAO results indicate that 26% of Ontario’s Grade 3 students did not meet the Provincial

Standard (Level 3 or 4) for Reading, and 27% did not meet the requirements for Writing (EQAO 2017). While there are other causes of reading failure, many of these students have dyslexia. Historically, it is the student who has been blamed as being ‘unable’ to learn to read, but the evidence is now overwhelming that teaching reading using a ‘structured literacy’ approach, which targets the foundational components as per the widely accepted reading models, will enable children with dyslexia to read, as well as children struggling to read for reasons other than dyslexia. It is an inclusive instructional design for teaching reading that must be standard in classrooms starting in Kindergarten. This alone will result in fewer children requiring special education support for reading (Lyon 2003).

### **Early Screening and Response to Intervention: Support for Students with Dyslexia and Other Struggling Readers**

Early identification and effective interventions are critical to avoid the subsequent results of failure to learn to read – poor academic performance, low self-esteem, behavioural issues and other mental health problems. There is strong evidence that intensive reading interventions are most effective in pre-school, kindergarten or first grade (Ozernov-Palchik & Gaab, 2016; Ozernov-Palchik et al, 2016; What Works Clearinghouse, 2009), so early identification is critical. For example, in a study of 172 children involved in small-group reading intervention, children who received intervention earlier, in 1st and 2nd grade, made gains in foundational word reading skills relative to controls almost twice that of children receiving intervention in 3rd grade (Lovett et al., 2017).

Early identification is also feasible. Several studies have shown that early measures of risk factors for dyslexia in children as young as three (e.g. deficits in phonological awareness, phonological memory, letter-sound knowledge, rapid automatized naming, family history) are predictors of reading difficulties in later years (Ozernov-Palchik & Gaab, 2016; Puolakanaho et al, 2007). Following legislation requiring early screening in many U.S. states, various jurisdictions have published lists of recommended ‘early screener’ assessments, such as the Connecticut State Department of Education (2017), Alabama State Department of Education (2016) and the International Dyslexia Association (2017). Nadine Gaab’s lab at Boston Children’s Hospital has compiled [a spreadsheet](#) with detailed information about various early screeners. Decoding Dyslexia California has also published [a summary of screening tools for Universal Screening for Reading Difficulties](#).

In Ontario, early screening for dyslexia is not widely used and the ‘*wait to fail*’ model prevails in most schools, with results in children not being identified with reading challenges until they are in Grade 3, 4

or even later. **It is not uncommon for a parent to be told that their child cannot receive extra support in reading until they are two years behind in performance.**

A Response to Intervention (RTI) framework incorporates early screening and effective instruction and intervention (Catts et al., 2015); this is also called the “The Tiered Approach to Instruction” (Robinson & Hutchinson, 2014; Ontario Ministry of Education, 2013). Instruction in the classroom (Tier 1) would be evidence-based, structured literacy instruction, using differentiated instruction and universal design for learning (UDL). In this approach, early screening and frequent progress monitoring identifies students who are at risk or struggling; these students are then provided with small group, more intense instruction, again with evidence-based structured literacy instruction (Tier 2). Full psycho-educational assessments are not required to access intervention. This is critical because students often do not receive the services they need while waiting for further assessment. Students who struggle in Tier 1 and 2 are offered Tier 3, one-on-one, personalized instruction. A psycho-educational assessment can be used to fully assess the learning challenges of these students (to better inform instruction and accommodations, etc.).

The critical point is that effective, structured literacy instruction must occur in all Tiers, including the general classroom. All students, including those with dyslexia and other struggling readers will benefit from this approach and effective implementation of structured literacy instruction in the classroom (Tier 1) can reduce the number of students requiring Tier 2 and Tier 3 services (Kilpatrick, 2015).

## **Teacher Training**

Teacher training institutions do not adequately prepare teachers in research-based, effective reading instruction. (National Council on Teacher Quality, 2006; Buckingham, 2013, Spear-Swerling, Brucker & Alfano, 2005). This has been attributed to adherence to whole-language ideologies and to the lack of scientific rigor in educational research and educational policy (Buckingham, 2013). Information about dyslexia and early screening is also lacking in most teacher training programs. To teach students effectively, teachers need in-depth knowledge about the structure of language, including phonology (the speech-sound system), orthography (the spelling system), morphology, semantics and syntax. Similarly, to teach written expression effectively teachers need a knowledge base about language structure, including sentence and discourse structure (IDA, 2010).

The International Dyslexia Association has developed [Knowledge and Practice Standards for Teachers of Reading](#) (IDA, 2010) that describe the elements of effective reading instruction that teachers need to

know. IDA provides individual certification and accreditation for teacher training institutions as per these standards.

## **Discrimination and Inequity**

All students, including those with dyslexia, are entitled to the necessary instruction required to learn to read. In 2012, the Supreme Court of Canada ruled in the [Moore case](#) that there was discrimination when a student with dyslexia was not offered the education to which he was entitled, that is, intensive remediation in learning to read. The Ontario Human Rights Commission recently released the “*Policy on Accessible Education for Students with Disabilities*” (2018) which includes learning disabilities in the definition of disability (examples include students with ‘dyslexia’). Under the Ontario Human Rights Code, people with disabilities are protected from discrimination in ‘services’ including education services.

Systemic discrimination still exists against students with dyslexia in the Ontario education system, beginning with how reading is taught in the classroom, the lack of early identification of children with reading problems, poor access to early, effective intervention programs and the refusal of the Ontario Ministry of Education and many school boards to recognize and use the term ‘dyslexia.’

There is also great inequity among school boards and schools in availability and quality of early screening, in the identification of dyslexia, and effective reading instruction. Unfortunately, parents are often treated without dignity and full participation, while advocating for the services and supports that their child with dyslexia needs to succeed at school. This runs contrary to *the Guidelines on Accessible Education* (OHRC 2004) and the *Policy on Ableism and Discrimination based on Disability* (OHRC 2016).

The term ‘dyslexia’ is absent from most of the Ministry and school board publications, websites and policies, including the Ministry of Education’s *Policy/Program Memorandum No. 8 – Identification of and Program Planning for Students with Learning Disabilities* (OME, 2014) and the *new Special Education Policy and Resource Guide* (OME 2017). As well, many teachers, school administrators, Special Education Advisory Committees (SEACs) will not use the term despite its widespread use by other jurisdictions, institutions and researchers around the world, including in hundreds of peer-reviewed research articles. There is systemic discrimination in not acknowledging that dyslexia is a completely acceptable term to describe a very real learning disability, which is one of the disability categories covered by the Ontario Human Rights Code.

## Other Jurisdictions

Both the U.S. and the U.K. early elementary school curriculums include explicit instruction in letter-sound knowledge, phonics, morphology and fluency instruction (U.K. Department for Education, 2013, U.S. Common Core Standards Initiative, n.d.).

- ▶ Many jurisdictions outside Canada have implemented legislation mandating dyslexia awareness training, early screening and identification, and appropriate, effective literacy instruction. [Thirty-seven \(37\) U.S. states](#) have passed or are about to pass dyslexia legislation. Many states have developed [handbooks, guides or reports](#) related to implementation of dyslexia-related legislation. Numerous other organizations around the world have called for dyslexia awareness training, early screening and effective literacy instruction ([Decoding Dyslexia Ontario](#), [Dyslexia Canada](#), [Decoding Dyslexia](#), [Australian Federation of Specific Learning Difficulties Association](#), [Learning Disabilities Association of Australia](#), [National Council on Teacher Quality](#)).

## Recommendations

The Ontario Branch of the International Dyslexia Association has the following recommendations for improving literacy instruction and outcomes for all students, including those with dyslexia.

### Eliminate systemic discrimination and inequity in reading/writing instruction

- ▶ Effective classroom literacy instruction that is no longer discriminatory but is universal in design, access to early screening and identification, and appropriate intensive literacy interventions should be available equally to all Ontario students, regardless of place of residence, school board, socio-economic status or ethnic background.
- ▶ The term ‘dyslexia’ should be used in all Ontario policies, documents, reports, and legislation so that students, families and teachers are familiar with this disability and can easily access information and support. This includes the 2017 draft *Special Education in Ontario Policy and Resource Guide* (OME, 2017b), as well as the PPM8, IPRC documents, IEPs, and the Ontario School Information System.

### Effective reading instruction (‘Structured Literacy’ instruction) for all

- ▶ IDA supports “structured literacy” instruction for all children. This is explicit, systematic instruction in the structure of the English language, consistent with the scientific evidence as to

how children learn to read, how best to teach reading, and aligns with the instructional recommendations of the *Learning for All* document (OME, 2013).

- ▶ The current Kindergarten curriculum should include specific instructional goals for learning of phonological awareness, letter-sound associations and introduction to word-level decoding (blending and segmenting of sounds).
- ▶ The Grade 1-2 curriculum should abandon the three-cueing system that emphasizes guessing from context and syntax as acceptable strategies for identifying words. The curriculum should be changed to include diagnostic, explicit and systematic instruction in structured literacy (as described above).
- ▶ Appropriate literacy instruction should not be considered an ‘accommodation’ on IEPs or other special education documents or policies, but instead, should be part of the curriculum.

### **Early screening of children should occur in Kindergarten/early Grade 1**

- ▶ Early screening should identify children at risk of difficulties with learning to read, write and spell.
- ▶ Early screening should include assessment of skills such as phonological awareness, letter-sound knowledge, rapid naming of letters and oral language comprehension, which are all early predictors of future reading difficulties/success, as well as family history of dyslexia. More detailed assessments should be carried out on the lowest performers or students who are not responding to intervention, in order to guide further intervention. Effective reading instruction and intervention should not be held back while waiting for assessments.
- ▶ Screening instruments must have strong predictive validity, reliability, classification accuracy and norm-referenced scoring.
- ▶ Children identified at risk or who are not making expected progress in reading, spelling and writing should receive more intensive and targeted structured literacy instruction, including small-group and one-on-one interventions, as required, as per the Response to Intervention model.
- ▶ Ongoing progress monitoring throughout primary school should be used to ensure each child receives appropriate interventions that work.

### **Teacher training and support – implementing Structured Literacy instruction, early screening, effective interventions, and knowledge of learning disabilities, including dyslexia**

- ▶ Teacher training institutions should be required to provide training in structured literacy to all pre-service teachers.
- ▶ In-service teachers should be provided with similar training and effective, continual professional development and coaching.
- ▶ Resource/special education educators should be required to have training in reading/writing interventions based on structured literacy.
- ▶ The [IDA Knowledge and Practice Standards for Teachers of Reading](#) (for both classroom and interventionists) provide details on the competencies required for effective structured literacy instruction.
- ▶ Teacher training (new and in-service teachers) should also include instruction in:
  - the science of reading, including models of reading and the neurobiology of reading,
  - learning disabilities (including dyslexia, dysgraphia and dyscalculia). This would include terminology, statistics, independence from IQ, co-morbidities, prevalence, assessment, appropriate accommodations and evidence-based interventions.
  - use of early screening tools for dyslexia, effective progress monitoring and the knowledge to interpret results accurately.

### **Ongoing support for students with dyslexia**

- ▶ Students with dyslexia should be given ongoing support throughout school.
- ▶ Accommodations such as assistive technologies, scribes, alternate formats to demonstrate competencies, extra time for exams, etc., should be available to all students with dyslexia and other learning disabilities.
- ▶ These accommodations and supports, however, should not replace appropriate and effective literacy instruction and intervention.
- ▶ The Ministry should implement appropriate monitoring tools (for example, within the Ontario School Information System) to accurately estimate the prevalence of dyslexia and other learning disabilities, comorbid conditions (e.g. Attention Deficit Hyperactivity Disorder) and through longitudinal data collection, monitor the effectiveness of early screening and interventions.

## References

- Alabama State Board of Education. 2016. [Alabama Dyslexia Resource Guide](#), Appendix A, *Examples of Dyslexia Screening Tools*.
- Alexander-Passe, N. 2006. How dyslexic teenagers cope: an investigation of self-esteem, coping and depression. *Dyslexia*. 12(4):256-275.
- American Psychiatric Association. 2013. *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5).
- Armbruster, B.B., F. Lehr, J. Osborn. 2001. [Put Reading First. The Research Building Blocks for Teaching Children to Read](#). U.S. National Institute for Literacy.
- Barbard-Brak, L. & T.N. Sulak. 2010. *Literacy, learning disabilities and their association with imprisonment*. Corrections Compendium (American Correctional Association). Fall 2010, p. 7-11.
- Barquero, L.A., N. Davis, L.E. Cutting. 2014. Neuroimaging of reading intervention: a systematic review and activation likelihood estimate meta-analysis. *PLoS ONE*. 9(1):e83668.
- Berninger, V.W. et al. 2008. Writing problems in developmental dyslexia: under-recognized and under-treated. *Journal of School Psychology*. 46:1-21.
- Birsh, J. R. (2011). Connecting research and practice. In J. R. Birsh (Ed.), *Multisensory teaching of basic language skills* (3rd ed., pp.1–24). Baltimore, MD: Paul H. Brookes Publishing.
- Boyes, M.E. et al. 2016. Why are reading difficulties associated with mental health problems. *Dyslexia*. DOI: 10.1002/dys.1531.
- Buckingham, J. 2013. [Why Jaydon can't read](#). Learning Difficulties Australia. 45(3), Nov. 2013.
- Catts, et al. 2015. Early identification of reading disabilities within a RTI framework. *Journal of Learning Disabilities*. 48(3):281-297.
- Connecticut State Department of Education. 2017. *Approved Menu of Research-based Grades K-3 Universal Screening Reading Assessments*. Retrieved from: [http://www.sde.ct.gov/sde/lib/sde/pdf/curriculum/language\\_arts/approved\\_menu\\_of\\_research\\_based\\_k3\\_universal\\_reading\\_assessments\\_March\\_2017.pdf](http://www.sde.ct.gov/sde/lib/sde/pdf/curriculum/language_arts/approved_menu_of_research_based_k3_universal_reading_assessments_March_2017.pdf).
- Cortiella, C. & S.H. Horowitz. 2014. [The State of Learning Disabilities](#). Facts, Trends and Emerging Issues. National Center for Learning Disabilities. Crawford, C. 2002. [Learning disabilities in Canada: economic costs to individuals, families and society](#). Prepared for the Learning Disabilities Association of Canada by The Roeher Institute.
- Education Quality and Accountability Office. 2017. Highlights of the Provincial Achievement Results, 2016-2017. Retrieved from <http://www.eqao.com/en/assessments/results/communication-docs/provincial-report-highlights-elementary-2017.pdf>
- Farrell, L., et al. 2010. The Simple View of Reading. The Center for Development and Learning Blog. February 1, 2010. Retrieved from: <http://www.cdl.org/articles/the-simple-view-of-reading/>.
- Fuller-Thomson, E. & S.R. Hooper. 2015. The association between childhood physical abuse and dyslexia, findings from a population study. *Journal of Interpersonal Violence*. 30(9): 1583-1592.
- Gabrieli, J.D. 2009. Dyslexia: a new synergy between education and cognitive neuroscience. *Science*. 325 (5938):280-283.
- Galuschka, et al. 2014. Effectiveness of treatment approaches for children and adolescents with reading disabilities: a meta-analysis of randomized controlled trials. *PLoS ONE* 9(2): e89900. doi:10.1371/journal.pone.0089900.

- Gough, P.B. & W.E. Tunmer. 1986. Decoding, reading, and reading disability. *Remedial and Special Education*. 7: 6-10.
- Hawken, J. 20. 2008. *Foundations for Literacy: An Evidence-based Toolkit for the Effective Reading and Writing Teacher*. Canadian Language and Literacy Research Network.
- Handler, S.M. & W.M. Fierson. 2011. *Joint Technical Report – Learning Disabilities, Dyslexia, and Vision*. *American Academy of Pediatrics*. 127 (3): 3818-3856. DOI: 10.1542/peds.2010-3670.
- Heisz, A., G. Notten & J. Situ. 2016. *The association between skills and low income*. Insights on Canadian Society, Statistics Canada. Catalogue no. 75-006-X.
- Hempenstall, K. 2013 (Rev. 2017). The three-cueing system in reading: Will it ever go away? National Institute for Direct Instruction. Retrieved from: <https://www.nifdi.org/resources/news/hempenstall-blog/402-the-three-cueing-system-in-reading-will-it-ever-go-away>.
- Hempenstall, K. (Ed. By Jennifer Buckingham). 2016. *Read About It: Scientific Evidence for Effective Teaching of Reading*. Centre for Independent Studies (Australia), Research Report 11.
- Horizon Educational Consulting. 2016. *Access to Special Education in Ontario in a Social Justice Context – Identifying barriers and obstacles for students, parents and teacher-parents in accessing Special Education in Ontario*. Hurford, D.P. et al. 2016. The dyslexia dilemma: a history of ignorance, complacency and resistance in colleges of education. *Journal of Childhood & Developmental Disorders*. 2 (3): 26. DOI: 10.4172/2472-1786.100034.
- Hulme, C. & M.J. Snowling. 2011. Children’s reading comprehension difficulties: nature, causes, and treatments. *Current Directions in Psychological Science*. 20(3):139-142.
- Im, K et al. 2016. Atypical sulcal pattern in children with developmental dyslexia and at-risk kindergarteners. *Cerebral Cortex*. 3:1138-1148.
- International Dyslexia Association (IDA), Professional Standards and Practices Committee. 2010. *Knowledge and Practice Standards for Teachers of Reading*. International Dyslexia Association, Baltimore, MD.
- International Dyslexia Association (IDA). 2013. *Dyslexia in the Classroom: What Every Teacher Needs to Know*. International Dyslexia Association. Baltimore, MD.
- International Dyslexia Association (IDA). 2017. *Universal Screening: K-2 Reading*. Retrieved from: <https://dyslexiaida.org/universal-screening-k-2-reading/>.
- International Dyslexia Association (IDA). 2019. Definition of Dyslexia. Retrieved from <https://dyslexiaida.org/definition-of-dyslexia/>.
- Kilpatrick, D. A. 2015. *Essentials of Assessing, Preventing, and Overcoming Reading Difficulties*. Wiley & Sons Inc.
- Kozey, M. & L.S. Siegel. 2008. *Canadian Provincial Policy Definitions of Learning Disabilities*. Canadian Language and Literacy Research Network. 38pp.
- Learning Disabilities Association of Canada. 2015. “*Position Paper: To Revise Or Not To Revise: The Official LDAC Definition of Learning Disabilities versus DSM-5 Criteria*”. LDAC. Retrieved from [https://www.ldac-acta.ca/downloads/pdf/media\\_release/LDAC-DSM-5-Statement-March-2015-FINAL-CL.pdf](https://www.ldac-acta.ca/downloads/pdf/media_release/LDAC-DSM-5-Statement-March-2015-FINAL-CL.pdf).
- Learning Disabilities Association of Ontario (LDAO). 2001. Learning disabilities: a new definition. Retrieved from: [http://www.ldao.ca/documents/Definition\\_and\\_Suporting%20Document\\_2001.pdf](http://www.ldao.ca/documents/Definition_and_Suporting%20Document_2001.pdf).
- Lerner, J.W. 1989. Educational interventions in learning disabilities. *J. American Academy of Child and Adolescent Psychiatry*. 28(3):326-331.
- Lyon, G.R. 2003. Reading disabilities: why do some children have difficulty learning to read? What can be done about it? *Perspectives*. 29 (2).
- Lyon, G.R., S.E. Shaywitz, B.A. Shaywitz. 2003. Part I Defining dyslexia, comorbidity, teachers’ knowledge of language and reading. A definition of dyslexia. *Annals of Dyslexia*. 53:1-14.

- Lovett, M.W. et al. 2017. Early intervention for children at risk for reading disabilities: The impact of grade at intervention and individual differences on intervention outcomes. *Journal of Educational Psychology*. 109(7):889-914.
- Mallet, C.A. 2014. Youthful offending and delinquency: the comorbid impact of maltreatment, mental health problems and learning disabilities. *Child and Adolescent Social Work Journal*. 31:369-392.
- Mather, N. & B. J. Wendling. 2011. *Essentials of Dyslexia Assessment and Intervention*. Wiley.
- McCloy, U. & L. DeClou. 2013. [Disability in Ontario: Postsecondary education participation rates, student experience and labour market outcomes](#). Higher Education Quality Council of Ontario. Issue Paper No. 14, Feb. 21, 2013.
- Macdonald, S.J., L. Deacon, J. Merchant. 2016. "Too far gone": dyslexia, homelessness, and pathways to drug use and dependency. *Insights into Learning Disabilities*. 13(2):117-134.
- Mizrahi, J. L., Jeffers, J., Ellis, E. B., & Pauli, P. (2016). *Disability and criminal justice reform: Keys to Success*. RespectAbility.org. Rockville, MD.
- National Center for Family Literacy. 2017. [The State of Learning Disabilities: Understanding the 1 in 5. Executive Summary](#). National Institute for Literacy.
- National Center for Family Literacy. 2008. [Developing Early Literacy. Report of the National Early Literacy Panel. A Scientific Synthesis of Early Literacy Development and Implications for Intervention](#). National Institute for Literacy.
- National Institutes of Health. 2017. *Dyslexia Information Page*. Retrieved from <https://www.ninds.nih.gov/Disorders/All-Disorders/Dyslexia-Information-Page>. Feb. 2018.
- National Reading Panel (U.S.). 2000. [Report of the National Reading Panel: Teaching Children to Read : an Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction : Reports of the Subgroups](#). [Washington, D.C.]: National Institute of Child Health and Human Development, National Institutes of Health.
- Norton, E.S. & M. Wolf. 2012. Rapid automatized naming (RAN) and reading fluency: implications for understanding and treatment of reading disabilities. *Annu. Rev. Psychol.* 63:427-52.
- Norton, E.S., S.D. Beach, J.D.E. Gabrieli. 2015. Neurobiology of Dyslexia. *Current Opinion in Neurobiology*. 30:73-78.
- Organisation for Economic Co-operation and Development & Statistics Canada. 2000. [Literacy in the Information Age. Final Report of the International Adult Literacy Survey](#). OECD, Paris & the Ministry of Industry, Canada.
- Ontario Human Rights Commission. 2004. [Guidelines on accessible education](#). Minor revision in Dec. 2009. Retrieved online from [www.ohrc.on.ca](http://www.ohrc.on.ca).
- Ontario Human Rights Commission. 2016. [Policy on ableism and discrimination based on disability](#). Retrieved online from [www.ohrc.on.ca](http://www.ohrc.on.ca).
- Ontario Human Rights Commission. 2018. [Policy of accessible education for students with disabilities](#). Retrieve online from [www.ohrc.on.ca](http://www.ohrc.on.ca).
- Ontario Ministry of Education (OME). 2013. [Learning for All, a Guide to Effective Assessment and Instruction for All Students, K to Grade 12](#).
- Ontario Ministry of Education (OME). 2014. [Policy/Program Memorandum No. 8 Identification of and program planning for students with learning disabilities](#).
- Ontario Ministry of Education (OME). 2017a. [Overview of Special Education Funding in Ontario](#). Presented at Special Education Information Sharing Forum, Thunder Bay, Jan. 18, 2017.
- Ontario Ministry of Education (OME). 2017b. [Special Education in Ontario Policy and Resource Guide \(Draft\)](#).
- Ontario Psychological Association. 2018. Ontario Psychological Association Guidelines for Diagnosis and Assessment of Children, Adolescents, and Adults with Learning Disabilities. Consensus Statement and Supporting Documents. OPA. June 2018. 31pp.

- Ozernov-Palchik, O. et al. 2016. Lessons to be learned: how a comprehensive neurobiological framework of atypical reading development can inform educational practice. *Current Opinion in Behavioral Sciences*. 10: 45-58.
- Ozernov-Palchik, O & N. Gaab. 2016. Tackling the ‘dyslexia paradox’: reading brain and behavior for early markers of developmental dyslexia. *Wiley Interdiscip. Rev. Cogn. Sci.* 7(2):156-176.
- PACER Center Inc. 2013. [Students with Disabilities and the Juvenile Justice System: What Parents Need to Know](#). PACER Center Champions for Children with Disabilities. Minneapolis, MN.
- Parrila, R. et al. 2010. [Effective Interventions for Adolescent Struggling Readers – A Research Review with Implications for Practice](#). JP Das Centre on Developmental and Learning Disabilities. University of Alberta.
- Puolakanaho et al. 2007. Very early phonological and language skills: estimating individual risk of reading disability. *Journal of Child Psychology and Psychiatry*. 48(9): 923-931.
- Quinn, M.M. et al. 2005. Youth with disabilities in juvenile corrections: a national survey. *Council for Exceptional Children*. 71(3):339-345.
- Raschle, N.M., M. Chang, N. Gaab. 2011. Structural brain alterations associated with dyslexia predate reading onset. *NeuroImage*. 57:742-749.
- Robinson, K. & N.L. Hutchinson. 2014. Tiered approaches to the education of students with learning disabilities. LD@School. Retrieved from <https://www.ldatschool.ca/tiered-approaches-to-the-education-of-students-with-learning-disabilities/>.
- Roeher Institute, The. 2002 (Rev. 2007). [Learning Disabilities in Canada: Economic Costs to Individuals, Families and Society](#). Prepared for the Learning Disabilities Association of Canada. 49p.
- Rose, J. 2009. [Identifying and Teaching Children and Young People with Dyslexia and Literacy Difficulties](#). An independent report from Sir Jim Rose to the Secretary of State for Children, Schools and Families. Sapers, H. 2013. [Respecting Rights in Canadian Prisons: An Ombudsman’s Perspective. Correctional Investigator of Canada. Notes for an address to British House of Lords](#). London, U.K. April 17, 2013.
- Saygin, Z.M. et al. 2013. Tracking the roots of reading ability: white matter volume and integrity correlate with phonological awareness in prereading and early-reading kindergarten children. *The Journal of Neuroscience*. 33:13251-13258.
- Saygin, Z.M. et al. 2016. Connectivity precedes function in the development of the visual word form area. *Saygin et al. 2016. Nature Neuroscience*. 19:1250-1266.
- Scarborough, H.S. 2001. A discussion of evidence, theory, and practice connecting early language and literacy to later reading disabilities. In Newman, S.B. & D.K. Dickinson (Eds.), *Handbook of early literacy research*. P. 98. Guilford Press, New York, NY.
- Seidenberg, M. 2017. *Language at the Speed of Sight – How we read, why so many can’t and what can be done about it*. Basic Books (Perseus Books): New York.
- Siegel, L. 2006. Perspectives on dyslexia. *Paediatrics Child Health*. 11(9): 581-587.
- Shaywitz, S. E., Shaywitz, B. A., Fletcher, J. M. & Escobar, M. D. 2000. Prevalence of reading disability in boys and girls. Results of the Connecticut Longitudinal Study. *JAMA* 264, 998–1002.
- Shaywitz, S. 2004. *Overcoming dyslexia: A new and complete science-based program for reading problems at any level*. New York, NY: Random House.
- Spear-Swerling, L. 2013. A road map for understanding reading disabilities and other reading problems. In *Theoretical Models and Processes of Reading*. Ed. Alvermann, D.E. et al. International Reading Association. Pp. 412-436.
- Spear-Swerling, L., P.O. Brucker & M.P. Alfano. 2005. Teachers’ literacy-related knowledge and self-perceptions in relation to preparation and experience. *Annals of Dyslexia*. 55(2): 266-296.
- Tanaka, H. et al. 2011. The brain basis of the phonological deficit in dyslexia is independent of IQ. *Psychological Science*. 22(1):1442-1451.

- Tunmer, W.E. & J.W. Chapman. 2002. The relation of beginning readers' reported word identification strategies to reading achievement, reading-related skills, and academic self-perceptions. *Reading and Writing: An Interdisciplinary Journal*. 15:341-358.
- U.K. Department of Education. 2013. [\*English programmes of study: key stages 1 and 2\*](#). National curriculum in England.
- U.S. Common Core Standards Initiative. N.d. *English Language Arts Standards, Reading Foundational Skills, Grade 1*. Retrieved from: <http://www.corestandards.org/ELA-Literacy/RF/1/>.
- Vandermosten, M., F. Hoeft & E.S. Norton. 2016. Integrating MRI brain imaging studies of pre-reading children with current theories of developmental dyslexia: a review and quantitative meta-analysis. *Current Opinion in Behavioral Sciences*. 10:155-161.
- What Works Clearinghouse. 2009. [\*Assisting Students Struggling with Reading: Response to Intervention \(RtI\) and Multi-Tier Intervention in the Primary Grades\*](#). National Center for Education Evaluation and Regional Assistance, U.S. Department of Education. NCEE 2009-4045.
- Wren, S. 2001. [\*The Cognitive Foundations of Learning to Read: A Framework\*](#). Southwest Educational Development Laboratory. Austin, TX.