

**Access to Medical Education for Students with Learning Disabilities**

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## INTRODUCTION

The term “learning disability” is a broad category of disorders that affect approximately 10% of the general population (range 3-17%).<sup>1</sup> The manifestations of learning disorders are characterized by difficulties with the acquisition and use of information presented orally, visually, or both.<sup>2</sup> Particularly relevant to medical education, researchers have found that learning disorders affect up to 3% of all medical students.<sup>1</sup>

These disorders have unclear etiologies but it is presumed that they are caused by a central nervous system dysfunction. They have the potential to occur across the lifespan and typically present with noticeable changes on diagnostic imaging, such as computed tomography (CT) and magnetic resonance imaging (MRI).<sup>2</sup>

For the purpose of this paper, NOSMSS will adhere to the definition of learning disorder as defined by the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV):

*Learning Disorders are diagnosed when the individual's achievement on individually administered, standardized tests in reading, mathematics, or written expression is substantially below that expected for age, schooling, and level of intelligence. The learning problems significantly interfere with academic achievement or activities of daily living that require reading, mathematical, or writing skills.*

## PRINCIPLES

### PRINCIPLE ONE

Access to education in Ontario is equal for all individuals including those afflicted with a disability. Such individuals also have the right to accommodation.

The Ontario Human Rights Commission has published two papers particularly relevant to this discussion and they were used as consultation papers for this position statement. Namely, the “Education and Disability: Human Rights Issues in Ontario’s Education System” as well as the “Policy and Guidelines on Disability and the Duty to Accommodate”, stipulate that individuals afflicted with a disability have the right to access post-secondary education and to receive appropriate accommodations to ensure their success. Their success is defined by the ability to perform the tasks and duties expected of them upon completion of the program of study (with or without accommodations).

### PRINCIPLE TWO

Learning disorders do not correlate with ability to perform or to achieve success, or with level of intelligence.

According to a study conducted by Grantham and Endicott<sup>3</sup>, approximately 50% of students with

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<sup>1</sup> Rosebraugh, C.J. (2000). *Learning disabilities and medical schools*. Medical Education: 34, pg 994-1000.

<sup>2</sup> Faigel, H.C. (1992). *Services for students with learning disabilities in U.S. and Canadian medical schools*. Academic Medicine: 67 (5), pg 338-339.

<sup>3</sup> Grantham, S. & Endicott, K. (1995). *Learning, taking disabilities seriously means redefining how students get an education*. Dartmouth Alumni Magazine. May pg 28-33.

learning disorders are not identified until their senior years in post-secondary education. And while the public perception of students who under-perform on standardized tests are that these students either do not put in the effort to study or just do not have the abilities to succeed, these same students are found to have superior abilities; showing better performance on IQ testing as well as SAT scores.

*PRINCIPLE THREE*

In 2003-2004, the Council of Ontario Faculties of Medicine (COFM) agreed to implement the policy “Essential Skills and Abilities Required for the Study of Medicine”.

The Council of Ontario Faculties of Medicine identified technical standards that a student must meet in order to study medicine, including skills in: observation, communication, motor, intellectual-conceptual, integrative and quantitative abilities, and behavioural and social attributes. Notably, the implementation strategy indicates a commitment to reasonable accommodation that will assist a student to meet the standards.<sup>4</sup>

*PRINCIPLE FOUR*

Accommodation strategies have been developed and shown to improve the success of medical students with learning disorders

In 1997, 71 out of 105 schools throughout the United States and Canada had support programs for medical students with disabilities. These strategies for success included: curriculum exemptions, alternative courses, decelerated curriculum, tutoring, untimed tests, prepared outlines, video-recorded lectures/demonstrations, computer-assisted learning, notetakers and others.<sup>5</sup>

## CONCERNS

*CONCERN ONE*

Individuals have the ability to progress as far as medical school without the diagnosis of a learning disorder.

Walters and Croen<sup>6</sup> suggest that numerous students have the ability to successfully complete undergraduate coursework without becoming aware of a learning disorder. It is not until they encounter the medical school curriculum, which requires a larger volume of work and faster pace of material, and suddenly an underlying learning disorder is finally exposed.

As a result, students admitted and enrolling into medical school have the potential of facing new challenges related to previously unidentified learning disorders that will impact on their academic success, as well as their personal life, which inevitably causes additional stress on these vulnerable students.

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<sup>4</sup> [www.ouac.on.ca/omsas/](http://www.ouac.on.ca/omsas/)

<sup>5</sup> Faigel, H.C. (1998). Changes in services for students with learning disabilities in U.S. and Canadian medical schools 1991-1997. *Academic Medicine*: 73 (12), pg 1290-1293.

<sup>6</sup> Walters, J.A. & Croen, L.G. (1993). An approach to meeting the needs of medical students with learning disabilities. *Teaching Learning Med*: 5 (1), pg 29-35.

*CONCERN TWO*

The Northern Ontario School of Medicine utilizes a self-directed teaching model that is unfamiliar to most students.

The self-directed approach along with the increased workload associated with our medical curriculum is likely to surpass previous educational challenges faced by the majority of the students enrolled in the Undergraduate Medical Education program. As a result, these students can experience new learning disabilities that had previously been compensated for by other mechanisms. Yet, due to the additional curriculum demands, these students are no longer able to adequately compensate and suddenly a masked disorder becomes apparent.

*CONCERN THREE*

The needs of medical students with learning disorders are not properly addressed in a number of medical schools.

According to Faigel<sup>5</sup>, a number of schools in the United States and Canada have measures in place to accommodate student with learning disorders; sadly, 37% of medical schools remain without proper programs or avenues to address this issue – including both assessment of learning disorders and provision of appropriate, individualized accommodations.

**RECOMMENDATIONS**

*RECOMMENDATION ONE*

Encourage medical school applicants to provide early disclosure of known learning disorders in order to improve assessment and accommodation strategies, and to meet their needs in a timely fashion.

By encouraging self-disclosure of a known learning disorder, the medical applicant or medical student will be able to benefit from assessment and accommodation measures that will improve his or her success in the program of study. It will also promote a reduction in the stigmatization associated with learning disorders and influence other students who potentially have learning disorders.

*RECOMMENDATION TWO*

Ensure proper diagnosis and documentation of learning disorders in medical students.

Rosebraugh<sup>1</sup> recommends a number of steps to ensure that medical students are properly evaluated for a learning disorder, including: (1) the qualifications of the evaluator; (2) the most current documentation; and (3) the appropriate clinical evaluation and evidence to establish a rationale supporting the need for accommodation.

Given the sensitive nature of any diagnosis, student confidentiality must be respected.

*RECOMMENDATION THREE*

Designate personnel to ensure the needs of the learning-disabled medical students are identified, assessed, and followed as well as facilitate the provision of services and resources to accommodate their needs.

Faigel<sup>5</sup> indicated that the majority of schools who offer accommodation programs for medical students with learning disorders do so via the office of Student Affairs or the department of

Undergraduate Medical Education. Some schools make use of other units to ensure the delivery of such services to their medical students. The personnel involved must have appropriate understanding of the relevant legislation surrounding this issue and the modalities and services that exist to address the needs of medical students with learning disorders.

*RECOMMENDATION FOUR*

Develop policies and procedures to address the needs of applicants with a learning disorder wishing to be accommodated, presently enrolled students with confirmed learning disorders requesting accommodations, and students who believe they may have a previously undiagnosed learning disorder and request assessment and accommodation.

This policy should be readily available to applicants and current students in order to promote disclosure and proactive steps in obtaining accommodations.

*RECOMMENDATION FIVE*

Employ strategies and modalities proven to be effective with other medical students afflicted with learning disorders

A number of strategies have been developed in other circumstances and in other schools to accommodate medical students with learning disorders. The most common and successful strategies include tutoring and untimed tests<sup>5</sup> Students must be able to access individual accommodation plans, and these strategies should be evaluated and reassessed throughout the journey of the medical student through the MD program. Compatibility with the Undergraduate Medical Education program should be assessed for implementation purposes.