

**Date of Issue:** May 17, 2007

**Effective:** Until revoked or modified

**Subject:** INCORPORATING METHODS OF APPLIED BEHAVIOUR ANALYSIS (ABA) INTO PROGRAMS FOR STUDENTS WITH AUTISM SPECTRUM DISORDERS (ASD)

**Application:** Directors of Education  
Secretary Treasurers and Supervisory Officers of School Authorities  
Director of the Provincial Schools Branch  
Superintendents of Schools  
Superintendent of Centre Jules-Léger  
Principals of Elementary Schools  
Principals of Secondary Schools  
Principals of Provincial and Demonstration Schools  
Principals of Section 68 Schools

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## PURPOSE

The purpose of this memorandum is to provide direction to school boards<sup>1</sup> to support their use of applied behaviour analysis (ABA) as an effective instructional approach in the education of many students with autism spectrum disorders (ASD).<sup>2</sup> This memorandum establishes a policy framework to support incorporation of ABA methods into school boards' practices. The use of ABA instructional approaches may also be effective for students with other special education needs.

This memorandum has been informed by recommendations of the Report of the Minister's Autism Spectrum Disorders Reference Group.<sup>3</sup> This group was established in 2006 at the joint invitation of the Minister of Education and the Minister of Children and Youth Services to provide both ministers with advice on effective, evidence-based educational practices to meet the wide range of needs of students with ASD.

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1. In this document, *school board(s)* and *board(s)* refer to district school boards and school authorities.

2. The term *autism spectrum disorders (ASD)* describes "a subset of the Pervasive Developmental Disorders (PDDs) currently outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). These disorders share three common areas of concern: qualitative impairments in social skills; qualitative impairments in verbal and non-verbal communication; restricted and repetitive interests or behaviours. When using the term ASD, most professionals are referring to the subset of PDDs that includes Autistic Disorder (usually referred to as Autism), PDD-NOS (not otherwise specified) and Asperger's Disorder." From *Making a Difference for Students With Autism Spectrum Disorders in Ontario Schools: From Evidence to Action*, Report of the Ministers' Autism Spectrum Disorders Reference Group to the Minister of Education and Minister of Children and Youth Services, February 2007, p. 63.

3. Ibid.

This memorandum is intended to strengthen collaborative working relationships between parents,<sup>4</sup> schools, and the community. This collaboration is *essential* for supporting positive learning for students with ASD. An example of such collaboration is the development of an Individual Education Plan (IEP) for a student.

## BACKGROUND

The direction provided in this memorandum builds on suggestions for successful practice provided in the Ministry of Education's documents entitled *Special Education: A Guide for Educators, 2001* and *Individual Education Plans: Standards for Development, Program Planning, and Implementation, 2000*, and is consistent with the Ontario curriculum as a basis for programs for students with ASD.

This direction is also consistent with suggestions for successful practice provided in the following documents published by the Ministry of Education:

- *Special Education Transformation: The Report of the Co-Chairs With the Recommendations of the Working Table on Special Education, 2006*
- *Education for All: The Report of the Expert Panel on Literacy and Numeracy Instruction for Students With Special Education Needs, Kindergarten to Grade 6, 2005*
- *Planning Entry to School: A Resource Guide, 2005*
- *The Individual Education Plan (IEP): A Resource Guide, 2004*
- *Transition Planning: A Resource Guide, 2002*
- *The Ontario Curriculum Unit Planner: Special Education Companion, 2002*

School board staff should consult the above documents for more detailed information.

The Ministry of Children and Youth Services (MCYS) document entitled *Autism Intervention Program: Program Guidelines, 2006* provides additional information. In particular, the sections on Transition Planning and Sharing Information may provide useful information. The MCYS document entitled *A Shared Responsibility: Ontario's Policy Framework for Child and Youth Mental Health, 2006* provides additional information. Copies of these documents are available online (see page 7) or through the local MCYS office.

This memorandum is also informed by the recommendations in the *Report of the Interim Parent Involvement Advisory Board*, which was released in July 2006.

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4. In this document, *parents* refers to parent(s) and guardian(s).

## APPLIED BEHAVIOUR ANALYSIS

Applied behaviour analysis (ABA)<sup>5</sup> uses methods based on scientific principles of learning and behaviour to build useful repertoires of behaviour and reduce problematic ones. In this approach, the behaviour(s) to be changed are clearly defined and recorded. The antecedents of the undesirable behaviour(s) are analysed, as are the reinforcers that might be maintaining the undesirable behaviour(s) or that might be used to help develop adaptive behaviours.

Interventions based on behavioural principles are designed to develop appropriate behaviours. Progress is assessed and the program is altered if necessary (adapted from Perry and Condillac 2003). ABA can be used with students of every age. It can be applied in a variety of situations, and it can be used for very limited and specific purposes, such as the development or reduction of single behaviours. ABA can also be used for broader purposes, such as the development or reduction of sets of behaviour (for example, to improve relaxation skills, to teach more effective social skills, or to enhance community living skills). ABA can be used for students with ASD, and it can be used for students who have varying degrees of intensity of ASD along a learning continuum.

ABA methods can support students with ASD in a number of ways. For example, ABA methods can help a student to:

- develop positive behaviours (e.g., improve the ability to stay on task, improve social interaction);
- learn new skills (e.g., comprehensive skills, including language skills, social skills, motor skills, academic skills);
- transfer a positive behaviour or response from one situation to another (e.g., from completing assignments in a special education class to maintaining the same performance in a regular class).

ABA methods can also be used to limit the conditions under which problematic behaviours occur – for example, to modify the learning environment so that students are less likely to injure themselves.

Educators must measure an individual student's progress in the above areas by collecting and analysing data on an ongoing basis. Educators must use the data collected to determine the effectiveness of the program and to alter the program as necessary to maintain or increase a student's success. Progress should be measured in accordance with the assessment methods used in the student's program.

## REQUIREMENTS

### **1. School boards must offer students with ASD special education programs and services, including, where appropriate, special education programs using ABA methods.**

Under Regulation 181/98, principals are required to ensure that an IEP is developed for each exceptional student within thirty school days of the start of the student's placement. School boards also have the

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5. Adapted from *Making a Difference for Students With Autism Spectrum Disorders in Ontario Schools: From Evidence to Action*, Report of the Ministers' Autism Spectrum Disorders Reference Group to the Minister of Education and Minister of Children and Youth Services, February 2007, p. 62.

discretion to develop an IEP for students who have not been formally identified as exceptional. Students with ASD have a wide range of educational needs. Principals are required to ensure that ABA methods are incorporated into the IEPs of students with ASD, where appropriate.

Principals must ensure that relevant school board personnel<sup>6</sup> and community personnel<sup>7</sup> who have previously worked and/or are currently working with a student with an ASD are invited to provide input and participate in the IEP process. These personnel are able to bring other perspectives and recommendations regarding special education programs and services for students with ASD. In particular, the assessment information gathered from these personnel can benefit the IEP team in planning accurate and comprehensive interventions for the student and promote a common approach to enhance student success.

#### ***ABA Methods in Programs for Students With ASD***

Given the range of needs for students with ASD, the principal must ensure that staff developing a student's IEP consider special education program and service options that will best take into account the student's individual strengths and areas of need in the demonstration of learning. The program selected must be based on relevant assessment information that identifies the student's skills and needs, instructional level, and learning style/modalities, and must incorporate relevant ABA methods, where appropriate. Use of functional behavioural assessment<sup>8</sup> may also help to identify a student's strengths, needs, and learning environment.

When an alternative program is determined to be appropriate for a particular student with an ASD, it should, wherever possible, incorporate methods of ABA and be provided in conjunction with a program that includes accommodations as well as modified learning expectations as necessary. Alternative program areas for a student with an ASD could include, for example, behavioural, self-management, social, and communication skills.

When a student with an ASD requires accommodations and/or modified expectations, assessment and evaluation of student learning will be consistent with the strategies outlined in the student's IEP.

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6. School board personnel may include, but are not limited to, the following: principals and vice-principals; teachers; counsellors; teachers' assistants; resource teachers; educational consultants; psycho-educational consultants; Provincial School or Demonstration School personnel.

7. Community personnel may include, but are not limited to, the following: occupational therapists; physiotherapists; other medical professionals; child and youth workers; social workers; psychologists; service providers from appropriate community agencies; autism program providers.

8. Functional behavioural assessment is a systematic process used by teachers, parents, caregivers, and other professionals to: enhance students' strengths; describe problematic and challenging behaviour; identify environmental factors and setting events that have a problematic influence on behaviour or that increase the probability that the challenging behaviour will occur; and determine what factors may cause a student to maintain a challenging behaviour, and design effective and efficient behaviour support plans to reduce or eliminate the challenging behaviour.

The principal must ensure that instructional modifications/strategies are uniquely suited to each student's learning strengths and needs. The ministry plans to publish a resource guide entitled *Effective Education Practices for Students With Autism Spectrum Disorders* that will provide more detailed information on strategies.<sup>9</sup>

### ***Principles of ABA Programming***

The following principles underlie ABA programming that is provided to students with ASD, where appropriate:

- *The program must be individualized.* Each student's specific profile and pattern of strengths and needs must be analysed to determine concrete learning objectives and teaching methods. No single curriculum or teaching strategy is appropriate for all students with ASD. Some students may require more intensive programming. Although students' programs must be individualized, the various supports may be provided to students either individually or in group situations.
- *Positive reinforcement must be utilized.* Positive reinforcement techniques are often helpful to motivate students with ASD.
- *Data must be collected and analysed.* Reliable data must be collected and analysed on an ongoing basis to measure student progress in the acquisition of new behaviours and skills, and to identify skills or behaviours that need to be taught.
- *Transfer, or generalization, of skills should be emphasized.* Each student should be taught to transfer skills acquired in one context to different contexts or settings. For example, a student should be encouraged to apply a newly acquired positive behaviour in a wide variety of environments, and to learn to use a wide variety of related or similar behaviours in a variety of contexts. The ultimate goal is to enable the student to develop increasing independence.

## **2. School board staff must plan for the transition between various activities and settings involving students with ASD.**

Transition planning is an important process for all students, but especially for students with ASD. Principals are required to ensure that a plan for transition is in place for students with ASD. Transitions may include: entry to school; transition between activities and settings or classrooms; transitions between grades; moving from school to school or from an outside agency to a school; transition from elementary to secondary school; transition from secondary school to postsecondary destinations and/or the workplace.

Transition into school is of particular importance for students with ASD. Relevant ABA methods must be used to support transition, where appropriate. Students enter school from a range of settings, including the home and child-care or pre-school programs. It is essential that school board staff work with parents and community agencies to plan for a successful transition. Where a student is currently working with a community service professional, that professional should be involved with the transition process.

9. Additional resources can be found in the Resources section at the end of this memorandum.

## MONITORING AND REPORTING OF IMPLEMENTATION

School boards are encouraged to make use of a growing body of knowledge about educational practices that are effective for students with ASD. Relevant research on ASD will be posted on the ministry's website to provide information on instructional practices for students with ASD.

School boards should develop a plan to implement the policy in this memorandum, and should consult with their Special Education Advisory Committee (SEAC) regarding the implementation. School boards should also consult their SEAC regarding the monitoring of the implementation of this memorandum, at least on an annual basis.

The ministry will integrate monitoring of implementation of this memorandum into existing reporting mechanisms. The Minister's Advisory Council on Special Education, as well as members of the Ministers' Autism Spectrum Disorders Reference Group who wish to be involved, will be consulted twice a year regarding the implementation of ABA methods by school boards.

For further information, please contact the local regional office of the Ministry of Education.

## REFERENCE CITED

Perry, A., and R. Condillac. 2003. *Evidence-Based Practices for Children and Adolescents With Autism Spectrum Disorders: Review of the Literature and Practice Guide*. Toronto: Children's Mental Health Ontario.

[http://www.kidsmentalhealth.ca/professionals/evidence\\_based\\_practices.php](http://www.kidsmentalhealth.ca/professionals/evidence_based_practices.php).

## RESOURCES

### Web Links for Selected Ontario Government Publications

#### *Ministry of Education*

*Education for All: The Report of the Expert Panel on Literacy and Numeracy Instruction for Students With Special Education Needs, Kindergarten to Grade 6, 2005.*

<http://www.edu.gov.on.ca/eng/document/reports/speced/panel/speced.pdf>.

*Individual Education Plans: Standards for Development, Program Planning, and Implementation, 2000.*

<http://www.edu.gov.on.ca/eng/general/elemsec/speced/iep/iep.pdf>.

*The Individual Education Plan (IEP): A Resource Guide, 2004.*

<http://www.edu.gov.on.ca/eng/general/elemsec/speced/guide/resource/iepresguid.pdf>.

*The Ontario Curriculum Unit Planner: Special Education Companion, 2002.*

<http://www.ocup.org/resources/documents/companions/speced2002.pdf>.

*Planning Entry to School: A Resource Guide, 2005.*  
<http://www.edu.gov.on.ca/eng/parents/planningentry.pdf>.

*Special Education: A Guide for Educators, 2001.*  
<http://www.edu.gov.on.ca/eng/general/elemsec/speced/guide.html>.

*Transition Planning: A Resource Guide, 2002.*  
<http://www.edu.gov.on.ca/eng/general/elemsec/speced/transiti/transition.pdf>.

#### ***Ministry of Children and Youth Services***

*Autism Intervention Program: Program Guidelines, 2006.*  
<http://www.children.gov.on.ca/CS/en/programs/SpecialNeeds/Publications/autismGuidelines.htm>.

*A Shared Responsibility: Ontario's Policy Framework for Child and Youth Mental Health, 2006.*  
<http://www.children.gov.on.ca/CS/en/programs/SpecialNeeds/Publications/default.htm>.

#### **Additional Resources**

Alberto, P. A., and A. C. Troutman. 2006. *Applied Behaviour Analysis for Teachers*. Upper Saddle River, NJ: Pearson Prentice Hall.

Committee on Educational Interventions for Children With Autism, National Research Council. 2001. *Educating Children With Autism*. Washington, DC: National Academy Press.

Cooper, J. O., T. E. Heron, and W. L. Heward. 2006. *Applied Behavior Analysis*. 2<sup>nd</sup> ed. Columbus, OH: Prentice Hall.

Heflin, L. J., and D. F. Alaimo. 2007. *Students With Autism Spectrum Disorders: Effective Instructional Practices*. Upper Saddle River, NJ: Pearson Prentice Hall.

Simpson, R. L. 2004. *Autism Spectrum Disorders: Interventions and Treatments for Children and Youth*. Thousand Oaks, CA: Corwin Press.