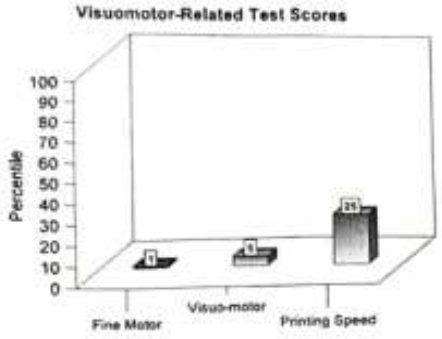
- *Visual-motor/organization skills* (a task involving the copy of a large geometric design): Borderline range, 5th percentile.

- *Printing speed* (a task involving printing small unfamiliar symbols quickly): Average range, 25th percentile.



Jesse showed relative difficulty with fine-motor skills and printing speed, which can be expected to affect both the neatness and speed of his written output. His difficulties on these tests are consistent with a diagnosis of *dysgraphia* (which is likely due to Jesse's Myasthenia Gravis), which is a deficiency in the ability to write, primarily in terms of handwriting. Students with dysgraphia can often write on some level and may experience difficulty with other fine motor skills, such as tying shoes. However, dysgraphia does not affect all fine motor skills. Nonetheless, students with dysgraphia often have unusual difficulty with handwriting, which in turn causes writing fatigue.

SUMMARY AND SYNTHESIS:

The first set of test results, or academic achievement results answered the question regarding what areas is struggling with academically, and what areas he is not. To begin, Jesse performed very well in the area of reading comprehension with a score at the 92nd percentile. In contrast, all other scores involving reading, written language, and math were statistically significantly lower than his Verbal Comprehension Index. This indicates that Jesse could be considered as having a Global Learning Disability, which was also the case when he was tested in 2003 and 2009. In addition, the pattern of results suggest that Jesse has a form of dyslexia that could be characterized as *Dysphonetic Dyslexia*, which involves a difficulty using a phonological route in bridging letters and sounds (phoneme/grapheme relationships). Dyslexia affects Jesse's sight reading and spelling equally.

In addition to meeting the BC Ministry of Education requirements for having a learning disability, Jesse also fully qualifies for a **DSM-5** (American Psychological Association, 2013) diagnosis of *Specific Learning Disorder with Impairment in Written Expression, Reading, and Mathematics.* Specifically, he meets the criteria by virtue of having difficulty with spelling, reading accuracy, and math; the difficulties are substantially and quantifiably below those expected for his age, cause significant interference with academic performance, the difficulties began during school age years, and are not better accounted for by other factors (e.g., an intellectual disability or neurological

disorder).

Now that we know "what" Jesse may at times have difficulty with, we can turn to further test results to consider the reasons "why". As mentioned at the beginning of this report, sometimes students have academic difficulties because their reasoning/intellectual skills are below average. This is clearly not the case for Jesse, who showed many cognitive strengths, with several scores in the Average to Superior range:

- verbal comprehension/reasoning (95th percentile)
- nonverbal comprehension/reasoning (70th percentile)
- verbal abstract reasoning (i.e., ability to categorize information, see the "bigger picture"; 84th percentile)
- expressive vocabulary (84th percentile)
- receptive vocabulary (53rd percentile)
- word fluency (68th percentile)
- visual scanning speed (37th percentile)
- visual-motor skills (i.e., working with the hands to construct things; 50th percentile)
- general fund of knowledge (99th percentile)
- verbal memory (Index at the 27th percentile)

- Given that reasoning/intelligence issues are not an explanation for Jesse's reported academic difficulties, we can now explore the role that "*cognitive processes*" play. Jesse showed relative difficulty with the following:

  - visual-motor integration skills (i.e., drawing/copying skills; 5th percentile)
  - visual memory (Index at the .4th percentile)
  - fine motor skills (<1st percentile)

- The above processing difficulties are related to dyslexia and dysgraphia, which in turn may be expected to affect (the "when" and "where" of the problem), spelling, printing speed, and handwriting quality. These, in turn, affect written language composition. Math is affected as well.

Now that we have identified *what* 's areas of relative academic weakness are, *why* he has difficulty in the areas that he does, and *when* and *where* these difficulties express themselves, we can now turn to a discussion as to *how* we can help adapt to his areas of weakness and capitalize on his areas of strength.

RECOMMENDATIONS

Every student is unique and those with learning challenges are no exception. Consequently, there is no "one-size fits all" remedial approach or specific program that will be guaranteed to work.