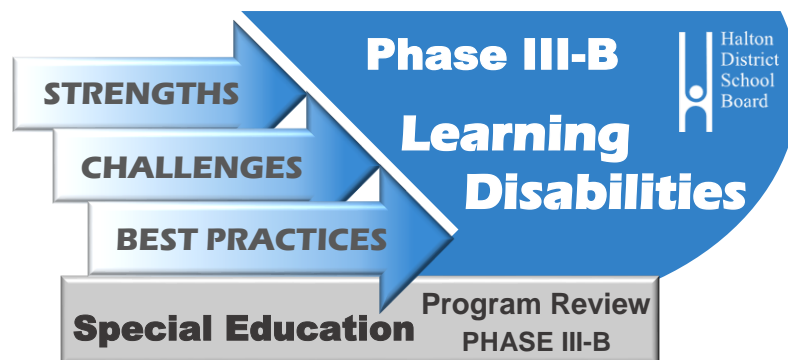




Halton District School Board
Special Education Programs and Services Review
Phase III-B

Strengths, Challenges, and Best Practices
with Assessment and Identification of Young Children
at Risk for Learning Disabilities

Exploring the Research Literature
and the Student Population in the Halton District School Board



Elana Gray, M.Sc., C.E.

May 2019

Special Education Programs & Services Review Steering Committee

David Boag	Associate Director of Education
Elana Gray	Consultant
Jane Lewis	In-School Principal - Elementary
Sean Marks	Principal - Special Education
Denise Nacev	Chair - SEAC (to January 2019)
Joanna Oliver	Trustee
Tim Sadai	Instructional Program Leader - Secondary
Linda Stewart	Senior Manager - Professional Services
Nicholas Varricchio	In-School Principal - Secondary
Mark Zonneveld	Superintendent - Special Education

Acknowledgements

The completion of Phase III-B was facilitated through the support of many dedicated individuals. A special note of thanks is extended to the above noted members of the Special Education Programs and Services Review Steering Committee for their continued guidance and support throughout this phase of the review.

Notes:

The term “parent” is used throughout this report and refers to **parents and guardians** of students.

This literature review presents issues and best practices relating to assessment and identification of young children at risk for learning disabilities. It is part of the larger Special Education Programs and Services Review – Phase III.

Table of Contents

Introduction.....	1
Elementary Learning Disabilities Program.....	2
Approach to the Review – Phase III-B	2
Review Methodology	3
Strengths, Challenges, and Best Practices with Assessment & Identification of Young Children at Risk for Learning Disabilities - A Review of the Literature.....	5
Introduction and Background	5
Brief Overview of Early Childhood Development	6
A Closer Look at the Assessment and Identification of Young Children at Risk for Learning Disabilities	7
Best Practices for Assessing and Identifying Young Children for Learning Disabilities.....	14
Enrolment Among Elementary and Secondary Students Identified with Learning Disabilities.....	17
Elementary Report Card Results	18
EQAO Grade 3 and Grade 6 Results	19
EQAO Grade 9 and Grade 10 Results	20
Parent Satisfaction and Perceptions of School and the Special Education Support Their Child is Receiving	21
Highlights of Review Findings	25
Key Considerations for the Assessment and Identification of Elementary Students at Risk for Learning Disabilities	28
References.....	30

List of Tables

Table 1: Special Education Review Framework for Phase III-B	3
---	---

List of Figures

Figure 1a: Enrolment of Students Identified with Learning Disabilities Over 5 Years	17
Figure 1b: Enrolment of Students Identified with Learning Disabilities by Gender Over 5 Years .	17
Figure 1c: Enrolment of Students Identified with Learning Disabilities by Area Over 5 Years	17
Figure 2: Elementary Report Card Results Over 5 Years by Curriculum Strand.....	18
Figure 3: Grade 3 EQAO Assessment Results Over 4 Years by Subject.....	19
Figure 4a: Grade 6 EQAO Assessment Results Over 4 Years by Subject.....	19
Figure 4b: 2015-2016 Grade 6 EQAO Results by Subject and Placement Type	19
Figure 5: EQAO Grade 9 and Grade 10 Results Over 5 Years by Subject	20
Figure 6: Reported Satisfaction of School Elements Among Parents of Students Identified with Learning Disabilities in Elementary and Secondary School – 2016-2017	21
Figure 7: Reported Satisfaction of Program Elements Among Parents of Students Identified with Learning Disabilities in Elementary and Secondary School – 2016-2017	22
Figure 8: Parents Reported Improvement in Their Child’s Academic and Social-Emotional Skills in Elementary and Secondary School – 2016-2017.....	23
Figure 9: Reported Overall Program Satisfaction Among Parents of Students Identified with Learning Disabilities in Elementary and Secondary School – 2016-2017	24

Review of the Special Education Programs and Services – Phase III-B

Strengths, Challenges, and Best Practices with Assessment and Identification of Young Children at Risk for Learning Disabilities

INTRODUCTION

The Special Education Programs and Services Review began during the 2016-2017 school year, with a phased implementation approach over three years. Each phase set out to address specific goals, and the findings were used to inform the direction and activities of the subsequent phase.

Phase 1: this initial phase examined student enrolment trends in each of the Special Education categories of exceptionality; student achievement trends; and student, parent, and staff perspectives regarding Special Education programs and services. Results from Phase 1 identified the need for the Halton District School Board (HDSB) to further examine elementary special education assessment, identification and placement procedures for students with autism, learning disabilities, and giftedness. Specifically, this phase identified: (1) concerns among school staff regarding the services, supports and increased needs of students with these exceptionalities; (2) large achievement gaps between students not receiving special education support and students with learning disabilities and autism; and (3) special education enrolment trends demonstrating that almost 60% of students with exceptionalities were in the elementary panel, with a sizable proportion representing these three exceptionalities (Love and Favaro, 2017).

Phase II: Based on the findings in Phase I, Phase II was structured to further explore the referral, identification and placement pathways available for elementary students with autism, learning disabilities, and giftedness. Focusing on the fidelity, consistency, efficiency, and effectiveness of procedures and practices used throughout the pathways, Phase II examined: (1) elementary enrolment trends; (2) procedural pathways within the HDSB and in neighbouring school boards; (3) alignment between HDSB's practices and Ministry guidelines; and (4) stakeholder perspectives regarding pathway procedures and practices. Findings from Phase II identified a variety of strengths and challenges with the referral, identification and placement pathways. Subsequent recommendations were generated from these findings, addressing areas relating to communication, assessment results, identification criteria and processes, student support, staff professional development, and the Individual Education Plan (Gray, 2018).

Phase III: Following completion of Phase II, Student Services took action to address various recommendations. Through discussions about the results and recommendations presented in Phase I and Phase II, members of the Special Education Programs and Services Review Steering Committee agreed that more information was required for some exceptionalities before decisions or action could take place. Specifically, the Steering Committee discussed the need to better understand evidence-based best practices among two exceptionalities – giftedness and learning disabilities. Phase III involved a review of the literature for these exceptionalities, with a focus on primary, elementary, and/or secondary levels; and incorporated HDSB student-based data including enrolment, achievement, and parent perceptions of the Special Education program.

This report includes the second section of Phase III (Phase III-B), addressing areas of the elementary and secondary Special Education program for students identified with learning disabilities. The report addressing areas of assessment and identification of young gifted children is available in a separate document (Phase III-A).

ELEMENTARY LEARNING DISABILITIES PROGRAM

In the Special Education Plan (HDSB, 2018), the HDSB shares their Statements of Belief that embrace effective practices for all students with exceptionalities. These beliefs reflect the Board's commitment to support early identification of needs, shared responsibilities, equitable access for all students, and sound pedagogy. For the primary years, the HDSB believes early identification and intervention is essential for student success, and provides a range of student placements, services, supports, and interventions that students with different abilities may require. In accordance with legislative requirements (Reg. 181/98), and in keeping with HDSBs' beliefs and practices, placement in a regular classroom, with appropriate education services, is given first consideration for all students when it meets the needs of the student and is consistent with parental preferences (HDSB Standard 9, 2018, p. 1).

The Halton District School Board has offered the elementary Learning Disabilities program for the past several years. Primary students who show signs of learning difficulties or disabilities are supported in the regular classroom with Resource Support, and the board's formal identification procedure for elementary students begins in grade 3. If the criteria for learning disabilities are met, formal identification and placement decisions are made through the Identification, Placement, and Review Committee (refer to Phase II for details regarding assessment and identification procedures; Gray, 2018). Between Grades 4–8, students who are identified with learning disabilities, and who continue to experience significant challenges with grade level curriculum, may enter a Self-contained placement.

APPROACH TO THE REVIEW – PHASE III-B

The second section of the Special Education Programs and Services Review-Phase III was motivated largely by findings from Phase I and II of the Review. In particular, enrolment and achievement trends among students with learning disabilities, and feedback provided by school staff and parents, sparked interest to further investigate the research literature and student population within the HDSB. The purpose of this section was to:

1. Explore current research literature regarding the strengths, challenges and best practices relating to assessment and identification of learning disabilities among young children;
2. Better understand HDSB's student population with learning disabilities.
3. Better understand parent perspectives regarding their child's progress and the Special Education program.

Although the literature review focuses on the identification and assessment of young children, four- and five-year trends are presented for both elementary and secondary students in the HDSB. The inclusion of information reflecting secondary students was considered important to develop a picture of long-term consistencies and variances in student enrolment and achievement trends among students identified with learning disabilities.

Table 1 provides the Review framework outlining the methodology and data sources used to complete this second section of Phase III.

Table 1: Special Education Review Framework for Phase III-B

Review Component	Review Goals	Data Sources
Literature Review	<p>Conduct a systematic review of evidence-based research and professional theories regarding the education of young children with learning disabilities.</p> <p>Identify strengths, challenges, and current best-practices relating to the assessment, identification, and placement of young children with learning disabilities.</p>	<p>Educational journals</p> <p>Meta-analytic reviews</p> <p>Books</p> <p>Expert opinions</p> <p>Research monographs</p> <p>Position statements</p>
Student Enrolment	<p>Develop a picture of trends in enrolment among elementary and secondary students with learning disabilities.</p>	<p>HDSB Student Information System databases</p>
Student Achievement	<p>Develop a picture of trends in student achievement, among elementary and secondary students with learning disabilities.</p>	<p>EQAO achievement results</p> <p>Report card achievement results</p>
Parent Perceptions	<p>Understand the perceptions of parents of elementary and secondary students with learning disabilities regarding their child's progress, school, and Special Education program.</p>	<p>Parent survey results – from Phase I</p>

Special Education Programs and Services Review Steering Committee

As with previous phases, Phase III employed a participatory approach to the review process. The Special Education Programs and Services Review Steering Committee continued supporting all stages of the Review. Ongoing guidance was provided throughout the project planning, data collection and compilation of key findings. Steering Committee members included senior staff, Student Services staff, a trustee, a Special Education Advisory Committee (SEAC) representative, school administrators, a board researcher, and a program evaluation consultant. Steering Committee members are listed on the inside cover of this report.

REVIEW METHODOLOGY

Literature Review

The literature review provides an overview of current research and professional theories involving issues relating to the assessment, identification, and placement of young students at risk for learning disabilities. The review provides information obtained from educational journals, books, meta-analytic reviews, position statements, newsletters, interviews, and documented expert opinions. Although not an exhaustive examination, the review includes current issues presented in the literature as being critical considerations for young children with possible learning disabilities. Resources include local, national and international research findings and theories; and, with the exception of a few key sources, the review focused on literature from the past 10 years.

Student Enrolment

HDSB enrolment data over five years were analysed and presented for elementary and secondary students identified with learning disabilities. Data were disaggregated by panel, gender, and location.

Student Achievement Results

Report Card Achievement: Five-year trends for final elementary report card achievement results for Reading, Writing, and Number Sense and Numeration strands were analyzed using yearly percentages among students identified with learning disabilities, and among students without exceptionalities.


EQAO Achievement: Four-year trends for Grade 3 and Grade 6 EQAO Reading and Mathematics assessment results, and five-year trends for Grade 9 Mathematics and Grade 10 Ontario Secondary School Literacy Test (OSSLT) achievement results, were analyzed using yearly percentages among students identified with learning disabilities, and among students without exceptionalities. Grade 6 Reading and Mathematics assessment results were also analysed for the 2015-2016 school year, using percentages, for students identified with learning disabilities who were receiving Resource Support, and those who were in Self-contained placements.

Skopus Data Warehouse, Trillium (Student Information System), and Board Interface Tools comprise of large system databases which house a variety of student information. The majority of student-related data were retrieved from these databases.

Parent Survey Results

Results from the parent/guardian survey administered during Phase I of this review were analyzed using percentages, for levels of satisfaction and ratings reflecting their child's improvement, among parents of students identified with learning disabilities. Survey items included parental satisfaction with their child's experiences in school and the Special Education program, and perceptions of their child's academic and social-emotional progress. Results are disaggregated by program placement type for elementary parent respondents, and by parents of students receiving Resource Support in secondary school (results for parents of students identified with learning disabilities in Self-contained classes in secondary school were suppressed due to a low survey response rate among this group).

The Special Education Programs and Services Review–Phase III-B was conducted by an external evaluation consultant. Independent reviews provide organizations with an objective approach, analysis and interpretation of program and service strengths, challenges and opportunities for improvement. Throughout the review process, the consultant approached each component with a clear awareness of stakeholder investment while maintaining a neutral and open-minded perspective. As such, the reported findings are based on the evidence acquired throughout this review, and are presented with the intent to guide future decisions regarding the provision of special education programs and services in the HDSB.



**STRENGTHS, CHALLENGES, & BEST PRACTICES WITH
ASSESSMENT & IDENTIFICATION OF YOUNG CHILDREN
AT RISK FOR LEARNING DISABILITIES**

A REVIEW OF THE LITERATURE

Introduction and Background

The purpose of this literature review is to explore current research and expert theories regarding issues and best practices relating to assessment and identification of young children who may be at risk for learning disabilities. The motivation behind this literature review was based on the collective feedback obtained by school staff and parents of elementary students identified with learning disabilities in Phase II of the Special Education Programs and Services Review. Specifically, staff and/or parents conveyed the following concerns as they relate to elementary students who may be at risk for learning disabilities:

1. The absence of formal assessment and identification practices in the early primary grades;
2. The implementation of non-identified IEPs in primary grades; and
3. The absence of Self-contained placement options for primary students (Gray, 2018).

In addition, among the recommendations provided in Phase II, it was suggested that the Halton District School Board “*Use the Grade 4 screening assessment results to build learner profiles*” (Review Phase II, p. 40), thereby prompting a search to investigate the utility and value of CCAT-7 results for students with different learning profiles. Given HDSB’s recent implementation of the CCAT-7, the timing is ideal. Overall, the information gathered in this review is intended to help guide future decisions regarding procedures and processes towards the provision of Special Education programs and services in the HDSB.

The following section contains a review of current issues related to assessment and identification that are presented in the literature as being critical considerations for young children with possible learning disabilities. This review provides information obtained from periodical journal articles, books, research monographs, meta-analytic reviews, position statements, and documented expert opinions. Resources included local, national and international research findings and professional theories from the past 15 years.

This literature review is one of two sections connected to the Special Education Programs and Services Review – Phase III. While this section focuses on issues relating to learning disabilities, the other section covers issues related to strengths, challenges, and best practices with gifted assessment and identification of young children (Phase III-A), and is available in a separate document.

Brief Overview of Early Childhood Development

Professionals in early childhood education have established that early child development and learning proceed continuously and rapidly, at varying rates between children, and at a differing pace physically, emotionally, cognitively and socially (Jiban, 2013; National Association for the Education of Young Children [NAEYC], 2009; National Research Council, 2008). The notion of this developmental variability in young children has been researched for several years. The Learning Disabilities Association of Ontario (LDAO) (n.d.) states that children entering school arrive with “highly diverse environmental, social and linguistic experiences, with various degrees of enrichment or deprivation, with a history of individual learning opportunities, and with a significant range of developmental maturity” (p. 9). Guddemi and Case (2004) agree that early childhood development is “highly influenced by the environment (e.g., family, culture, experiential background), and that children experience periods of rapid growth and frequent rest” (p. 3). These variances in development, combined with environmental factors, influence a child’s functioning in all domains.

Implications for Assessing Young Children at Risk for Learning Disabilities

Child development experts and researchers have examined and documented the challenges associated with assessing young children in general. Many agree that assessment requires sound and comprehensive procedures and instruments due to the differing and uneven manner in which all children develop and learn (Miles, Fulbrook, & Mainwaring-Magi, 2016; NAEYC, 2009). As with child development, the development of learning delays and disabilities may also be “manifested differently among individuals over time, in severity, and across settings” (National Joint Committee on Learning Disabilities [NJCLD], 2010); and may be related to “individual variations in rates and patterns of maturation, environmental factors (i.e., language exposure), and quality of [prior] learning opportunities” (NJCLD, 2007, p. 63). For these reasons, and concerns regarding the accuracy of instruments used to determine intellectual levels and achievement, some professionals have noted caution with the assessment of young children (Learning Disabilities Association of Minnesota, 2018).

The Ontario Psychological Association (OPA) (2018) agrees that, historically, assessment practices for the diagnosis of learning disabilities have been postponed due to the above mentioned developmental and environmental variabilities among young children, the absence of sound assessment instruments, and the belief that the ability-achievement discrepancy criteria (now highly-discredited) could not be documented for younger children. However, the OPA (2018) states that “with advances in test construction, knowledge of early risk factors associated with [learning disabilities], and expertise among clinicians in evaluating young children effectively, there have been many gains in our ability to assess neurocognitive development and learning during the early academic years” (p. 22). The OPA believe that risk factors may be recognized during the early stages of development, and, once the child is in school, academic difficulties can be reliably assessed, along with the consideration of a diagnosis of learning disabilities.

A Closer Look at Assessment and Identification of Young Children at Risk for Learning Disabilities

Considerations for Developmentally Appropriate Assessment & Identification

During the primary school years, the assessment of children’s learning and developmental levels may be conducted for the purposes of instructional program planning, monitoring child progress, measuring child outcomes, screening, determining eligibility for special education services, and/or program evaluation (Division for Early Childhood [DEC], 2014; Jiban, 2013; Macy & Bagnato, 2013). Harrison (2005) notes that *screening* determines which students are “at risk for academic problems without specifying a particular diagnostic category or identification label” (p. 23); and *assessment* determines that “one specific identifiable problem, and not another, is the cause of a child’s academic difficulties” (p. 23). Furthermore, the World Health Organization (WHO, 2012) states that “comprehensive tracking and follow-up systems can ensure that children who are identified through screening subsequently receive assessments and appropriate services, [and that] assessment should be linked to intervention and should be an ongoing process of systematic observation and analysis” (p. 22). The notion of early intervention, and tracking and monitoring children throughout the process is also strongly supported by many organizations and advocacy groups. For example, the NJCLD (2007) recommends that identification includes: screening, examination of risk indicators and protective factors, systematic observations, and, when indicated, a comprehensive evaluation. Similarly, the Promoting Early Intervention (PEI) working group of the LDAO recommends that the identification process include: screening, provisions of appropriate supports and remedial interventions for at risk or vulnerable children, progress tracking, and when necessary, a comprehensive diagnostic assessment. (Harrison, 2005).

Types of Assessments

Although research evidence clearly supports the need for a variety of measures, procedures and practices, diverse perspectives are held about the types of assessments that provide the most accurate reflection of a young child’s learning and developmental profile. While many experts respect formal, objective measures of intelligence, cognitive ability, and relative performance; others support authentic, naturalist assessment approaches for evaluating development, learning, and behaviour in young children. Standardized quantitative measures remain among the most widely used tools to determine eligibility for special education services, due to their well-defined procedures, adequate psychometric properties, diagnostic potential, and their ability to determine eligibility (Macy & Bagnato, 2010; Macy, Bagnato, Macy, & Salaway, 2015). On the other hand, authentic assessments involve observations of individual behaviours and typical functioning within each child’s daily routines. An important strength of authentic assessments includes the ability to establish a baseline of strengths and deficits based on the profile a child’s functional skills that are exhibited in a variety of natural settings. This information can assist in the tracking and monitoring of performance and progress, and inform the child’s learning and developmental goals, instruction, and program planning (Bagnato, Macy, Salaway, & Lehman, 2007).

Ultimately, standardized, norm-referenced tests are used to a determine eligibility for special education services and programs (Macy and Bagnato, 2010); however, for young children, proponents of authentic assessment believe that these methods are more “developmentally appropriate [as they] capture a more accurate holistic, and contextualized portrait of each child’s profile of assets and needs” (Lee, Bagnato, & Pretti-Frontczak, 2015, p. 165). Guddemi & Case (2004) explain that since young children “construct

knowledge in experiential, interactive, concrete, and hands-on ways... [and to learn, they] must touch and manipulate objects, build and create in many media, listen and act out stories and everyday roles, talk and sing, and move and play in various ways and environments,” the “expression of what young children know and can do” should not be limited to traditional paper and pencil assessments (p. 2). Given the noted strengths of both standardized and authentic assessments procedures, Jiban (2013) proposes that the combination of cognitive explanations via standard tasks and performance, and behavioural observations conducted in natural environments, can work together to effectively generate a comprehensive picture of a child’s unique strengths, progress, and needs.

Screening and Assessment in the Ontario Context

The Learning Disabilities Association of Ontario (n.d.) states that even with the range of developmental patterns and experiences, the majority of young children will adapt to the level of programming and learning expectations throughout the primary school years. However, some children will continue to demonstrate learning difficulties that “place them significantly behind their peers in key areas of readiness for the acquisition of appropriate literacy and numeracy skills” (p. 9). Given that these learning difficulties may be due to a variety of individual, social and/or environmental factors, it is recommended that young children (i.e., kindergarten age) participate in a screening process to determine if they are, indeed, at risk for academic problems (Harrison, 2005). The Ontario Ministry of Education (OME) supports early and ongoing screening through Policy/Program Memorandum No. 11 (1982), requiring school boards to employ “procedures to identify each child’s level of development, learning abilities and needs... [and that] these procedures... should be initiated when a child is first enrolled in school or no later than the beginning of a program of studies immediately following Kindergarten and should continue throughout a child’s school life” (para. 1).

Similar to recommendations noted earlier, for children as young as Kindergarten age, the LDAO (n.d.) suggests that learning difficulties be determined using screening measures and approaches that are non-categorical in nature, whereby children are determined to be “at risk, without specifying a particular diagnostic category or identification label” (p. 9). A non-categorical approach to assessment can “serve children who may not meet specific categorical criteria. Therefore, children can be served earlier, who would later be found eligible for special education” (Macy & Bagnato, 2013, p. 6). Following the determination of vulnerability, appropriate remediation and interventions should be

Learning Disability

One of a number of neurodevelopmental disorders that persistently and significantly has an impact on the ability to learn and use academic and other skills and that:

- affects the ability to perceive or process verbal or non-verbal information in an effective and accurate manner in students who have assessed intellectual abilities that are at least in the average range
- results in (a) academic underachievement that is inconsistent with the intellectual abilities of the student (which are at least in the average range) and/or (b) academic achievement that can be maintained by the student only with extremely high levels of effort and/or with additional support
- results in difficulties in the development and use of skills in one or more of the following areas: reading, writing, mathematics, and work habits and learning skills
- may typically be associated with difficulties in one or more cognitive processes, such as phonological processing; memory and attention; processing speed; perceptual-motor processing; visual-spatial processing; executive functions.
- may be associated with difficulties in social interaction, with various other conditions or disorders, diagnosed or undiagnosed; or with other exceptionalities.
- is *not* the result of a lack of acuity in hearing and/or vision that has not been corrected; intellectual disabilities; socio-economic factors; cultural differences; lack of proficiency in the language of instruction; lack of motivation or effort; gaps in school attendance or inadequate opportunity to benefit from instruction.

Ontario Ministry of Education

implemented to address challenges and build skills; as well as ongoing tracking and assessment to monitor student progress, evaluate program effectiveness, and adjust intervention efforts (Harrison, 2005). The focus on addressing individual strengths and needs prior to diagnosis is also reflected in Policy/Program Memorandum No. 8 (Ontario Ministry of Education [OME], 2014) stating that “the determining factor for the provision of special education programs or services is not any specific diagnosed or undiagnosed medical condition, but rather the needs of individual students based on the individual assessment of strengths and needs” (p. 4).

Similar to the Response to Intervention approach presented throughout the literature, the OME’s *Learning for All* (2013) promotes the use of a “tiered” approach to early identification and intervention, describing this process as:

a systematic approach to providing high-quality, evidence-based assessment and instruction and appropriate interventions that respond to students’ individual needs. It is based on frequent monitoring of student progress and the use of assessment data, focusing on learning rate and level, to identify students who are facing challenges in learning and to plan specific assessment and instructional interventions of increasing intensity to address their needs effectively. (p. 24)

Robinson and Hutchinson (2014) note that this tiered approach lends to students being “assessed based on risk, rather than deficit” (p. 1), and its proactive nature can result in early identification of students with learning disabilities, reduce identification bias, and focus on student outcomes. The three tiers of intervention begin with using principles of Universal Design for Learning and differentiated instruction for all students (Tier 1). Students may then progress to more intensive instruction and interventions in Tier 2. Tier 3 involves targeted, individualized support and resources for students requiring more intensive instruction. Students receiving support at the Tier 3 level are often referred to the formal assessment process for identifying potential learning disabilities (OME, 2013; Robinson and Hutchinson, 2014). Finally, continuous progress monitoring is considered a key strategy used throughout the tiered approach and is also advocated through policies and guidelines describing the assessment of students with special education needs as being a “continuous, cyclical process” (Ontario Ministry of Education, 2017, p. C9); and that “the nature, intensity, and duration of interventions are always determined on the basis of evidence gathered through frequent and systematic monitoring of the student’s progress (Ontario Ministry of Education, 2014, p. 4).

Optimal Age for Screening and Assessment of Students at Risk for Learning Disabilities

Children demonstrate different strengths and weaknesses, and decisions regarding the age of assessment and identification of these strengths and weaknesses are child dependent. For some children, delays are temporary and are resolved over time, yet for others, the issues or delays may persist in various degrees and in different domains. During the early years it is difficult to determine which children will continue to demonstrate learning difficulties and which will make adequate progress with time (NJCLD, 2007). Early childhood professionals, organizations, and advocacy groups typically agree that assessment procedures of young children differ from the assessment of older children (Guddemi & Case, 2004; LDAO, n.d.). For younger children, experts lean towards screening for strengths, needs, and children at risk during Kindergarten and Grade 1; and suggest administering comprehensive diagnostic assessments to children who continue to demonstrate learning difficulties between Grade 3 – Grade 4. The following perspectives represent opinions regarding the optimal age for screening and assessment of children at risk for learning disabilities:

- ▶ The Ontario Psychological Association (OPA) (2018) recommends that screening occur in Kindergarten and Grade 1 for the purpose of early identification and access to early intervention. Children determined to be at risk should participate in evidenced-based intervention throughout Kindergarten and early primary grades; and a comprehensive psychoeducational assessment should be conducted, for diagnostic purposes, with children “whose reading or other academic problems are severe and seemingly intractable following early intervention efforts in Grade 1 or 2” (p. 22).
- ▶ The PEI working group of the Learning Disabilities Association of Ontario recommends that screening be conducted for all children in Senior Kindergarten and Grade 1, using measures of early literacy and numeracy skills. Following remedial interventions, children who do not benefit from these supports by Grade 2 or 3 should be referred for a comprehensive diagnostic assessment (Harrison, 2005).
- ▶ Miles, Fulbrook, & Mainwaring-Magi (2016) note that it is critical to conduct screening between the ages of 4 – 7 years so problems can be identified and addressed using early interventions.
- ▶ Harrison (2005) notes that screening measures for Kindergarten students help teachers assess early literacy and numeracy skills, of which typically focus on phonological, orthographic, and morphological awareness, and number sense skills. Measures such as the Teacher School Readiness Inventory (TSRI; Simner, 1997), and the Rosner Test of Auditory Analysis (Rosner, 1975) are designed specifically for teachers of students as young as Kindergarten, to assess these skills and help flag those who may be at risk.
- ▶ The Learning Disabilities Association of Minnesota (2018) recommends assessing children’s academic strengths and weaknesses at an early age, but does not recommend diagnosing children for a learning disability less than 8 years of age.
- ▶ As cited in Guddemi & Case (2004) the National Education Goals Panel on Early Childhood Assessment suggests that standardized assessments for high stakes purposes not be administered until grade 3 or 4, due to the fact that these assessments are “not as accurate, valid, and reliable for young children as they are for older children” (p. 7).
- ▶ A longitudinal study following students from grades 1 – 12, conducted by Ferrer, Shaywitz, Holahan, Marchione, Michaels, & Shaywitz (2015), demonstrated that children at risk for dyslexia can be identified as early as grade 1. The researchers also propose that identification can begin as early as preschool or Kindergarten. However, Fisher (2015) cautions that screening and identifying children before they can read is complicated, and that pediatricians typically do not screen children for reading difficulties as young as 5 or 6 years of age.

The Ontario Ministry of Education (2014) notes that “early screening and interventions are important in determining whether a student’s difficulties in learning may be due to learning disabilities (p. 2).” Although the OME does not recommend an optimal age range for assessment, it states that “many students with learning disabilities have already shown precursors or signs of learning disabilities before they enter school... however, for most students with learning disabilities, difficulties in learning may not be noticed until the early school years” (p. 2). Furthermore, the NJCLD (2007) states that regardless of age, “young children who demonstrate difficulties in early development may or may not be at risk for LD; nevertheless, screening, evaluation, enhanced learning opportunities, and possibly intervention services should be provided. It is not in the child's best interest to ‘wait and see’ or hope that the child will ‘grow out of’ his or her problems” (p. 65).

Issues Related to Assessing Young Children for Learning Disabilities

Stability of Early Assessment Results

As researchers continue to study assessment outcomes of young children over time, results indicate that children's intra- and inter-individual variability, along with the shortage of strong psychometric screening measures, prevents the ability to determine the stability of assessment results in a valid and reliable way (Dockerell & Marshall, 2015; Frans, Post, Huisman, Oenema-Mostert, Keegstra, & Minnaert, 2017; Guddemi & Case, 2004). The following research and perspectives represent key issues and findings related to the stability of assessment results over time:

- ▶ Ellingsen (2016) noted that the use of cognitive assessment and intelligence tests on young children with potential developmental delays or disabilities is challenging due to the low reliability and predictability of measures, the standardized administration process, and poor utility of assessment data for intervention planning.
- ▶ The Division for Early Childhood (DEC) (2007) states that due to unpredictable rates of learning and growth among young children, “scores from assessments administered to very young children tend to be unstable. Tests of cognitive development (e.g., IQ tests) are the most frequent culprit of this phenomenon, but it is [also] true of assessment in other developmental domains” (p. 15). The DEC also states that “young children with disabilities introduce even more instability to results because although they experience growth spurts just like young children without disabilities, their rates of growth in general tend to be more unpredictable” (p. 15).
- ▶ A key study conducted by Frans et al. (2017) assessed the stability of language and mathematics achievement scores among children 4 – 8 years of age, paying particular attention to scores in the lower regions. The results demonstrated that only a small proportion of students initially identified as at-risk remained in this category four years later, with the majority of low-scoring children showing large fluctuations in scores over time. Furthermore, a large number of low-achieving children (at follow-up) were not identified as at-risk during the initial assessment.
- ▶ Schneider, Niklas, & Schmiedeler (2014) conducted a longitudinal study following children from age 4 – 23 years using measures of intelligence over time. Results demonstrated that the stability of intelligence scores was higher between shorter measurement intervals; and correlations between measurements were significantly higher from age 7 years and onwards. Furthermore, children who attained initial scores in the lower category remained more stable over time than those scoring in the medium and high categories, from preschool age onwards. However, 20% of children initially demonstrating low levels of intellectual ability, attained scores above the overall mean at the end of elementary school, and some attained IQ scores above 120 at the age of 17.

Predictive Validity of Early Assessment Results

A key motivation for assessing early academic development is to “identify and improve skills to increase the likelihood of later educational and life success for a child” (DEC, 2007, p. 15). Therefore, it is essential to use instruments with evidence of predictive validity. However, research addressing the predictive validity of early childhood assessments has resulted in inconsistent findings and thus conflicting conclusions and perceptions among practitioners, researchers, and early childhood experts. The following perceptions and findings suggest a relationship between early assessment results and later achievement:

- ▶ Miles, Fulbrook, & Mainwaring-Magi (2016) emphasized the importance of screening children between preschool and early school age (4 – 7 years), because “test scores at this time are predictive of future academic achievement and school success” (p. 2).
- ▶ A longitudinal study conducted by Ferrer, et al. (2015) examined reading and verbal IQ scores of children between grades 1 – 12 and found that “typical and dyslexic readers differ in the trajectories of their reading scores and verbal IQ over time, from childhood to adolescence, [and concluded that] these differences are not so much a function of increasing disparities over time, but instead, because of differences already present in first grade between typical and dyslexic readers” (p. 1121).
- ▶ A 10-year longitudinal study showed strong correlations between language assessment scores at 5 years of age and academic achievement in grades 4, 7 and 10 (Einarsdottir, Bjornsdottir, & Simonardottir, 2015).
- ▶ Dale and Patterson (2017) reviewed results of various studies demonstrating that young children (2 years of age) identified with slow expressive language development were at 2 to 5 times higher risk for language impairment continuing into elementary school years, when compared to children without slow expressive language development.

Conversely, other research has demonstrated that the relationship between early test scores and future development and performance varies widely and remains unclear (DEC, 2007; Dockrell & Marshall, 2015; Frans et al., 2017).

- ▶ Dollaghan and Campbell (2009) found no association with low language scores in children at 3 years of age and later impairment at ages 4 and 6 years. However, children with a vocabulary deficit at 4 years old had a significantly increased risk of demonstrating a vocabulary deficit at 6 years.
- ▶ Frans et al. (2017) present their own study, as well as others, that found slight to moderate correlations between early (ages 3 – 5 years) and later math and/or language test scores; and between preschool academic assessments and future school success.
- ▶ The Learning Disabilities Association of Ontario (n.d.) states that “in children younger than age 7, a clear diagnosis of a learning disability, in areas other than language processing, may be hampered by relatively weak reliability and/or predictive validity of measures of thinking and learning, a relatively narrow range of measurable areas of academic achievement, and a broad band of normal developmental fluctuations” (p. 10).
- ▶ Dockrell & Marshall (2015) caution that many current screening measures do not demonstrate psychometrically sound properties for the identification of early language problems, and are unlikely to accurately predict future language difficulties.

Implications for Assessing Young Children at Risk for Learning Disabilities

Frans et al. (2017) caution that educators should be careful with the interpretation of test scores among young children, given the potential for a “wide margin of error when it comes to early identification” (p. 713). Between instrument limitations and children’s varying development trajectories, researchers caution the limitations with single assessment or screening outcomes when looking to predict later performance (Dockrell & Marshall, 2015). Although standardized instruments can provide a valid and reliable method of assessment, it is only one mode of assessing young children. In order to effectively inform decisions regarding identification and placement of young students, researchers and specialists are recommending a multidimensional assessment approach. This process should include frequent assessments, using multiple sources of information through a variety of assessment methods, including developmental checklists, interviews, portfolios, and play-based and observational assessments (Frans et al., 2017; Miles et al., 2106; NAEYC, 2009; NJCLD, 2007).

While the above research has established that the stability of assessment results among young children is variable, interestingly, the Learning Disabilities Association of Ontario (n.d.) suggests the following:

If a thorough and comprehensive assessment is completed after age seven, and a diagnosis rendered, repeated assessment to re-establish the presence of a learning disability should not be required. Reassessment is recommended, however, at times when the individual is making significant transitions (such as from elementary to high school, or high school to post-secondary school), or whenever specific questions arise that cannot be answered by other means. Such reassessments will likely be undertaken to understand better how the individual’s specific learning disability presently manifests itself, and the types of programming and accommodations that are most appropriate for the needs of the individual at that time. (p. 7)

Furthermore, the Association notes that “a diagnosis based on competent and comprehensive evaluation that was performed after age 18 is considered definitive... [and] further reassessment undertaken to re-establish a diagnosis past this age is not typically required” (p. 7).

Universal Screening – Application of the CCAT 7

Research evidence indicates that universal screening of children in Kindergarten and primary grades is an important step in the early determination of students at risk for learning disabilities. Although, a wide range of standardized screening and assessment measures exist, researchers emphasize that instruments should be suitable, useable, technically adequate with standardized norms, and be aligned with instructional practices (Burns, Haegele, & Petersen-Brown, 2014; Miles, Fulbrook, and Mainwaring-Magi, 2016). As mentioned earlier, a systematic approach to supporting the learning needs of younger students involves the process of universal screening, coupled with interventions involving increasingly intensive instruction and interventions, and continuous progress monitoring.

Identical to the CogAT Form 7 (with the exception of Canadian norms), the CCAT 7 has been found to have strong psychometric properties (Slocumb & Olenchak, 2006). The CCAT 7 is used in many school districts across Ontario as a screening measure to assess verbal, quantitative, and nonverbal reasoning abilities. The majority of these districts, including the Halton District School Board (HDSB), use the CCAT 7 as a first step in identifying gifted students for the purpose of determining educational program placements in elementary school. Houghton Mifflin Harcourt (2013) support the use of the CCAT 7 for these purposes, and state that the multidimensional nature of the test assesses abilities that “reflect the

overall efficiency of cognitive and processing strategies that enable students to learn new tasks and solve problems” (p. 1). They also emphasize three primary uses of the CCAT 7 scores:

- ▶ to guide efforts to adapt instruction to the needs and abilities of students,
- ▶ to provide a measure of cognitive development, and
- ▶ to identify students whose predicted levels of achievement are markedly discrepant from their observed levels of achievement (p. 4).

Given its intention to inform instruction in the classroom, and the fact that all Grade 4 students in the HDSB complete the CCAT 7, it seems prudent to use the CCAT 7 test results as an additional piece of data to help inform the learning profiles of all students, and to adapt instruction with the intent to build on individual strengths and improve areas of weakness. With this in mind, it appears that the utility of the CCAT 7 results can extend beyond screening for giftedness, and also work to benefit students who demonstrate challenges in their cognitive and processing abilities.

Lakin & Driver (2017) note that the CCAT 7 score profile provides both a picture of overall ability, as well as specific strengths and weaknesses. They also note that instructional strategies can be created to address each level of these results. Throughout the *CogAt Form 7 Teachers Guide*, a clear emphasis is placed on the use of CCAT 7 scores to help teachers adapt instructional methods and resources in order to help meet the diverse learning needs of students. Practical ideas and strategies for differentiated instruction are provided in detail for strengths and weaknesses demonstrated in overall ability and among the verbal, quantitative, and nonverbal components. For example, for weaknesses demonstrated in verbal reasoning, the guide provides a detailed profile of learner characteristics, indicators of relative weakness including possible areas of difficulty and learning preferences, and suggestions for instructional adaptations and learning strategies. Given the multidimensional nature of the CCAT 7, and the instructional support offered through the *Teachers Guide*, it seems reasonable to conclude that the results of the CCAT 7 can work to help teachers better understand student learning profiles, support differentiated instruction in the classroom, and ultimately benefit all students – including those with learning challenges.

Best Practices for Assessing and Identifying Young Children for Learning Disabilities

Prior to the formal assessment of learning disabilities, it is recommended that screening for learning difficulties be performed on young children (Harrison, 2005; National Center for Learning Disabilities, n.d.). As mentioned earlier, this systematic, non-categorical approach works to determine if young children are at risk for learning difficulties, and sets the stage for increasingly intensive and remedial interventions that respond to students’ individual needs. Through evidence-based instruction, continuous monitoring of student progress, and frequent examination of student outcomes, informed decisions can be made about the learning profiles of young students. Those students who do not progress in response to the increasingly intensive instruction can then be referred for a comprehensive assessment of learning disabilities and eligibility for special education services and programs (Robinson and Hutchinson, 2014). The National Centre for Learning Disabilities (n.d.) maintains that this Response to Intervention approach must be implemented rigorously and with fidelity, using: (1) high-quality, scientifically based classroom instruction; (2) ongoing student assessment, (3) a multi-tiered instructional approach, and (4) parent involvement (para. 2).

Research findings pertaining to the stability and predicative validity of learning outcomes, observed limitations of assessment instruments, and the variability experienced during early childhood has

encouraged researchers to further investigate effective assessment and identification procedures. Whether assessments of young children are conducted to understand a child's patterns of abilities and needs, determine program placement, or investigate educational trajectories, professionals agree that a comprehensive assessment process is required (NAEYC, 2009). Multiple measures and a variety of perspectives that provide different types of information are considered essential to ensure sound results, accurate diagnoses, and appropriate placement decisions (Gillis, West, & Coleman, 2014; LDAO, n.d.; NAEYC, 2009; NJCLD, 2007).

The following assessment components have been noted throughout the literature to represent evidence-based best practices critical to the implementation of comprehensive and effective identification of young children for learning disabilities:

- ▶ Early and ongoing assessment of learning strengths and challenges.
- ▶ Assessments should be tailored to a specific purpose.
- ▶ Current instruments are based on Canadian norms (where possible), have adequate psychometric properties, and are culturally, linguistically, developmentally, and age appropriate.
- ▶ Multiple sources of quantitative and qualitative information, including:
 - student background information – home language, developmental, medical and educational history through interviews with parents, educators, related professionals, and students;
 - a variety of standardized and non-standardized assessments and information provided by professionals, caregivers, and students that yield information in multiple settings and on various occasions, such as: teacher/parent rating scales, developmental checklists, norm- and criterion-referenced tests, curriculum-based assessments, portfolios, interactions, play-based and observational assessments of children.
 - continuous progress monitoring repeated during instruction and over time.
- ▶ Employ a multidisciplinary team approach.
- ▶ Facilitate the inclusion of family members in the assessment process in an engaging and collaborative manner.
- ▶ Consider all components and areas of specific learning disabilities. Examine functioning and/or ability across all domains, including specific areas of cognitive and integrative difficulties in perception.
- ▶ Adhere to the recommended procedures for administration, scoring, and reporting of standardized measures. Integrate the standardized and informal data collected. Convey assessment results using standard scores. Provide confidence intervals and standard errors of measure, if available.
- ▶ Personnel involved in the assessment process are appropriately trained in the administration, interpretation, and use of the instrument.
- ▶ Balance and discuss the information gathered from all data sources, describing the student's current level of academic performance and functional skills, and informing the development of the student's IEP and decisions about identification, eligibility, and services.

(DEC, 2014; Gillis, West, Coleman, 2014; LDAO, n.d.; Miles et al., 2016; NAEYC, 2009; NJCLD, 2010; NJCLD, 2007; Ontario Ministry of Education, 2014)

The NJCLD (2010) notes that the emphasis on a comprehensive assessment process is, in large part, due to the diverse set of characteristics or manifestations of learning disabilities. These manifestations may be different among children over time, in severity, and across settings. They may also be subtle, or hidden when compensatory or avoidance strategies are used. As a result, it is recommended that the following characteristics of learning disabilities be considered during the assessment and identification process:

Learning disabilities:

- ▶ vary with the individual – differences in strengths and weaknesses on achievement and/or performance should be considered relative to age, grade, and intellectual level;
- ▶ exist on a continuum from mild to severe;
- ▶ can appear differently in various settings (academic and non-academic);
- ▶ may vary depending on task demands;
- ▶ may include difficulties in a variety of areas, including language, math, memory, perception, cognition, fine motor expression, social skills and/or executive functioning; and
- ▶ can occur in children who are intellectually gifted (NJCLD, 2016)

During the elementary years, the assessment of learning and development should be conducted for the purposes of screening children who may be at risk for academic difficulties, monitoring children's learning outcomes and progress, and determining specific diagnoses and eligibility for special education services and programs. Many researchers and early childhood specialists concur that initial screening should be coupled with needs-based intensive instruction and continuous progress monitoring prior to conducting a comprehensive evaluation of learning disabilities. Subsequent formal assessment procedures should involve a multidimensional process using developmentally appropriate sources of quantitative and qualitative information, in a range of settings, while considering the diverse set of characteristics associated with learning disabilities. This proactive approach to assessing learning strengths and challenges will enable educators to address the diverse needs of young children with the intent to improve student outcomes.



ENROLMENT AMONG ELEMENTARY and SECONDARY STUDENTS IDENTIFIED WITH LEARNING DISABILITIES IN THE HDSB

Figure 1a: ENROLMENT of Students Identified with Learning Disabilities Over Five Years

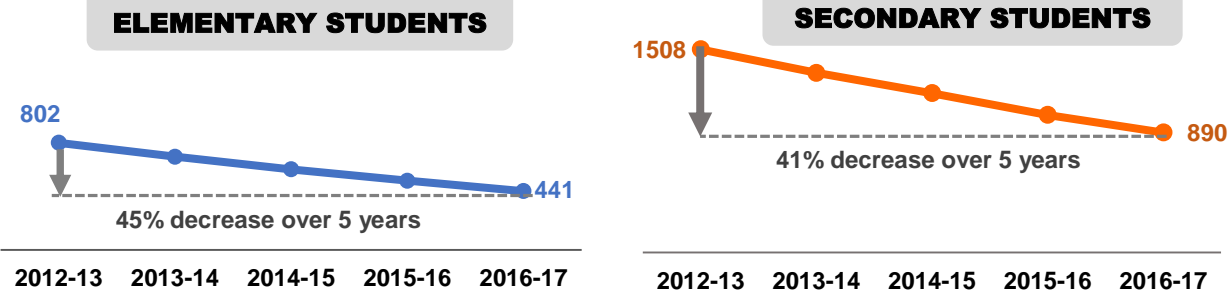


Figure 1b: ENROLMENT of Students Identified with Learning Disabilities by Gender Over Five Years

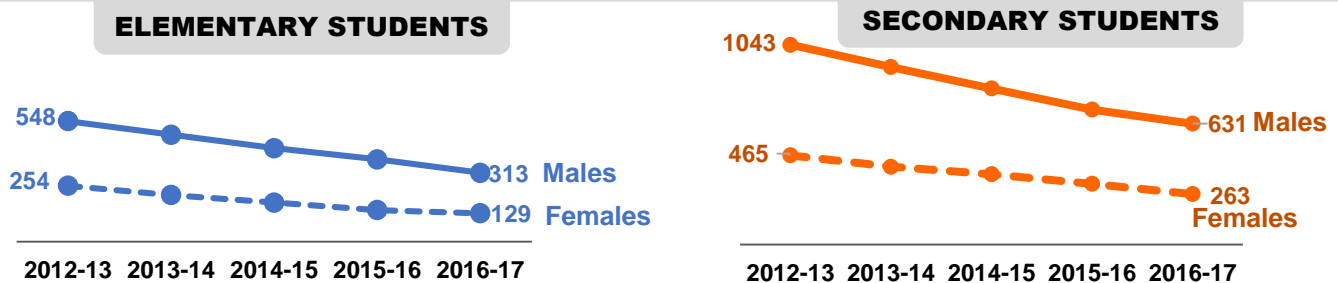
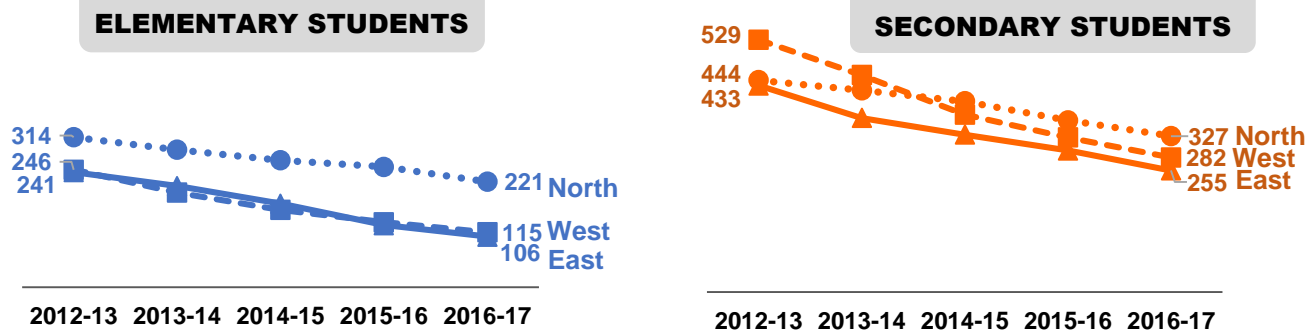


Figure 1c: ENROLMENT of Students Identified with Learning Disabilities by Area Over Five Years



Key Findings – Elementary and Secondary Students

Over five years in the HDSB, enrolment among students identified with learning disabilities was consistently higher in the secondary panel, and among male students in both panels. Overall, enrolment decreased by **45%**, in the elementary panel, and by **41%** in the secondary panel.

In the elementary panel, enrolment decreased by:

- 43% among males, and 49% among females
- 30% among students in the North
- 53% among students in the West
- 56% among students in the East

In the secondary panel, enrolment decreased by:

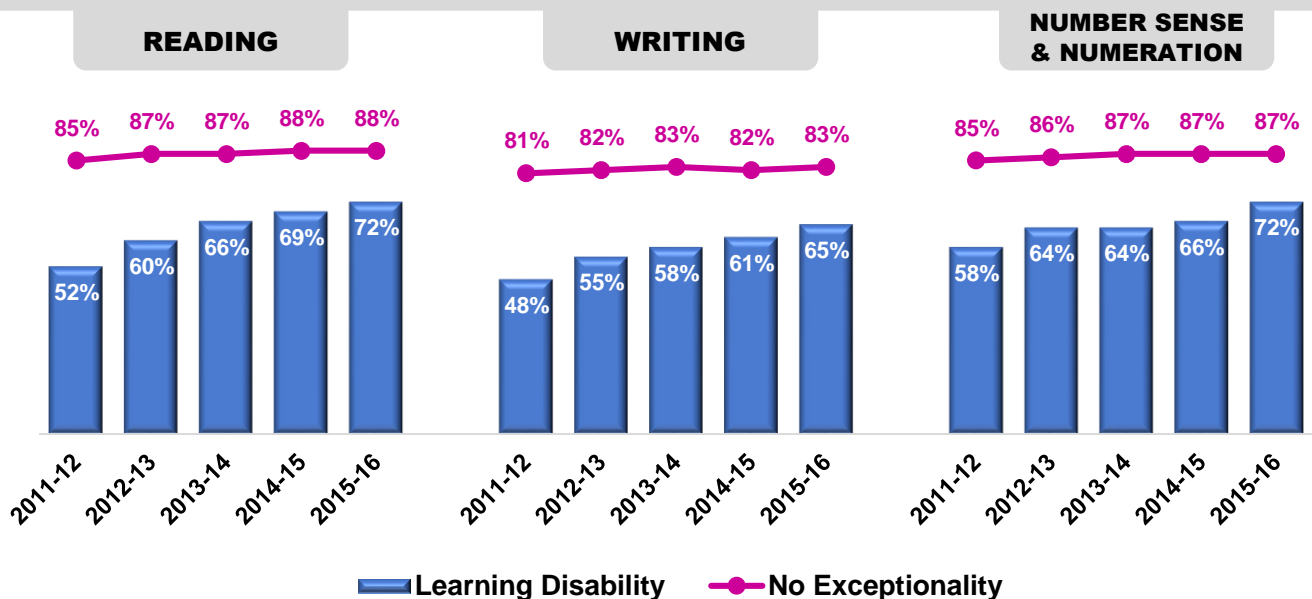
- 40% among males, and 43% among females
- 26% among students in the North
- 47% among students in the West
- 41% among students in the East



ELEMENTARY REPORT CARD RESULTS

Student Achievement Among Elementary Students Identified with Learning Disabilities in the HDSB

Figure 2: Elementary **REPORT CARD** Results (Grades 1-8)
Percentage of Students with a Learning Disability Who Achieved the Provincial Standard in Semester 2
Over Five Years – by Curriculum Strand



Key Findings – Report Card Results

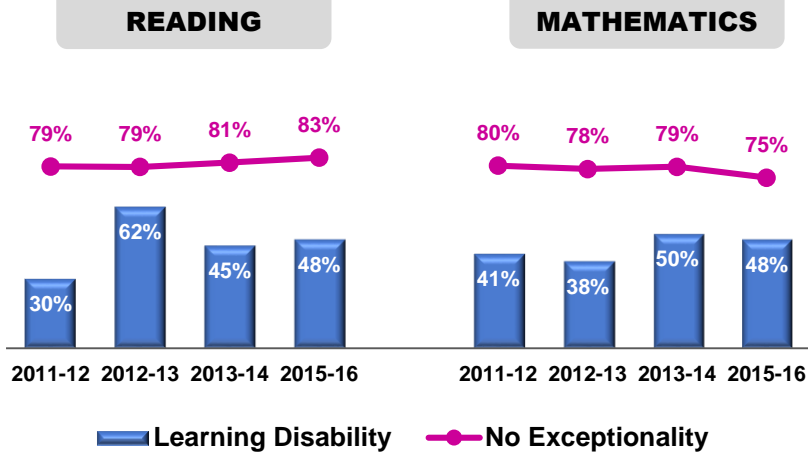
Over five years:

- the average percentage of students identified with a learning disability who achieved the provincial standard was **62%** in Reading, **56%** in Writing, and **64%** in Number Sense and Numeration.
- the percentage of students identified with a learning disability who achieved the provincial standard in semester 2 increased by an average of **17%** across the three curriculum strands. Specifically, provincial standard achievement:
 - ▶ increased in Reading by **20%**
 - ▶ increased in Writing by **17%**
 - ▶ increased in Number Sense and Numeration by **14%**
- the percentage of students without exceptionalities who achieved the provincial standard in semester 2 remained relatively stable.
- elementary report card results demonstrated achievement gaps between students identified with learning disabilities, and students without exceptionalities; with average achievement gaps of **25%** in Reading, **26%** in Writing, and **22%** in Number Sense and Numeration.

EQAO GRADE 3 & GRADE 6 RESULTS

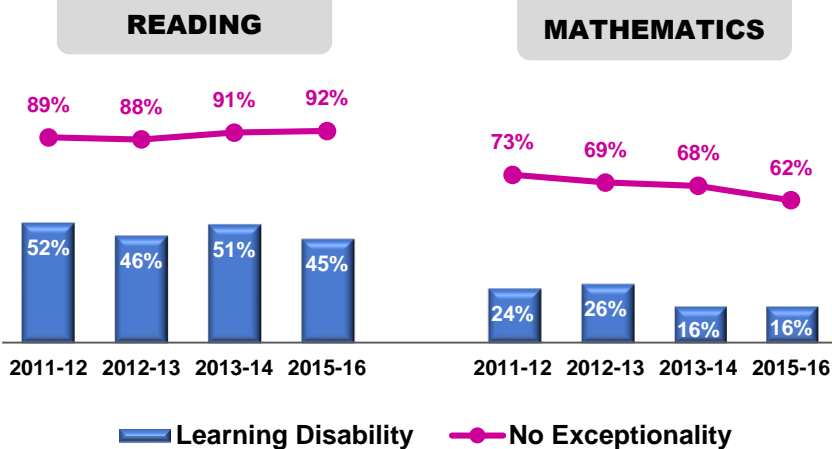
Student Achievement Among Elementary Students Identified with Learning Disabilities in the HDSB

Figure 3: GRADE 3 EQAO Assessment Results
Percentage of Students Who Achieved the Provincial Standard Over Four Years – by Subject



Note: Due to labour action, the primary EQAO assessment was not conducted during the 2014-2015 school year.

Figure 4a: GRADE 6 EQAO Assessment Results
Percentage of Students Who Achieved the Provincial Standard Over Four Years – by Subject

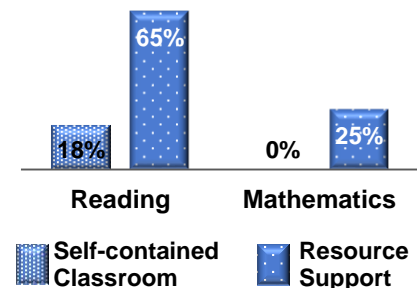


Key Findings – EQAO Results

Over 4 years:

- the average percentage of students identified with learning disabilities who achieved the provincial standard was:
Grade 3: 46% in Reading, 44% in Mathematics
Grade 6: 49% in Reading, 21% in Mathematics
- improvement in achievement is seen in Grade 3 by 18% in Reading and by 7% in Mathematics, and a slight decrease in achievement in Grade 6 by 7% in Reading and by 8% in Mathematics.
- in Mathematics, a considerably smaller proportion of students with learning disabilities in Grade 6 achieved the provincial standard, when compared to students with learning disabilities in Grade 3.
- large achievement gaps are noted between students identified with learning disabilities, and students without exceptionalities, with these gaps widening between Grade 3 and Grade 6.

Figure 4b: 2015-2016 GRADE 6 EQAO Results
Percentage of Students Identified with a Learning Disability Who Achieved the Provincial Standard – by Subject and Placement Type



Key Findings – 2015-2016 Grade 6 EQAO Results

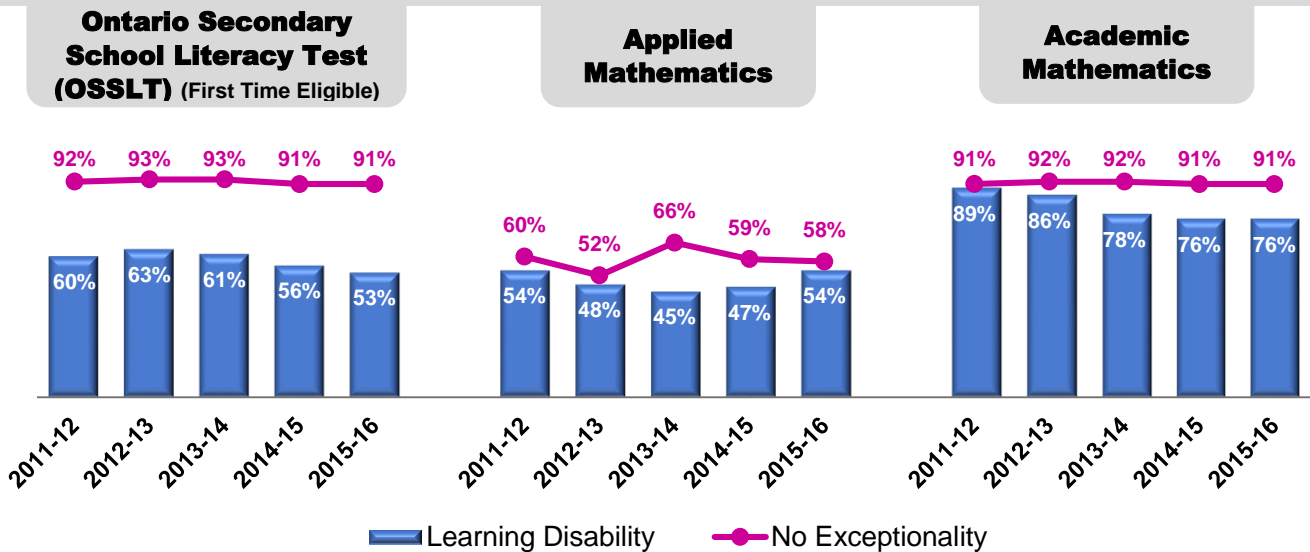
In 2015-2016, among students in Grade 6 receiving special education support for a learning disability, a significantly larger proportion of students receiving support in regular classrooms achieved the provincial standard in Reading and Mathematics, when compared to students receiving support in Self-contained classrooms.



EQAO GRADE 9 & GRADE 10 RESULTS

Student Achievement Among Secondary Students Identified with Learning Disabilities in the HDSB

Figure 5: GRADE 9 and Grade 10 EQAO Assessment Results
Percentage of Students Who Achieved the Provincial Standard
Over Five Years – by Subject



Key Findings – Secondary EQAO Results

Over 5 years:

- the average percentage of students identified with learning disabilities who achieved the provincial standard:
 - on the OSSLT was: 59% of students
 - in Mathematics was: 50% of students in Grade 9 Applied Mathematics
81% of students in Grade 9 Academic Mathematics
- the average percentage of students without exceptionalities who achieved the provincial standard:
 - on the OSSLT was: 92% of students
 - in Mathematics was: 59% of students in Grade 9 Applied Mathematics
91% of students in Grade 9 Academic Mathematics
- the percentage of students identified with a learning disability who achieved the provincial standard decreased by 7% on the OSSLT, and decreased by 13% in Academic Mathematics.
- Grade 10 OSSLT results demonstrated large achievement gaps between students identified with learning disabilities, and students without exceptionalities – with an average achievement gap of 33%.
- Grade 9 Mathematics results demonstrated relatively similar results between students identified with learning disabilities, and students without exceptionalities in both applied (gap average of 9%) and academic Mathematics (gap average of 10%).



PARENT SATISFACTION & PERCEPTIONS OF SCHOOL AND THE SPECIAL EDUCATION SUPPORT THEIR CHILD IS RECEIVING

Parent/Guardian Survey Results – 2016-2017 School Year

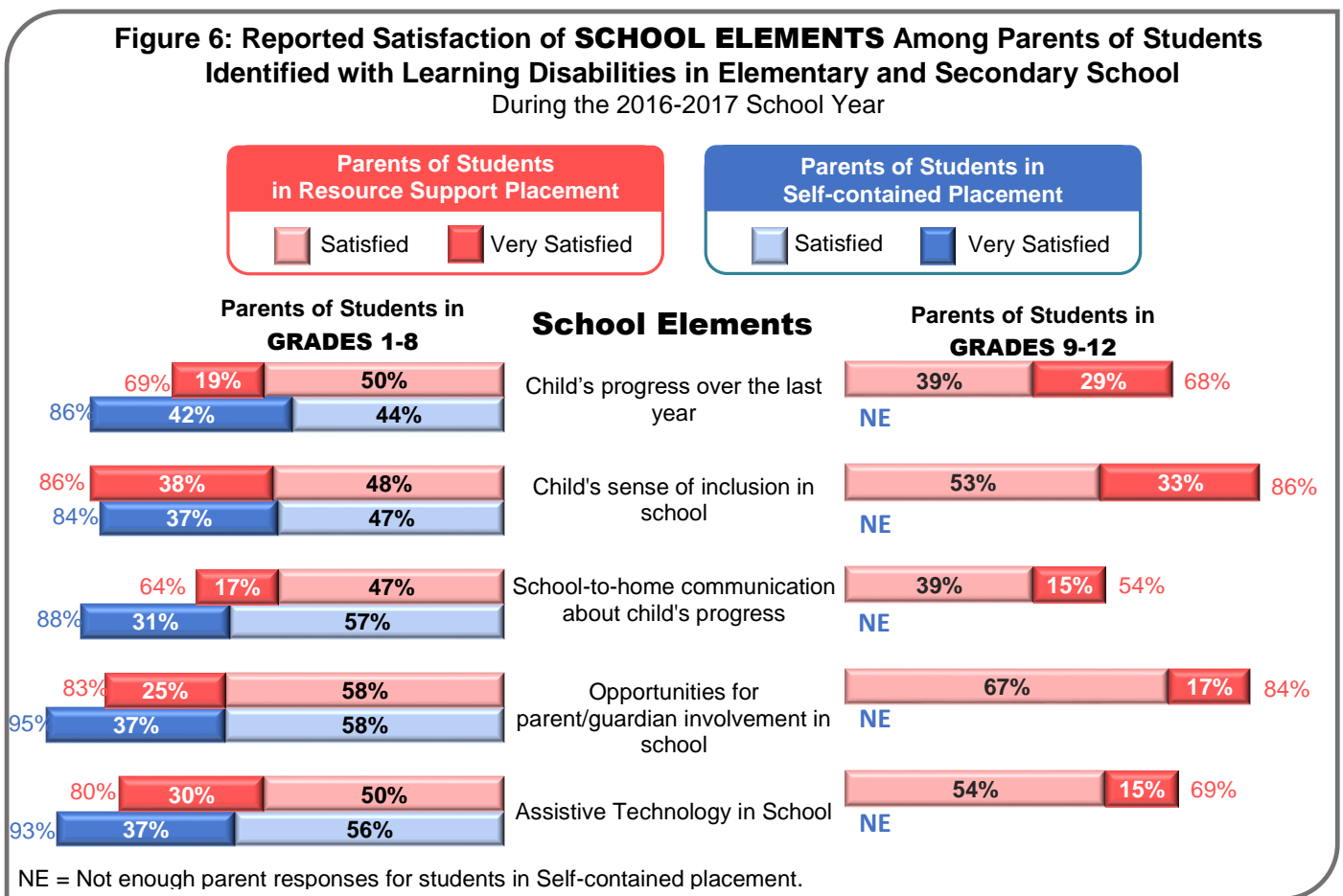
Parents of Students Identified with Learning Disabilities in Elementary and Secondary Schools

The following data reflect parents' reported satisfaction and perceptions of elements related to school and the special education support their child is receiving. The survey was distributed to all parents of students with an exceptionality in the HDSB during the 2016-2017 school year, as part of the Special Education Programs and Services Review – Phase I (Love and Favaro, 2017).

Total # of parent/guardian survey respondents with children identified with a learning disability = 287.

- ▶ Parents of students in elementary & middle school – 57%: Resource Support: n= 96; Self-contained placement: n=45
- ▶ Parents of students in secondary school – 43%: Resource Support: n= 95; Self-contained placement: n=10

Figure 6: Reported Satisfaction of SCHOOL ELEMENTS Among Parents of Students Identified with Learning Disabilities in Elementary and Secondary School During the 2016-2017 School Year

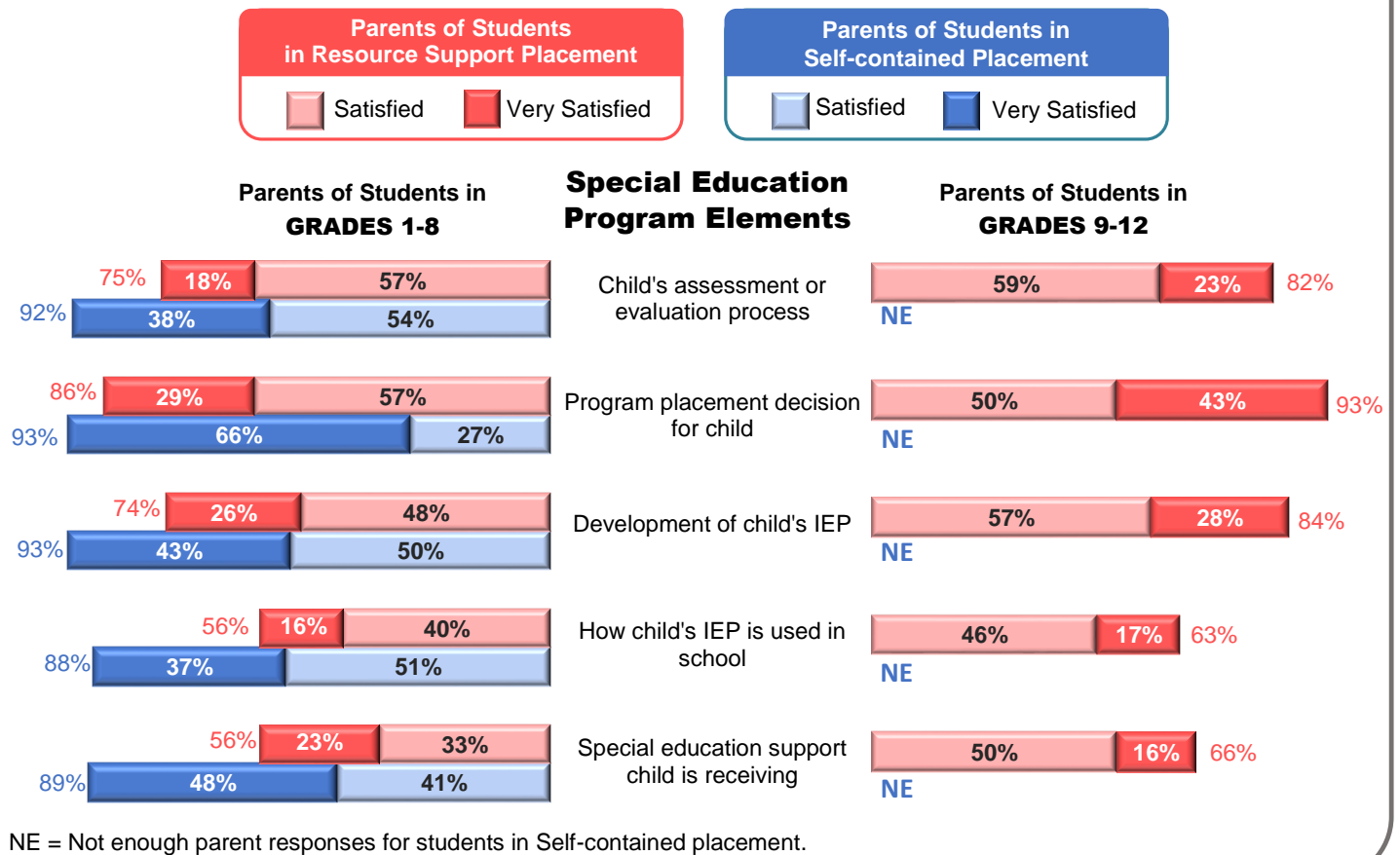


Key Findings – Parent Survey Results for SCHOOL ELEMENTS

Compared to parents of **ELEMENTARY** students identified with learning disabilities in Resource Support placement, parents of students in Self-contained placement reported higher levels of satisfaction with their child's progress over the school year, school-to-home communication, assistive technology, and opportunities for parent involvement during the 2016-17 school year.

Parents of **ELEMENTARY** and **SECONDARY** students identified with learning disabilities in Resource Support placement reported relatively similar levels of satisfaction with various school elements over the 2016-2107 school year.

Figure 7: Reported Satisfaction of PROGRAM ELEMENTS Among Parents of Students Identified with Learning Disabilities in Elementary and Secondary School During the 2016-2017 School Year

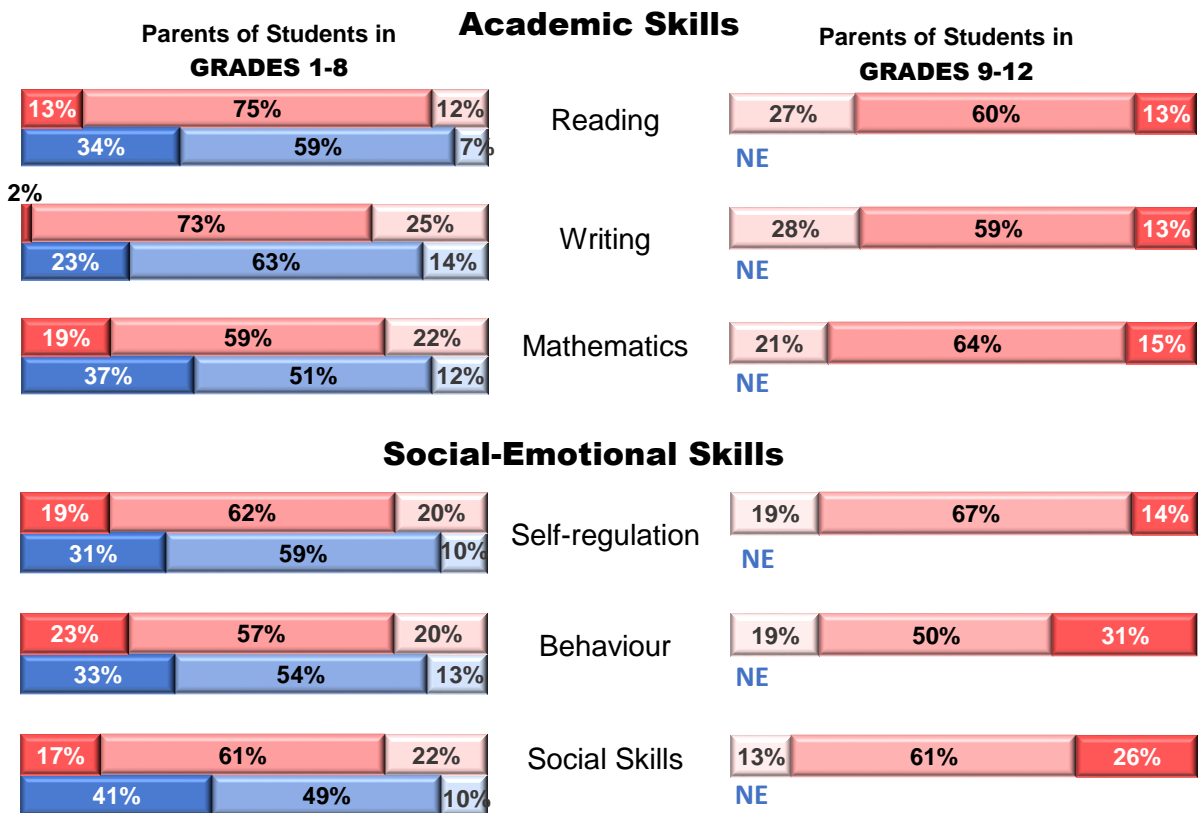
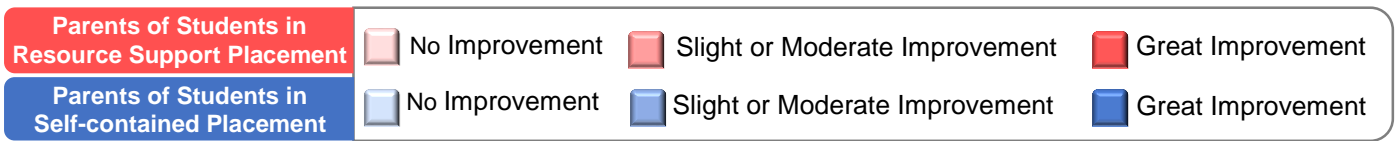


Key Findings – Parent Survey Results for SPECIAL EDUCATION PROGRAM ELEMENTS

Compared to parents of **ELEMENTARY** students identified with learning disabilities in Resource Support placement, parents of students in Self-contained placement reported higher levels of satisfaction with their child's assessment or evaluation process, IEP development, use of their child's IEP, and the special education support their child is receiving.

Compared to parents of **ELEMENTARY** students, parents of **SECONDARY** students identified with learning disabilities in Resource Support placement reported slightly higher levels of satisfaction with various Special Education program elements over the 2016-2107 school year.

Figure 8: Extent to Which Parents Reported **IMPROVEMENT in their Child’s Academic Skills & Social-Emotional Skills in Elementary and Secondary School**
During the 2016-2017 School Year



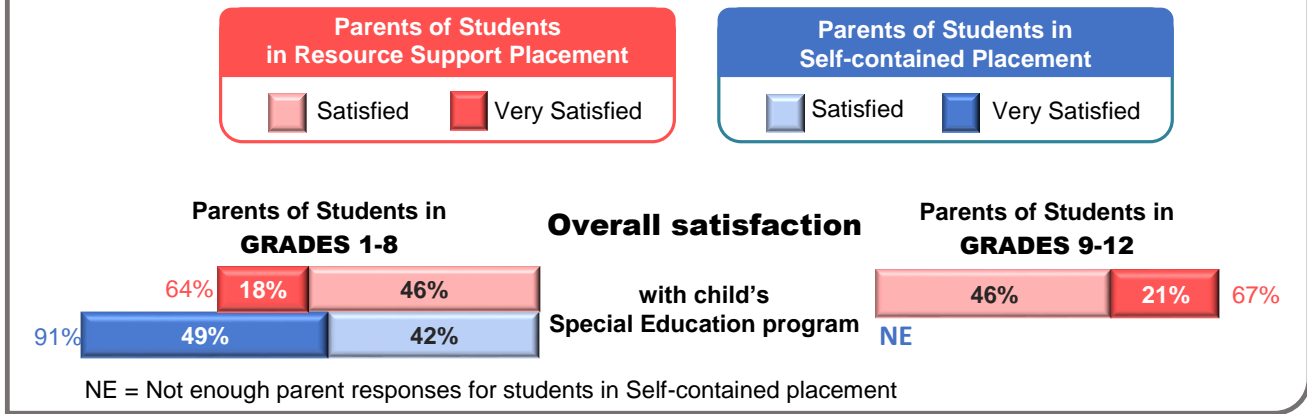
NE = Not enough parent responses for students in Self-contained placement.

Key Findings – Parent Survey Results for **ACADEMIC & SOCIAL-EMOTIONAL SKILLS**

Compared to parents of **ELEMENTARY** students identified with learning disabilities in Resource Support placement, parents of students in Self-contained placement reported higher levels of improvement with their child’s Reading, Writing and Mathematics skills; as well as their child’s self-regulation skills, behaviour skills, and social skills, during the 2016-2017 school year.

Parents of **ELEMENTARY** and **SECONDARY** students identified with learning disabilities in Resource Support placement reported relatively similar levels of improvement in their child’s social emotional skills and academic skills (with the exception of Reading, where parents of elementary students reported relatively higher levels of improvement).

Figure 9: Reported Overall Program **SATISFACTION Among Parents of Students Identified with Learning Disabilities in Elementary and Secondary School During the 2016-2017 School Year**



Key Findings – Parent Survey Results for OVERALL PROGRAM SATISFACTION

Compared to parents of **ELEMENTARY** students identified with learning disabilities in Resource Support placement, parents of students in Self-contained placement reported considerably higher levels of satisfaction with their child's Special Education program during the 2016-2017 school year.

Parents of **ELEMENTARY** and **SECONDARY** students identified with learning disabilities in Resource Support placement reported similar levels of satisfaction with their child's Special Education program during the 2016-2017 school year.



HIGHLIGHTS OF REVIEW FINDINGS

The purpose of the Special Education Programs and Services Review–Phase III-B was to gain a better understanding of HDSB’s population of students with learning disabilities, and identify evidence-informed best practices for assessment and identification of students in elementary grades. As such, the review set out to: (1) explore the research literature regarding the strengths, challenges and best practices with assessment and identification of young students at risk for learning disabilities; (2) develop a picture of elementary and secondary students identified with learning disabilities; and (3) understand the perceptions and levels of satisfaction among parents of students identified with learning disabilities, in both Self-contained and Resource Support placement. Following is a summary of the key findings established throughout the review.

Research Literature Highlights

It is clear in the literature that development and learning proceeds at varying rates among young children, and that these variances, combined with environmental factors, influence a child’s functioning in all domains. Similarly, the development of learning delays and disabilities tend to manifest differently among individuals, and may be related to variations in rates and patterns of maturation, environmental factors, and the quality of learning opportunities. While many experts caution the assessment of young children due to their developmental variabilities and inherent limitations among assessment instruments; others believe that advancements in knowledge of child development and measurement have led to increased accuracy in assessing academic difficulties and learning disabilities during the elementary years. Proponents of objective measures believe that standardized quantitative measures provide the psychometric properties and diagnostic potential to determine eligibility for special education services, and others support authentic assessment approaches that are more developmentally appropriate, and capture a holistic picture of young children’s unique learning profile. Given the strengths of both assessment approaches, researchers and developmental experts agree that the combination of standardized assessments and behavioural observations can effectively provide a comprehensive profile of a child’s strengths, progress, and needs.

Within the range of developmental patterns exhibited by children throughout the primary grades, many will progress adequately over time, and others will continue to show delays in various degrees and in different domains. With these children in mind, experts and advocacy groups support universal, non-categorical screening procedures to determine those who are at risk for learning difficulties and subsequent academic problems. Results of early screening procedures can inform the type and level of remediation needed through a multi-tiered approach to intervention, which should include continuous progress monitoring, and when necessary, a comprehensive diagnostic evaluation. There is strong agreement among experts that early assessment of learning strengths and needs is essential, with many supporting universal screening during Kindergarten and Grade 1. Due to varying developmental trajectories and instrument limitations, comprehensive diagnostic assessments are best conducted between Grades 3–4 for children who continue to demonstrate learning difficulties. Along with challenges relating to standardized administration procedures, assessment measures among young children have demonstrated low reliability and stability of results. In addition, while some research has

demonstrated reasonable correlations between early test scores and future achievement; other evidence indicates that the predictive validity of early assessment results is variable and unclear.

Similar to other school Boards throughout Ontario, the Halton District School Board offers universal screening in Grade 4, using the CCAT 7 assessment. The results of this multidimensional assessment provides insight into various cognitive and processing abilities at an individual student level. This information, along with instructional support offered in the *Teacher's Guide*, can help teachers build their student's learning profiles, and support instructional interventions for those students who demonstrate learning challenges. The research literature notes that following increasingly intensive remedial interventions and continuous progress monitoring, those students who continue to struggle academically should be referred for a comprehensive assessment of learning disabilities for the purposes of identification and eligibility for special education programming. Given the inherent limitations among assessment instruments and learning outcomes among young children, developmental variabilities, and the diverse manifestations of learning disabilities; a comprehensive and multi-dimensional assessment process is recommended in order to accurately diagnose learning disabilities. Throughout the literature, evidence-based best practices highlight the importance of early and ongoing assessments involving a multidisciplinary team approach to gather multiple sources of quantitative and qualitative information that address a range of developmental domains, within various settings. Such a comprehensive approach can work to ensure a collection of information that will contribute to fully understanding the child's learning profile, accurately diagnosing learning disabilities, determining appropriate program placement, and ultimately improving the academic outcomes of students with learning disabilities.

Student Enrolment

Enrolment among students identified with learning disabilities has decreased over five years (2013-2017) by an average of 42% across the HDSB. In addition, enrolment has been consistently higher in the secondary panel, and among male students. In both the elementary and secondary panels, enrolment among students identified with learning disabilities has decreased most in the East (by 56% and 41%, respectively) and the West (by 53% and 47%, respectively), followed by the North (by 30% and 26%, respectively)

Student Achievement

Elementary Report Card Results

Final report card results over five years (2013-2017), demonstrated improvement in achievement among elementary students identified with learning disabilities. The percentage of students who achieved the provincial standard increased by 20% in Reading, 17% in Writing, and 14% in Number Sense and Numeration. However, achievement gaps among the curriculum strands were noted, with a consistently lower percentage of students identified with learning disabilities achieving the provincial standard, when compared to those without exceptionalities (with average achievement gaps ranging from 22% to 25%).

Elementary EQAO Assessment Results

Over four years, EQAO Reading and Mathematics assessment results demonstrated improved achievement in Grade 3, and a slight decrease in achievement in Grade 6. The percentages of students achieving the provincial standard in Grade 6 Mathematics are consistently lower than results in Grade 3. Similar to report card results, achievement gaps in EQAO results were noted. Throughout the four years, a significantly lower percentage of students identified with learning disabilities achieved the provincial

standard, when compared to those without exceptionalities, with average achievement gaps ranging from 34% to 47%.

In the 2015-2016 school year, Grade 6 EQAO Reading and Mathematics assessment results demonstrated that achievement among students identified with learning disabilities receiving Resource Support in the regular classroom was significantly higher than students identified with learning disabilities in Self-contained classes.

Secondary EQAO Assessment Results

Over five years, secondary EQAO assessment results demonstrated a slight decrease in achievement on the OSSLT and the academic Mathematics assessment, among students identified with learning disabilities. In addition, OSSLT results demonstrated large achievement gaps between students identified with learning disabilities, and students without exceptionalities. Achievement results for the two groups were comparatively closer for the Grade 9 academic and applied Mathematics assessments.

Overview of Achievement Gaps

Over the years, it can be seen that achievement gaps between students identified with learning disabilities and students without exceptionalities are consistently large across elementary literacy-based curriculum strands and EQAO assessment results for Grade 3, Grade 6 and Grade 10 (Reading and OSSLT). Similarly, large achievement gaps are seen in the Mathematics-based elementary curriculum strand and EQAO assessment results in Grade 3 and Grade 6. However, these gaps decrease greatly among Grade 9 applied and academic Mathematics assessment results.

Parent Satisfaction and Perceptions

During the 2016-2017 school year, compared to parents of students with learning disabilities receiving Resource Support, parents of elementary students in Self-contained placement reported higher levels of satisfaction regarding school-based elements and factors related to their child's Special Education program; and higher levels of improvement in their child's academic and social-emotional skills.

During the 2016-2017 school year, parents of elementary and secondary students identified with learning disabilities receiving Resource Support, reported similar levels of satisfaction regarding school-based elements, improvement in their child's academic and social-emotional skills, and overall satisfaction with their child's Special Education program. Parents of secondary students receiving Resource Support, reported slightly higher levels of satisfaction with various elements of their child's Special Education program, when compared to parents of elementary students receiving Resource Support.



KEY CONSIDERATIONS FOR THE ASSESSMENT and IDENTIFICATION OF ELEMENTARY STUDENTS AT RISK FOR LEARNING DISABILITIES

Phase II of the Special Education Programs and Services Review identified various strengths and challenges of the referral, identification and placement pathways for students identified with learning disabilities. Findings from Phase III-B also identified a variety of strengths, challenges and best practices relating to the assessment and identification procedures used with young children who may be at risk for learning disabilities. Enrolment trends and achievement outcomes among elementary and secondary students identified with learning disabilities in the HDSB were examined; and parent perceptions of the Special Education program were further explored. The following key findings from Phase II and Phase III are considered to be important for decisions regarding assessment and identification of young students at risk for learning disabilities within the Halton District School Board.

1. Research established theories regarding the impact that developmental and environmental factors have on the development and functioning of young children.
2. Various characteristics and manifestations of learning delays and disabilities among children over time, in severity, and across settings.
3. The importance of early and non-categorical screening among young children for the purpose of determining those who are at risk for academic problems.
4. Expert opinions regarding the optimal age for screening (Kindergarten – Grade 1), and for diagnostic assessment of learning disabilities (Grade 3 – Grade 4).
5. Research evidence demonstrating the instability and variability in predictive validity of early assessment results.
6. Evidence-based research regarding the effectiveness of the multi-tiered instructional approach to intervention and continuous progress monitoring, prior to conducting diagnostic assessments on young children.
7. The multidimensional cognitive and processing information provided by CCAT 7 results, and the instructional support provided in the *Teacher's Guide*.
8. Consistently declining five-year enrolment of 45% among elementary students identified with learning disabilities.
9. Increasing report card achievement outcomes, over five years, among elementary students identified with learning disabilities.
10. EQAO achievement results demonstrating that less than 50% of elementary students achieved the provincial standard in Reading and Mathematics over four years.

11. Large achievement gaps in elementary and secondary literacy-based, and elementary Mathematics-based, EQAO assessment results between students identified with learning disabilities and those without exceptionalities.
12. Higher levels of satisfaction with school and program elements, and higher levels of reported improvements in their child's academic and social-emotional skills, among parents of elementary students identified with learning disabilities in Self-contained classes, relative to parents of students receiving Resource Support.
13. Concerns among parents of elementary students identified with learning disabilities regarding lengthy wait times for assessments and support, and perceived resistance of formal assessment and identification of students in primary grades (Phase II).
14. Concerns among parents of elementary students identified with learning disabilities regarding inequities between exceptionalities in screening and assessment practices, and the availability of a primary Self-contained placement option (Phase II).
15. Strong beliefs among school staff regarding the value of non-identified IEPs for primary students who show signs of struggling (Phase II).
16. Strong parental support for Self-contained placement for elementary students with learning disabilities, based on their children's increased self-confidence, independence, and academic progress (Phase II).
17. Strong support throughout the literature for a comprehensive, multidimensional assessment approach, using multiple sources of information, in a variety of settings.

References

- Bagnato, S. J., Macy, M., Salaway, J., & Lehman, C. (2007). *Research foundations of authentic assessments ensure accurate and representative early intervention eligibility*. Pittsburgh, PA: TRACE Center for Excellence in Early Childhood Assessment, Early Childhood Partnerships, Children's Hospital/University of Pittsburgh; US Department of Education, Office of Special Education Programs, and Orelena Hawks Puckett Institute. Retrieved from https://www.researchgate.net/publication/275044641_Authentic_Assessment_1_Running_head_AUTHENTIC_ASSESSMENT_FOR_EARLY_INTERVENTION_ELIGIBILITY_Research_Foundations_of_Authentic_Assessments_Ensure_Accurate_and_Representative_Early_Intervention_Eligibility
- Burns, M. K., Haegele, K., Petersen-Brown, S. (2014). Screening for early reading skills: Using data to guide resources and instruction. In R. J. Kettler, T. A. Glover, C. A. Albers, & K. A. Feeney-Kettler (Eds.), *Universal screening in educational settings: Evidence-based decision making for schools* (pp. 171–197). Washington, DC: American Psychological Association.
- Division for Early Childhood. (2014). DEC recommended practices in early intervention/early childhood special education 2014. Retrieved from <https://divisionearlychildhood.egnyte.com/dl/tgv6GUXhVo>
- Division for Early Childhood. (2007). *Promoting positive outcomes for children with disabilities: Recommendations for curriculum, assessment, and program evaluation*. Missoula, MT: Author. Retrieved from <https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/PrmtgPositiveOutcomes.pdf>
- Dale, P. S., & Patterson, J. L. (2017). Early identification of language delay. In Rvachew , S. (Ed.), *Language development and literacy*. Encyclopedia on Early Childhood Development. (pp. 57-61).
- Dockrell, J. E., & Marshall, C. R. (2015). Measurement issues: Assessing language skills in young children. *Child and Adolescent Mental Health, 20*(2) 116-125.
- Dollaghan, C. A., & Campbell, T. (2009). How well do poor language scores at ages 3 and 4 predict poor language scores at age 6? *International Journal of Speech-Language Pathology, 11*(5), 358-365.
- Einarsdottir, J. T., Bjornsdottir, A. & Simonardottir, I. (2015). The predictive value of preschool language assessments on academic achievement: A longitudinal study of Icelandic children. *American Journal of Speech Language Pathology, 1*-13.
- Ellingsen, K. M. (2016). Standardized assessment of cognitive development: Instruments and issues. In A. Garro, (Ed.), *Early childhood assessment in school and clinical child psychology* (pp. 25–49). New York, NY: Springer New York.
- Ferrer, E., Shaywitz, B. A., Holahan, J. M., Marchione, K. E., Michaels, R., & Shaywitz, S. E. (2015). Achievement gap in reading is present as early as first grade and persists through adolescence. *The Journal of Pediatrics, 167*(5), 1121-1125.
- Fisher, P. G. (2015). Read my mind. *The Journal of Pediatrics (The Editor's Perspectives), 167*(5), 947.
- Frans, N., Post, W. J., Huisman, M., Oenema-Mostert, I., Keegstra, A. L., & Minnaert, A. E. (2017). Early identification of children at risk for academic difficulties using standardized assessment:

stability and predictive validity of preschool math and language scores, *European Early Childhood Education Research Journal*, 25(5), 698-716.

Gillis, M., West, T., & Coleman, M.R. (2014). Assessment in early childhood. *Get Ready to Read*. National Getreadytoread.org. National Center for Learning Disabilities, Inc. Retrieved from <http://www.getreadytoread.org/screening-tools/supportive-materials-for-elors/assessment-in-early-childhood>.

Gray, E (2018). *Special Education Programs and Services Review - Phase II: Review of Elementary Special Education Referral, Identification and Placement Pathways for Students identified with Autism, Learning Disabilities, and Giftedness*. Unpublished presentation. Burlington, Ontario: Halton District School Board.

Guddemi, M., & Case, B. J. (2004). *Assessing young children*. Pearson Education. Assessment Report. Pearson Inc., San Antonio, TX. Retrieved from: http://images.pearsonassessments.com/images/tmrs/tmrs_rg/AssessingYoungChildren.pdf

Halton District School Board. (2017). *Special Education Plan 2018-2019 – Standard 9: Special Education Placements Provided by the Board*. Burlington: Author, Retrieved from <https://www.hdsb.ca/learning-and-resources/Pages/Special%20Education%20Programs%20and%20Placements/Special-Education-Plan.aspx>

Harrison, A. G. (2005). Recommended Best Practices for the Early Identification and Diagnosis of Children with Specific Learning Disabilities in Ontario. *Canadian Journal of School Psychology*, 20(1/2), 21-43.

Houghton Mifflin Harcourt. (2013). *Cognitive Abilities Test Form 7: A short guide for teachers*. Retrieved from <http://www.aacs.org/wp-content/uploads/2012/10/CogAT-A-Short-Guide-for-Teachers.pdf>

Jiban, D. (2013). *Early childhood assessment: Implementing effective practice – A research-based guide to inform assessment planning in the early grades*. Northwest Evaluation Association. Retrieved from <http://info.nwea.org/rs/nwea/images/EarlyChildhoodAssessment-ImplementingEffectivePractice.pdf>

Lakin, J., & Driver, V. (2016). Universal screening in gifted and talented identification: Implementation and overcoming challenges. *Cognitively Speaking*, 1-4. Retrieved from http://www.auburn.edu/~jml0035/index_files/CS_Nov16_screening.pdf

Lakin, J., & Driver, V. (2017). Using CogAT score profiles to differentiate instruction. *Cognitively Speaking*, 1-5. Retrieved from http://www.gcisd-k12.org/UserFiles/Servers/Server_96229/File/Departments/Assesment/CogAT/CogAT_Cognitively_Speaking_Winter_2017_Issue.pdf

Learning Disabilities Association of Minnesota. (2018). *Assessing for a learning disability*. Retrieved from <https://www.ldaminnesota.org/community-programs/fact-sheets/assessing-learning-disability/>

Learning Disabilities Association of Ontario. (n.d.). *Recommended practices for assessment, diagnosis and documentation of learning disabilities*. Retrieved from <http://www.ldao.ca/wp->

content/uploads/LDAO-Recommended-Practices-for-Assessment-Diagnosis-Documentation-of-LDs1.pdf

- Lee, D. D., Bagnato, S. J. & Pretti-Frontczak, K. (2015). Utility and Validity of Authentic Assessments and Conventional Tests for International Early Childhood Intervention Purposes: Evidence from U.S. National Social Validity Research. *Journal of Intellectual Disability - Diagnosis and Treatment*, 3, 164-176.
- Macy, M. & Bagnato, S. J. (2013). Authenticity in early childhood assessment: The developmentally appropriate alternative. In D. H. Saklofske, C. R. Reynolds, & V. Schwann (Eds.), *The Oxford Handbook of Child Psychological Assessment*. New York: Oxford University Press.
- Macy, M. & Bagnato, S. J. (2010). Keeping It “REAL” with authentic assessment. *NHSA Dialog: A Research-to-practice Journal for The Early Intervention Field*. 13(1). 1-20.
- Macy, M., Bagnato, S. J., Macy, R., & Salaway, J. (2015). Conventional Tests and Testing for Early Intervention Eligibility: Is There an Evidence Base? *Infants & Young Children*, 28(2), 182–204.
- Miles, S., Fulbrook, P., & Mainwaring-Mägi, D. (2016). Evaluation of standardized instruments for use in universal screening of very early school-age children: Suitability, technical adequacy, and usability. *Journal of Psychoeducational Assessment*, 36(2), 1-21.
- National Association for the Education of Young Children. (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8*. Retrieved from <https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/PSDAP.pdf>
- National Center for Learning Disabilities. (n.d.). *What is RTI?* Retrieved from <http://www.rtinetwork.org/learn/what/whatisrti>
- National Joint Committee on Learning Disabilities. (2010). *Comprehensive assessment and evaluation of students with learning disabilities*. Retrieved from <http://www.ldonline.org/article/54711/>
- National Joint Committee on Learning Disabilities. (2007). Learning disabilities and young children: Identification and intervention. *Learning Disabilities Quarterly*, 30(1), 63-72.
- National Research Council. (2008). *Early Childhood Assessment: Why, What, and How?* Snow, C. E., and Van Hemel S. B. (Eds.) Washington, DC. The National Academies Press.
- Ontario Ministry of Education. (1982). *Early Identification of children’s learning needs*. Policy/Program Memorandum No. 11 Retrieved from <http://edu.gov.on.ca/extra/eng/ppm/11.html>
- Ontario Ministry of Education. (2013). *Learning for All: A Guide to effective assessment and instruction for all students, kindergarten to Grade 12*. Toronto: Author. Retrieved from <http://edu.gov.on.ca/eng/general/elemsec/speced/LearningforAll2013.pdf>
- Ontario Ministry of Education. (2014). *Identification of and program planning for students with learning disabilities*. Policy/Program Memorandum No. 8. Retrieved from <http://edu.gov.on.ca/extra/eng/ppm/ppm8.pdf>
- Ontario Ministry of Education. (2017). *Special education in Ontario, kindergarten to grade 12: Policy and resource guide*. Toronto: Author. Retrieved from http://www.edu.gov.on.ca/eng/document/policy/os/onschools_2017e.pdf

- 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*. Retrieved from [http://www.psych.on.ca/getattachment/37646d71-1469-4731-a3c6-55a458a8238f/OPA-Guidelines-for-Diagnosis-and-Assessment-of-Learning-Disabilities-Sept-7-2018-\(1\)-1.pdf.aspx?ext=.pdf](http://www.psych.on.ca/getattachment/37646d71-1469-4731-a3c6-55a458a8238f/OPA-Guidelines-for-Diagnosis-and-Assessment-of-Learning-Disabilities-Sept-7-2018-(1)-1.pdf.aspx?ext=.pdf)
- Robinson, K., & Hutchinson, N. L. (2014). *Tiered approaches to the education of students with learning disabilities*. Retrieved from https://www.researchgate.net/publication/266143004_Tiered_Approaches_to_the_Education_of_Students_with_Learning_Disabilities
- Rosner, J. (1975). *Helping children overcome learning difficulties*. New York: Walker and Company.
- Schneider, W., Niklas, F., & Schmiedeler, S. (2014). Intellectual development from early childhood to early adulthood: The impact of early IQ differences on stability and change over time. *Learning and Individual Differences, 32*, 156–162.
- Simner, M. L. (1997). Predictive validity of the Teacher’s School Readiness Inventory. *Canadian Journal of School Psychology, 3*, 21-32.
- Slocumb, P. D., & Olenchak, F. R. (2006). *Equity in gifted education: A state initiative*. Austin, TX: Texas Education Agency. Retrieved from http://www.gtequity.org/docs/equity_in_ge.pdf
- World Health Organization & UNICEF (2012). *Early childhood development and disability: A discussion paper*. World Health Organization & United Nations Children’s Fund. Retrieved from http://apps.who.int/iris/bitstream/handle/10665/75355/9789241504065_eng.pdf?sequence=1&isAllowed=y