Applied Behaviour Analysis (ABA) in Educational Settings

Home to School and School to Home
What is ABA?

Applied Behaviour Analysis (ABA) - The application of the science of behaviour analysis

Behaviour Analysis:

• a scientific approach using validated principles
• data driven
• changes socially significant behaviours
What is ABA?

• A clear and systematic way to:
  – describe
  – observe, and
  – measure behaviour

• Research and evidence-based

• Data-driven assessment and intervention
What is ABA?

• Individualized approach

• Changes behaviours
  – Increases new skills.
  – Decreases socially significant problem behaviours.
What is ABA?

• Focuses on:
  – increasing maintenance of new skills
  – generalization/transfer of skills
  – independence

• Is effective across a number of areas in addition to Autism Spectrum Disorders (ASD)
What is NOT ABA?

• ABA is **not** a material or tool (e.g., visual schedule, token board, etc.)

• ABA is **not** the use of ineffective strategies or methods.

• ABA is **not** only for children and youth with ASD.
What is PPM-140?

Policy/Program Memorandum No. 140:

• Incorporating methods of Applied Behaviour Analysis (ABA) into programs for students with Autism Spectrum Disorders (ASD)

• Developed by the Ontario Ministry of Education

• Released on May 17, 2007
Policy memorandums provide ‘direction’ to school districts/boards.

PPM-140 is intended to strengthen a collaboration between:

- parents
- schools
- community
PPM-140 defines ABA in the same way as the field of behaviour analysis.

• 2 ‘requirements’ are set-out in PPM-140
PPM-140 – Requirement #1

1. School boards must offer students with ASD special education programs and services, including, where appropriate, special education programs using ABA methods.
2. School board staff must plan for the transition between various activities and settings involving students with ASD.
Five components of this Policy:

1. individualized program
   a) curriculum
   b) teaching methods
PPM-140

2. use of positive reinforcement

3. data collection and analysis

4. transfer or generalization of skills

5. transition planning
What should we see with PPM-140?

• collaboration with parents on IEP (Individualized Education Plan) development

• collaboration with outside professionals on IEP development

• goals must be based on assessments - including Functional Behaviour Assessments (FBA)
1a. Curriculum Components

Areas identified on the IEP as accommodations, modified or alternative, can include:

- language and communication skills
- behaviour
- social skills
- life skills / adaptive skills
- motor skills
1b. Teaching Methods

Evidence-based, effective ABA teaching procedures include:

• activity schedules

• behaviour chaining (backward, forward, or total task chains)

• discrete trial instruction
1b. Teaching Methods

Evidence-based, effective ABA teaching strategies include:

- errorless learning/teaching
- functional analysis/assessments
- functional communication training (FCT)
1b. Teaching Methods

Evidence-based, effective ABA teaching procedures include:

• in-vivo modeling, video modeling, and audio modeling

• reinforcement systems

• script/script fading procedures
Evidence-based, effective ABA teaching procedures include:

- self-management techniques
- shaping procedures
2. Positive Reinforcement

- the child determines their potential reinforcers
- needs to be delivered for specific behaviours
- follows a predetermined schedule
- must be monitored
3. Data Collection & Analysis

If there is no data then there is no ABA!

Data is used to measure:

- prompt levels in use
- accuracy of the response (+/- or ✓/x)
- increase in desired skills
3. Data Collection & Analysis

Data is used to measure:

- reduction of problem behaviour
- frequency/rate (the number) of the target behaviour
- duration (how long) of the target behaviour
3. Data Collection & Analysis

Data must be analysed to determine what it tells us.

Data analysis process encompasses:

- baseline data – before teaching occurs
- intervention data – during teaching
- maintenance data – after teaching is finished
4. Generalization of Skills

Generalization means that the skill or target behaviour can be demonstrated:

• with different materials
• with different people
• in different settings
5. Transition Planning

Transitions may include:

- entry to school
- moving from an outside agency to a school
- transition between activities and settings or classrooms
- transitions between grades
5. Transition Planning

Transitions may include:

- moving from school to school
- transition from elementary to secondary school
- transition from secondary school to postsecondary destinations and/or the workplace.
5. Transition Planning

Transition from Intensive Behaviour Intervention (IBI) services to school:

- should include the community agency professional
- Connections for Students (CFS) program
PPM-140 and the Individualized Educational Plan (IEP)

What should we see on the IEP?

• identification of the child’s skills and needs
• the instructional level
• strategies/methods of teaching
• must incorporate relevant ABA methods
ABA in Schools

What is needed to meet the regulations of PPM 140?

• trained professionals

• an understanding of ABA
  – the principles
  – the process
  – the application
ABA in Schools

Trained Professionals

• hiring qualified staff in specific roles
• training school staff
• adequate and ongoing supervision
ABA in Schools

Resources are available to assist the classroom teacher and school personnel.

- Training events:
  - approved online ABA webinars and short courses
  - approved online ABA academic courses
  - public and private agencies with certified behaviour analysts
ABA in Schools

Books:


• **Bringing ABA into Your Inclusive Classroom: A Guide to Improving Outcomes for Students with Autism Spectrum Disorders.** Debra Leach, 2010
ABA in Schools

Books:

• It’s Time for School! Building Quality ABA Educational Programs for Students with Autism Spectrum Disorders, Edited by Ron Leaf, Mitchell Taubman, & John McEachin, 2008
Resources for ABA in Schools

Books:


http://parentbooks.ca/ASD_Classroom_ABA_for_Educators.html
Why Consistency is Important

• efficiency in learning

• additive effect

• principle of differential reinforcement
Home to School

- generalization of skills to a new setting
- sharing of assessment results
- sharing of home ABA/IBI program targets and effective teaching methods
Home to School

• collaboration regarding functional communication training

• collaboration with respect to potential reinforcers

• collaboration around which behaviours are socially significant behaviours (this includes acquiring skills as well as reducing maladaptive behaviours)
Home to School

• current prompt levels in place in the home
• cultural and language differences
Development of an individualized curriculum:

• Where is the child currently functioning with respect to the curriculum expectations?

• What are the foundation skills necessary to progress?
School to Home

- access to technology which **may** be beneficial

- identification of barriers to learning in a group setting

- assessment and treatment of interfering behaviours

- assessment of cognitive, language, and academic skills
References

• Association for Science in Autism Treatment (ASAT), www.asatonline.org.

References

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