

**DATE:** February 20, 2018

**TO:** Board of Trustees

**FROM:** Darrel Robertson, Superintendent of Schools

**SUBJECT:** Learning Disorders—Reading, Writing and Mathematics  
(Response to Request for Information #009)

**ORIGINATOR:** Brenda Gummer, Director Inclusive Learning - Specialized Services

**RESOURCE  
STAFF:** Leah Fraser, Jeremy Higginbotham, Leona Morrison

**REFERENCE:** December 20, 2017 Board meeting (Trustee Dunn)

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#### **ISSUE**

The following information was requested:

1. How many students currently in the District have been diagnosed with a learning disorder (with impairment in reading, written expression or mathematics)?
2. How does this number compare to the estimated prevalence of learning disorder?
3. How is the District identifying students with a learning disorder?
4. What screening tools are being used to specifically identify students who have a learning disorder in the areas of reading, written expression or mathematics? At what age or grade level are these tools being used?
5. What evidence-based interventions specific to learning disorders in reading, written expression or mathematics are being used by the District?
6. How do students and parents access these resources?

#### **BACKGROUND**

Our District schools provide high quality, differentiated instruction through an engaging, strength-based approach with all learners. Systems of intervention are in place at each school to identify students experiencing difficulties in specific areas of skill deficit and to provide the most appropriate targeted interventions in a timely manner. If students respond well to interventions and targeted accommodations then there is often no need for a formal assessment. However, if school staff suspect a learning disability, District processes are in place to assist with formal identification and a request for specialized assessment is made.

Standardized psycho-educational assessment is used to diagnose students with a learning disability. In the District, some of these students will be assigned Code 54 (learning disability). District coding criteria for allocations are for the purpose of distributing funds to schools. Weighted allocations are provided to schools recognizing that the programming needs of a limited number of students fall outside the wide range of abilities, skills and behaviours that can be accommodated in a regular program. Weighted allocations are not intended to cover all the costs associated with programming for any individual student.

Students may require adapted programming according to the Provincial Program of Studies with adjustments to the instructional process. For example, students may need a greater emphasis on basic literacy and numeracy skills, and/or adjustments to assignments, examination procedures, the pace of instruction and accommodations for behavioural support.

## **CURRENT SITUATION**

1. How many students currently in the District have been diagnosed with a learning disorder (with impairment in reading, written expression or mathematics)?

As of January 9, 2018, there are 3,664 students in the District with Code 54 (learning disability) assigned to them. This number will continue to change as new coding applications are submitted to Budget and Funding. Additionally we are reviewing our processes and the impact of a change to the coding criteria allowing all students to receive Code 54. Our current coding criteria contemplates delays in two or more areas. The review process for Code 54 will consider delays in one or more areas, thereby increasing the number of students receiving a code. It should be noted that any child with delays in reading, writing or mathematics will receive on-going interventions and support, regardless of coding.

2. How does this number compare to the estimated prevalence of learning disorder?

As of September 30, 2017, there were 98,914 students in the District. As of January 9, 2018, the 3,664 students coded 54 represent 3.7 per cent of our students. The true prevalence would be higher and most likely found in the same range as indicated in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) which across different languages and cultures, is expected to be in the 5 to 15 per cent range. A conservative estimate would be 10 per cent, or 9,900 students demonstrating needs across the range from mild to severe. Of those, 80 per cent would be estimated to have reading disorders, 6 to 7 per cent would be estimated to have mathematics disorders and 7 to 15 per cent would be estimated to have writing disorders. Additionally, based on research, approximately 50 per cent of students with a reading disorder typically would also have a mathematics disorder.

3. How is the District identifying students with a learning disorder?

Schools collect data as they work with students on a day-to-day basis. Classroom staff pay attention to growth patterns and if they suspect that a student may have a learning disability, District processes are in place to assist with formal identification. Schools work with families to understand what challenges the student is experiencing and seek consent from parents or guardians for specialized assessment. Families are also informed of the referral process and a request for service is submitted to Inclusive Learning.

Specialists assigned to complete a specialized assessment connect with family to gather pertinent information, implement appropriate assessments, write a detailed report that includes an interpretation of results, define a diagnosis (if appropriate) and provide strategies and suggest resources to support the learner. The formal assessment report is provided to both the school and family and discussed in detail by the specialists who completed the assessment.

For allocation of funding, the District uses criteria to identify and provide a weighted allocation for a sub-group of students who meet the District's criteria for a diagnosis learning disability.

Standardized academic assessments must be no more than one year old and cognitive assessments no more than five years old and they must be reflective of the student's current level of functioning.

4. What screening tools are being used to specifically identify students who have a learning disorder in the areas of reading, written expression or mathematics? At what age or grade level are these tools being used?

Schools complete a variety of screening measures, assessments and inventories to identify student learning needs. These measures vary amongst schools but the majority use the Fountas and Pinnell general reading/literacy screening. Schools also administer screens for writing, for example the Highest Level of Achievement (HLAT), and for mathematics, the Math Intervention/Programming Instrument (MIPI).

A wide variety of screening tools that schools may choose to use are accessible on our internal [Curriculum and Resource Supports](#) website.

Identification of concerns and intervention supports begin as early as Kindergarten/Grade 1. As teachers work to determine children/students at risk they recommend students for targeted intervention such as Reading Recovery or Levelled Literacy. Many classroom teachers use structured processes such as the Reading Readiness Screening Tool (RRST) or the Five Pillars of Reading Instruction as strategies for identifying the individualized learning needs of students. Through early intervention, the trajectory for learners can be altered in that they may be identified as reading delayed versus diagnosed as learning disabled. If students do not respond to interventions as expected and there has been sufficient opportunity for learning, then through collaborative conversations between schools and the Inclusive Learning school-linked teams, assessment is considered.

A specialized assessment is completed by a Psychologist, and usually a Reading Specialist (who is a qualified Level B assessor with a Master's degree in reading). Standardized tools typically include: Wechsler Intelligence Scale for Children—Fifth Edition (WISC-V), and specific subtests of Wechsler Individual Achievement Test—Third Edition (WIAT-III) and/or Kaufman Test of Educational Achievement—Third Edition (KTEA-3) for the diagnostic assessment. Some alternate tools for cognitive and/or academic functioning may also be used as determined by a qualified assessment professional.

Results of the cognitive and academic assessment are necessary but not sufficient for consideration of a learning disability. Our District Psychologists refer to the diagnostic criteria in the current *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* for specific learning disorders in the areas of reading, writing, or mathematics with severity level (mild, moderate, severe for each impairment area). A student must experience difficulty learning and using academic skills in one or more specified area, despite the provision of interventions that target those difficulties:

- reading (e.g., inaccurate, slow and only with much effort)
- understanding the meaning of what is read
- spelling
- written expression (e.g., problems with grammar, punctuation or organization)
- understanding number concepts, number facts or calculation
- mathematical reasoning (e.g., applying math concepts or solving math problems)

The previous version of the Diagnostic and Statistical Manual of Mental Disorders (DSM-4) relied more heavily on a discrepancy analysis between the cognitive abilities and academic achievement skills: that academic achievement in defined areas had to be substantially below the expected level given the person's age, intelligence level and age-appropriate education. The current version relies less on this discrepancy and more on contextual factors. The affected academic skills must be substantially and quantifiably below those expected for the individual's chronological age. Further, to receive a diagnosis, the difficulties must not be due to:

- intellectual disabilities
- external factors, such as economic or environmental disadvantage or lack of instruction
- vision or hearing problems, a neurological condition (e.g., pediatric stroke) or motor disorders
- limited English language proficiency

5. What evidence-based interventions specific to learning disorders in reading, written expression or mathematics are being used by the District?

If formal diagnosis identifies a specific learning disability in one or more areas of learning, then specialized and individualized strategies are recommended by the specialist(s) who completed the standardized assessment. Developmental recommendations are provided by the psychologist and specific literacy and numeracy based strategies are provided by the Reading Specialist. These recommendations would be provided in both a written and verbal form through the school/parents de-briefing meeting. Recommendations are always intended to enhance the classroom setting and strategies or processes are delivered by school personnel. Following the assessment process, short-term classroom consultation/follow-up is available if required.

Support does not necessarily end with the completion of an assessment process. At any other time, upon referral, Inclusive Learning consultants can provide classroom consultation to further assist teachers in implementing assessment recommendations as need arises. In addition support for universal and targeted interventions for literacy and/or numeracy skills can be accessed through our Curriculum and Resources Support unit.

The District also offers specialized programming for students diagnosed with a learning disability (Code 54) through Strategies classrooms. The goal of instruction in these classrooms is designed to assist students in developing strategies that support their unique learning needs. Classrooms are smaller and lessons are supported with visual aids, concrete examples and hands-on activities.

There are currently 20 schools across the District that offer Strategies programming with a total 705 students (Code 54) enrolled. As one example of specialized programming, the Academy at King Edward (AKE) provides Strategies programming for students (Code 54) in Grade 2 through 9 at their Strathcona location and Grades 10 to 12 at their Victoria High School and McNally High School locations. Staff new to this school are provided with training in the area of instruction for students with learning disabilities in the form of a yearly Boot Camp. Topics covered include an understanding of the various types of learning disabilities, assessment protocols, instructional strategies, a memory workshop, Individual Program Plan (IPP) development and the use of assistive technology for learning.

AKE provides weekly coaching sessions in the areas of literacy and numeracy through in-house Literacy and Numeracy coaches. Staff attend professional learning both within and outside of the District. An online training module for teachers is being developed for teachers to complete on a yearly basis as a refresher.

Many staff at AKE receive additional specialized training in such interventions as the Lindamood-Bell programming for Reading and Comprehension, Empower Reading and Orton-Gillingham Training. Some staff possess the credentials to administer specialized diagnostic assessments that can further inform programming and support for students.

6. How do students and parents access these resources?

There are many points of entry into the learning and identification process for parents. They are always encouraged to work closely with school personnel to access supports or information about identification processes. Parents are also an integral part of the Inclusive Learning specialized assessment process from providing information to the psychologist to participating in debriefing meetings with school staff. Many specialized strategies, recommendations and resources are shared at this time that can be implemented in multiple settings, including the home.

Parents can access additional resources and supports for their children, such as camps and social groups, through the Learning Disabilities Association of Alberta—Edmonton Chapter.

### KEY POINTS

- As of January 9, 2018 there are 3,664 students in the District with Code 54, learning disability assigned to them.
- Schools complete a variety of screening measures, assessments and inventories to identify student learning needs.
- Schools and parents work collaboratively to discuss any learning concerns and if they suspect that a student may have a learning disability, District processes are in place to assist in formal identification.
- Specialized assessment is completed by a Psychologist and usually a Reading Specialist who provide an interpretation of results and recommendations in both written and verbal form through the school/parent de-briefing meeting.
- The District offers Strategies programming, specifically for students assigned Code 54, in 20 schools.
- There are many points of entry into the learning and identification process for parents.

### ATTACHMENTS and APPENDICES

N/A

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