West ARC Proposal: Social Communications Classroom for Middle and High School Asperger Syndrome, NVLD and Similar Youth

May 31, 2011

We are proposing to establish a Hamilton-Wentworth District School Board (HWDSB) Social Communications Program for youth with complex needs which could include Aspergers Syndrome, Non-Verbal Learning Disorder (NVLD), High Functioning Autism Spectrum Disorder (HF-ASD) or similar conditions, but who are doing grade level work and are university and/or college bound. Many of these youth simultaneously face issues with anxiety and depression. Furthermore, some of these youth may also have ADHD, OCD, Tourette's, Sensory Issues, whether formally diagnosed or not, which would make the social, academic and emotional factors of high school life increasingly difficult to deal with. This program should not be restricted to official diagnosises, as Aspergers Syndrome, High Functioning Autism Spectrum Disorder, Pervasive Development Disorder and Non Verbal Learning Disorder are all under-diagnosed for numerous reasons.

We are proposing that the HWDSB implement a three year middle-school and a five-year high school for this cohort of youth. In both programs, the model would involve the students generally taking three academic courses each term plus a Social Communications Class. The program would be designed to be a continuous middle school and high school paired program; one pair for each of the three HWDSB clusters, including Cluster West. It is important the paired program be housed in natural neighbourhood-progression schools to facilitate on-going relationships with neurotypical classmates. The HWDSB may wish to begin with a pilot version of the program in a pair-location to be determined, given space allocations, staffing, high needs and other considerations. Possibly, the program could be placed at an International Baccalaureate (IB) Diploma Program school. Currently, there is no specifically designed program for this cohort. We are only aware of programs for moderate and lower functioning Autism youth and like conditions.

Ultimately, the program would have 6-8 students in each class from Grade 6-8 in middle school, as well as in years 1-5 of the high school program. To staff the program at the middle school level, the program would need one and a half teachers plus two child and youth workers/teaching assistants (for Grade 6-9 combined). At the middle school level, the class would teach the students' core subjects, as well as support the students' social communication needs. At the high school level, we propose two teachers and four child and youth workers/teaching assistants (for years 1-5 of the high school cohort combined). This class would support all academic course work, as well as the students' social communication needs.

For each age group, the social communication classroom period acts as a place and time where the youth may discuss and expand whatever they need to discuss/digest that day or week (e.g., sexuality, dating, parents, employment); or, if there is no pressing need, the teacher and child and youth workers/teaching assistants can provide the extra support and skill learning to achieve success in their coursework. If the students choose not to eat in the cafeteria, they are free to eat in their physical classroom (all four age groupings). Additionally, the classroom could be used as a space where a student from one age group could retreat if need be during the day; even if it is a different age

group's class time. Furthermore, the teacher and child and youth workers/teaching assistants are there as a resource for the academic course-load teachers.

Models of this program already exist in multiple boards in Ontario offering varying degrees of support. Models, that we are aware of, include:

Peel District School Board (PDSB)
Duffern-Peel Catholic District School Board (DPCDSB)
Thames Valley District School Board District School Board (TVDSB)
Toronto District School Board (TDSB)
Toronto Catholic District School Board (TCDSB)
York Region District School Board (YRDSB)
Hamilton-Wentworth Catholic District School Board (HWCDSB)

The "Transition Program" offered at the PDSB most closely mirrors what we are proposing. At the high school level, currently eleven high schools offer programs for this cohort and they are looking to add more. Five of these schools are for youth who are hoping to go on to university while the other six are for less academically inclined youth. Both types of high school programs have 1 ¾ teachers and four child and youth workers/teaching assistants assigned to four age groups and the lunch period over the course of the day. As an illustration, Streetsville Secondary School (academic stream) has 20 students total this year and in the past has had up to 28. Both the academic stream and the applied stream allow for flexibility for some youth to stay up to 21 years of age, as there may be a cohort within the group whose anxiety is too high for them to carry a three classes per year academic/applied/apprentice course-load. Students enrolled in the more academic stream typically complete their requirements in five years.

At the PDSB middle school level, they offer all sorts of placements, but specifically for this cohort: they offer a number of classes throughout their region where they have one teacher and two child and youth workers/teaching assistants for 8 youth.

Below, is a description of some of the ways in which the PDSB "Transitions" program operates.

Peel District School Board's High School and Middle School Transition Program (created in 1999)

"Because AS students learn and process information in a manner generally incompatible with the way it's usually presented in class, they need a reduced course load. AS students tend to lack general high-level thinking and problem-solving skills and have difficulty with recall related to problem solving.

The reduced load lets them spend time in the integrated classroom to interact with other students and learn the regular curriculum, often at the academic level. It also lets them return to the home-base class to get extra help through reteaching, breaking down assignments into manageable pieces, having deadlines extended and having access to computers or scribes.

Wherever possible, efforts are made to match AS students with teachers who have a teaching style and personality that supports their learning style. Another benefit of a reduced course load is that the maturity level of these students is about two-thirds of their chronological age, so it makes little sense to rush them through high school.

Homework is often a major problem. School is already stressful, and if they take the stress from school home with them as homework, their family life can become even more difficult. AS students need time during the day to do homework.

Perhaps the biggest benefit of the Peel program is that these kids are succeeding and even enjoying school, many for the first time, and they are doing so in a traditionally inflexible learning environment-the local high school. According to Richard Hales, head of the Peel District School Board's innovative Asperger's program, the key to their success is ensuring the "maximum flexibility for students who tend to be rigidly inflexible. For many teachers, this has required a significant paradigm shift, but this is the foundation of the program and it's working."

The Middle School Transition Program at David Leeder Middle School in Mississauga follows the same approach as the secondary school program and focuses on preparing the AS students academically and socially for the transition from elementary to secondary school.

The contained class of eight students, taught by one teacher with two teaching assistants, works on priming the children for the work, routine and stresses of the regular classroom. Students spend about 35 per cent of their time here each day, preparing for what they will learn in their classes, which helps reduce their anxiety. They also learn social skills, like sharing, dealing with obstacles and interacting with other children, both in the classroom and on the playground. They are excused from gym classes, as open spaces cause tremendous anxiety.

According to Hales, putting the AS students in one location has allowed a peer group to develop. The students in the Peel program, who were socially marginalized in their previous schools, have also gradually developed friendships with mainstream students. For some AS students, it's the first time in a long time they have been invited to parties (the invitations tend to stop coming early in the elementary years). These friendships also reinforce their academic success, as the students are more eager to attend school so they can have fun with their friends. Hales says, "The increased enjoyment of the overall school experience has resulted in reduced levels of stress and anxiety, fewer meltdowns and a more relaxed approach to academic tasks."

Hales views students with AS from several perspectives. He has a 13-year-old son with Asperger's in another board, and as the pervasive development disorder (PDD)/autism itinerant in Peel, he can compare the progress of students in the Peel Region transition programs with that of AS students in various other settings. He says, "I can say with confidence that the approach taken in the Peel program is the best. It balances mainstream integration with intensive smaller group support, and this has allowed students to achieve academic success while reducing stress and anxiety." "¹

This cohort of youth is susceptible to a number of mental health co-morbidities and a program as described above would generally be more able to support these youth than full inclusion with little or no direct support. "Some children develop depression and anxiety as they get older, possibly because they start to understand that they are being teased or rejected. Anxiety tends to be more long lasting than depression." "It appears that those who present with psychiatric disorders are the children who have better communication skills, specifically language comprehension. It seems that the better the language, the more likely the teenager will experience an anxiety disorder or depression. It could be because children with better language have a better understanding of social-

emotional situations and this greater insight leads to depression."³ Studies within the last fifteen years report rates of co-morbid mental health disorders from 40-60%, 67%, 70.8% and between 93.3% in HF-ASD and 100% in Aspergers.^{4 5 6 7} Studies have shown that Asperger's individuals are at even greater risk than HF-ASD for depressive disorders and ADHD, though both have high rates.⁸ In fact, "those most at risk for co-morbidity of challenging behaviours and psychiatric illness are those with better cognitive and language skills, and Asperger individuals with co-morbidities outnumber HF-ASD individuals with co-morbidities."⁹ Clearly, this cohort is very prone to co-morbid conditions; an implementation of a program such as we are proposing can help the board support these students' needs.

Youth diagnosed with Asperger's are also at risk in multiple areas, besides mental health co-morbidities, including:

- "Poor school performance, attendance or drop-out
- Failure to transition successfully to post-secondary education
- Problems with the law and inappropriate behaviour
- Social isolation and development of unhealthy relationships
- Physical and emotional bullying and other forms of victimization
- Poor organizational and life skills
- Unemployment or under-employment" 10

Supporting these youth must be a priority, as this cohort has difficulties in adulthood in terms of independent living and employment and the crucial ingredient for success is the appropriate supports early on. Professor Peter Szatmari (Chedoke Health Chair in Child Psychiatry at McMaster University) notes "Current supports are more important than childhood predictors, as there is little or no predictive ability for those with IQ>70." Implementing a program of this type will give the board a way to support the multiple areas of risk that these students present.

The needs of this cohort are not going away. Rates of ASD are increasing 10-17 percent annually 12 for numerous reasons from better diagnosing and awareness to increasing environmental triggers. 13 14 15 "There has been an increase in the percentage of children with AS/PDDNOS, resulting in an increasingly greater proportion of individuals with a typical IQ vs. ID (Intellectual Delay). As Canada has invested in early intervention in childhood, this will increase the IQ/Language profiles of those with ASD. However, early intervention is not sufficient to address the needs of young adults; predictors of childhood outcome are NOT the same predictors of adult outcome. 16 A program, such as we are proposing, will allow the HWDSB to support this growing cohort.

AS & PDDNOS comprise the largest component of the ASD population¹⁷ and are the target of this proposal. Other boards of similar size have implemented programs such as this with great success. We believe that in HWDSB we have the numbers to make this program viable. We are familiar with many parents and students at three elementary schools and two middle schools that feed in to one of the HWDSB West High School ARC high schools. Informally, we know of approximately 20 children between Grade 1 and Grade 8 among those three elementary and two middle schools that would benefit from this program supporting this type of higher functioning spectrum student (or, approximately, 2-3 children per grade across these schools). Assuming that these rates hold throughout the West Cluster (and the other two clusters), there would certainly be

enough students. The members of our delegation outside of this particular high school's bounds are in similar situations and can all report the same informal rates and needs. Add in students outside of the board, who are pursuing other school options, the population increases even further.

Currently, this cohort is under-served in our board. Many youth leave our system to attend private special needs schools, including: TALC Academy, Woodview Learning Centre, Wildwood Academy, The Pine School, Missing Links Academy, Colin Macdonald Community School and Chisholm Academy High School. Many others are enrolled in various independent and religious schools in the greater Hamilton region, as well as the greater Halton region. In addition, many other youth switch to the Hamilton-Wentworth Catholic District School Board, especially at the high school level. Many leave mainstream education completely and opt for homeschooling. By offering an appropriate program for these youth, the HWDSB would help to stop the attrition out of the board and potentially even reverse the flow.

Such a program would be in-line with the HWDSB's Core Commitments:18

- Vision all students achieving their full potential
- Mission Providing relevant, responsive education so that each student becomes a life-long learner and contributing citizen in a diverse world
- Values Respect, Creativity, Excellence and Citizenship

Additionally the program would be in-line with the Special Education Department's commitment "to providing appropriate educational opportunities for improved student learning for all students" and with the Board's endeavors "to meet the needs of all special education students in the most enabling environment, in accordance with parental preference." This program also has the advantage of being proposed during the ARC process²¹ and fits in perfectly with the Board's Learning for All: HWDS Program Strategy.

"Our Program Strategy is rethinking the way we offer programs and facilities, so that we can best meet the needs of each of our students in the 21st century. We want students to have choice, support and direction as they benefit from the knowledge and skills acquired from their educational program. We are restructuring what we offer, where we offer it and how we can help all students achieve their full potential. We know today's learners require new approaches, and that we must respond with engaging programs and safe, nurturing and innovative learning environments.

We envision a school system in which all students can find what they need at any of our schools. A place where the placement of programs, supports and facilities makes strategic sense. A place where students feel safe, welcome, included and energized as they are moving closer to their goals. This is about providing a pathway to success for every single one of our students."²²

Specifically, this program would be accommodated under Tier 3 of the Board's Learning for All: HWDS Program Strategy, "Students with mental health, anxiety, and/or behavioural needs and students with socio-communication disorders." 23

We wholeheartedly agree with Autism Ontario's statement in Autism Ontario's Education Policies 2007, but would like to highlight two specifically: #3, "Education for students with ASD includes not only programming for an academic curriculum, but also programming

to address the communication, social skills and behavioural challenges associated with ASD, while leveraging student strengths."²⁴ And most significantly, #5, "Students with ASD have access to a range of placement options based on individualized student needs, regardless of geographical location. This will include all ranges from full inclusion to full segregation at all school boards."²⁵ The program we're advocating incorporates lessons from both the inclusion and segregation models.

Hamilton is fortunate to have many experts in relevant fields in our community at McMaster University, Chedoke Hospital, The Offord Centre for Child Studies and Mohawk College, Brock University and Woodview Mental Health and Autism Services; all of whom may be of consulted in setting up this program.

It is proposed that a trial paired program for the HWDSB be implemented in Cluster West in the 2012-2013 school year, with a simultaneous start for both the middle and high school programs. Quickly followed by expansion of a second academic, three year (middle school) and five year (high school) program pair in the next cluster. While, simultaneously, initiating a trial for a similar program pair for the applied, three year (middle school) and seven year (high school) program stream. Ultimately, the goal would be to offer, at least, two program pairs per cluster for youth of this nature; one pair per cluster for the academic stream, as well as another program pair for the applied stream. Following the PDSB model, housing the applied and the academic program at the same school may not be optimal. Where necessary, the youth may need to be bussed in. As per funding, we cannot comment on the direct cost per fiscal year, as we do not have that data. Perhaps, this data could be collected at the Board level from PDSB colleagues.

"The protective influence of a positive high school experience for these students cannot be underestimated. Teachers and school communities can play an essential role in recognizing and addressing not only the academic needs of these youth, but also their social and emotional needs. Attention to work skills and life skills are a vital aspect of the curriculum for this population and are thought to increase their resilience and adaption to adult life. We have witnessed the results of a positive high school experience that sets these youth on a positive course into adulthood, but unfortunately, this is not the experience for many." By creating a supportive and appropriate program for these youth is not only protective to their mental health and self-reliance skills, but it is crucial for this cohort's future adulthood. Certainly, our delegation would be happy to assist in anyway possible.

¹ Miller, Leanne, "Asperger's syndrome: the invisible disability", *Professionally Speaking: The Magazine of the Ontario College of Teachers*, Dec. 2002, http://professionallyspeaking.oct.ca/december-2002/aps.asp>

² CAIRN, Canadian Autism Intervention Research Network, "Developmental Trajectories Among Children with Pervasive Developmental Disorders: Summary of Findings from a Follow-Up Study of Children with Autism and Asperger Disorders", n.d., http://www.cairn-site.com/en/print/documents/articles/follow_print.html ³ Ibid.

⁴ Szatmari, P., Stages of Autism: Adolescence & Beyond, 3rd Biennial Conference, (April 20, 2010, 2:40 pm – 3:40 pm Special Presentation & Closing remarks),

Variation in the Outcome of ASD; Implications for Public Policy http://www.woodview.ca/wp-content/uploads/Special-Presentation-Dr.-Peter-Szatmari.pdf

- ⁵ Simonoff, E., Pickles, A.C., Chandler, S., Loucas, T., & Bird, G., (2008), Psychiatric disorders in children with autism spectrum disorders; prevalence, co-morbidity, and associated factors in a population-derived sample, *Journal of the American Academy of Child and Adolescent Psychiatry*, 47, 921-929.
- ⁶ Ghaziuddin, M., Weidmer-Mikhail, E. & Ghaziuddin, N., (1998), Co-morbidity of Asperger Syndrome: A preliminary report, *Journal of Intellectual Disability Research*, 42, 279-283.
- ⁷ Mukaddes, N.M., Herguner, S. & Tanidir, C., (2010), Psychiatric disorders in individuals with high-functioning autism and Asperger's disorder: similarities and differences, *World Journal of Biological Psychiatry*, 8, 964-971.

 ⁸ Ibid.
- ⁹ Szatmari, P., Stages of Autism: Adolescence & Beyond, 3rd Biennial Conference, (April 20, 2010, 2:40 pm 3:40 pm Special Presentation & Closing remarks), Variation in the Outcome of ASD; Implications for Public Policy http://www.woodview.ca/wp-content/uploads/Special-Presentation-Dr.-Peter-Szatmari.pdf>
- ¹⁰ Sotddart, K., PhD., High School Students with Asperger Syndrome: Are the Youth at Risk? *Autism Matters, A Publication of Autism Ontario, Fall 2009, vol. 6, no. 2,* Page 22 <

http://www.autismontario.com/Client/ASO/AO.nsf/object/AM+Fall+2009/\$file/AM+Fall+2009.pdf >

- ¹¹ Szatmari, P., Stages of Autism: Adolescence & Beyond, 3rd Biennial Conference, (April 20, 2010, 2:40 pm 3:40 pm Special Presentation & Closing remarks), Variation in the Outcome of ASD; Implications for Public Policy http://www.woodview.ca/wp-content/uploads/Special-Presentation-Dr.-Peter-Szatmari.pdf>
- ¹² Autism Speaks, "What is Autism?: How Common is Autism, What Causes Autism, n.d., http://www.autismspeaks.org/whatisit/index.php
- ¹³ Autism Speaks, "What is Autism?: How Common is Autism, What Causes Autism, n.d., http://www.autismspeaks.org/whatisit/index.php
- ¹⁴ Hertz-Picciotto I., Delwiche L., (2009), The rise in autism and the role of age at diagnosis, *Epidemiology*, 2009 Jan;20(1):84-90.
- ¹⁵ UC Davis Health System, "UC Davis M.I.N.D. Institute study shows California's autism increase not due to better counting, diagnosis", 2009, < http://www.ucdmc.ucdavis.edu/welcome/features/20090218_autism_environment/>
- ¹⁶ Szatmari, P., Stages of Autism: Adolescence & Beyond, 3rd Biennial Conference, (April 20, 2010, 2:40 pm 3:40 pm Special Presentation & Closing remarks), Variation in the Outcome of ASD; Implications for Public Policy http://www.woodview.ca/wp-content/uploads/Special-Presentation-Dr.-Peter-Szatmari.pdf>

¹⁷ Ibid.

- http://www.hwdsb.on.ca/staff/strategic_directions/learning-for-all/
- ²³ Hamilton-Wentworth District School Board, Learning for All: HWDSB Program Strategy, Page 17, n.d.,
- http://www.hwdsb.on.ca/staff/strategic_directions/learning-for-all/documents/Program-Strategy.pdf
- ²⁴ Autism Ontario, Educational Policies, Approved by the Board of Directors: January 2007, Global Education Vision for Autism Ontario,
- http://www.autismontario.com/Client/ASO/AO.nsf/object/Autism+Ontario+Education+Policies+2007.pdf ation+Policies+2007/\$file/Autism+Ontario+Education+Policies+2007.pdf
- ²⁶ Sotddart, K., PhD., High School Students with Asperger Syndrome: Are the Youth at Risk? *Autism Matters, A Publication of Autism Ontario, Fall 2009, vol. 6, no. 2,* Page 22 <

http://www.autismontario.com/Client/ASO/AO.nsf/object/AM+Fall+2009/\$file/A M+Fall+2009.pdf>

¹⁸ Hamilton-Wentworth District School Board, About us @ HWDSB, About HWDSB, n.d.,http://www.hwdsb.on.ca/aboutus/

¹⁹ Hamilton-Wentworth District School Board, Programs @ HWDSB, Special Education/Student Services, n.d., http://www.hwdsb.on.ca/programs/specialed/
²⁰ Ibid.

²¹ Hamilton-Wentworth District School Board, Secondary Accommodation Review Committee, n.d., http://www.hwdsb.on.ca/arc/

²² Hamilton-Wentworth District School Board, Staff @ HWDSB, Strategic Directions, Learning for All: HWDSB Program Strategy, n.d.,