Applied Behaviour Analysis

for everydayuse in the inclusive classroom

Geoff Hannan

COURSE NOTES: SESSION ONE

The Trainer

A well-known education expert and government adviser, Geoff Hannan has been running his own training and consultancy business for over forty-five years. From schools as diverse as Gordonstoun and Charterhouse to our great state schools in underprivileged areas, Geoff has worked with many thousands of teachers and helped many hundreds of schools improve their practice.

Geoff is author of a dozen books, including the best-selling 'Improving Boys' Performance.' His TV consultancy work includes BBC's 'Child of Our Time,' Panorama: 'The Future is Female,' 'Boys Will Be Boys' for ITV and 'Why Men Don't Iron' for Channel 4.

Geoff Hanan's innovative strategies have won him an international reputation and universal acclaim from bookers around the world - down to earth strategies that help children to learn better. www.hannans.org.uk

His latest book 'Teaching the Autistic Child in the Inclusive Classroom' is available for course participants at £5 per copy.

Introduction

Thank you for taking part in my training sessions on the everyday use of A.B.A. for spectrum children in the inclusive classroom. In all my training I try to engage audiences experientially as well as intellectually. You may find my behaviour and the things I ask you to do a little odd at times. Rest assured- it's all deliberate and I will eventually explain everything in the context of my theme!

Applied Behaviour Analysis (ABA) is a widely used and evidence-based approach for helping children with autism spectrum disorder (ASD).

I first got involved with A.B.A. when writing a thesis for my London University teaching qualifications back in 1973 and have kept up to date with it since. It is a technique I come back to frequently in my advice to teachers especially during Behaviour Management training and consultancies and use it as a basic, flexible system to adjust to the needs of a school, and more importantly to the needs of individual children.

Activity One
Demonstration

Let me start by telling you a joke. Oh, wait- I better put this umbrella up!

Activity One
Debrief

Behaviour	**Consequence of Behaviour**	**Effect of Behaviour**
I tell you a joke	You laugh	Tell my joke more often

= Positive Reinforcement

I tell you joke	You boo	Tell my joke less often

= Extinction

I tell you joke	No reaction from you	I tell my joke less often *I work on better joke

= Negative Reinforcement

I am frightened of getting laughed at/ I don't tell jokes/ I don't develop my joking skills
(I tell sexist/racist joke- sexists and racists laugh- I am learning 'my tribe.')

Behaviour: frightened of getting wet, I put up an umbrella before it rains.
Consequence: I avoid getting wet in future.
Effect of Behaviour: Use umbrella in future and continue to use it all the time?

=Avoidance

Behaviour: frightened of getting wet, I take an umbrella with me and put it up when it rains
Consequence: escape getting wet
Effect of Behaviour: carry umbrella (always?)

=Escape

I have just taken you through some of the core precepts of A.B.A.

*Oh, and I should just mention **'Tangibles'** – let me show you what I can do with my umbrella handle!*

A Quick History Lesson

1. Origins in Behaviourism (Early 1900s)

- Foundations: ABA is rooted in behaviourism, a psychological theory developed by John B. Watson and later expanded by B.F. Skinner.
- Operant Conditioning: Skinner introduced the concept of operant conditioning—learning through rewards and consequences—which became central to ABA.

2. Emergence of ABA (1960s–1970s)

- Early Research: Psychologist Dr. Ivar Lovaas at UCLA began applying behaviourist principles to children with autism.
- Landmark Study (1987): Lovaas published a study showing that intensive behavioural intervention (40 hours/week) led to significant improvements in IQ and functioning in young children with autism.

3. Expansion and Standardization (1990s–2000s)

- Wider Adoption: ABA gained popularity as more studies confirmed its effectiveness.
- Structured Programs: Techniques like Discrete Trial Training (DTT), Pivotal Response Training (PRT), and Natural Environment Teaching (NET) were developed. See appendix for more details.

4. Modern ABA (2010s–Present)

- Individualized Approaches: ABA has evolved to be more child-cantered, focusing on naturalistic and socially meaningful goals.
- Criticism and Reform: Some autistic self-advocates and researchers have raised concerns about overly rigid or compliance-based methods. This has led to more emphasis on ethical practices, consent, and neurodiversity-affirming approaches.

Activity Two

When *I* was naughty!

In box one write down a time you misbehaved in some way!

1

In box two write down what triggered your misbehaviour!

2 

In box three write down what happened afterwards.

3

ABA-ABC CHART

An **ABC chart** is a tool used in **ABA** to help understand the causes and consequences of a specific behaviour. The acronym **ABC** stands for antecedent, behaviour, consequence

Behaviour

- **What is the specific behaviour being observed?**
- It should be described in clear, observable, and measurable terms.
- Example: *Child throws toys and screams.*

Antecedent

- **What happens right before the behaviour?**
- This includes the setting, people present, activities, instructions given, or any environmental factors.
- Example: *Teacher asks the child to clean up toys.*

Consequence

- **What happens immediately after the behaviour?**
- This includes how others respond and what the child gains or avoids.
- Example: *Teacher removes the toys and gives the child a break.*

Purpose of an ABC Chart

- To **identify patterns** in behaviour.
- To help determine the **function** of the behaviour (e.g., attention-seeking, escape, sensory).
- To inform the development of effective **intervention strategies**.

The ABA Process for an Autistic Child

1. Assessment Phase

Assessment Tools most frequently used in A.B.A. are VB-MAPP, ABLLS-R and Functional Behavior Assessment.

I provide a brief analysis on BB-MAPP and ABBLLS-R in the appendix.

Key Areas Assessed:

- - Communication
- - Social Skills
- - Play Skills
- - Daily Living Skills
- - Problem Behaviours

The must readily adapted for everyday Inclusive Classroom use is
Functional Behaviour Assessment.
Please see the next section for an FBA plan you may adapt easily in many contexts.

2. Goal Setting

I suggest that all goal setting for many children on the spectrum should be broken down into simple progressive steps in very short time periods and progress monitored by a simple tick log each week.

There seems to me to be a tendency in many schools to make EHPs termly when they really need across most domains (e.g. reading, writing, maths and social skills) to be truly SMART in nature with an emphasis on specific and timed interventions in the short term.

E.G.
Autum Term
Short-Term Goals (3–6 weeks):
- e.g., Increase spontaneous verbal requests to 10 per day.
Long-Term Goals (6–12 weeks):
- e.g., Participate in group play for 10 minutes with minimal prompts.

3. Behavior Intervention Plan (BIP) as needed:

Target Behaviour(s):

Define Function of Behaviour: (e.g., escape, attention, access to tangibles, sensory)

Observe and Note Antecedents to Behaviour

Develop Strategies:

Through Replacement Behaviors:

Consequence Strategies:

Crisis Plan (if applicable):

4. Skill Acquisition Plan as needed:

For each skill:

Skill Name:
Teaching Procedure: (e.g., Discrete Trial Training, Natural Environment Teaching)

Prompting Strategy:

Reinforcement Plan:

Mastery Criteria:

Data Collection Method: (e.g., frequency, duration, percentage)

5. Session Structure

Session Duration:

Frequency per Week:

Teacher:

Materials/Additional Support Needed:

Environment Setup:

6. Data Collection & Progress Monitoring

Daily Data Tick Sheets:

Weekly Review Brief Notes:

Monthly Progress Summary:

Graphing Progress: (optional visual tracking)

7. Parent/Caregiver Involvement

Training Provided:

Home Strategies:

Communication Log:

Review Meetings: (e.g., monthly or quarterly)

8. Review & Adjustments

Review Date:

Progress Summary:

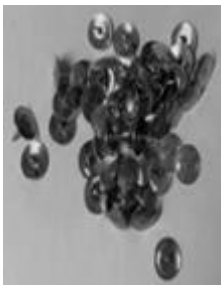
Adjustments Made:

Next Step

Activity Three

X	Y	7	5

1. Each of the above cards has a letter on one side and a number on the other. Which two cards should you turn over to check that the following statement is true: **if there is an X on one side there is a 5 on the other?**

2. You have a candle, a box of matches and some thumb tacks. How can you mount the candle on a wall?

In this activity you are exploring some aspects of 'Functional Behaviour.'

Understanding Functional Behaviour

Functional behaviour refers to actions that serve a specific purpose for an individual. In Applied Behavior Analysis, identifying the function of a behaviour helps in developing effective interventions.

Four Main Functions of Behaviour

1. Attention

Behavior performed to gain social interaction or a reaction from others. Example: A child shouts to get the teacher's attention.

Example from your experience

2. Escape

Behaviour aimed at avoiding or escaping an undesired task, situation, or person. Example: A student leaves the classroom to avoid a difficult assignment.

Example from your experience

3. Access to Tangibles

Example from your experience

Behavior used to obtain a desired object or activity. Example: A child cries to get a toy or snack.

4. Sensory Stimulation

Example from your experience

Behaviour that fulfills internal sensory needs. Example: Hand-flapping or rocking for self-soothing.

ABA Behavior Modification Plan Template

1. Behaviour Definition

Describe the specific behavior to be modified. Include clear, observable, and measurable terms.
Example: 'Tantrum behavior defined as crying, screaming, and dropping to the floor for more than 30 seconds.'

2. Baseline Data

Record the frequency, duration, and intensity of the behavior before intervention.
Include data collection dates and methods used (e.g., ABC chart, frequency count).

3. Function of Behavior

Identify the function of the behavior using Functional Behavior Assessment (FBA).
Functions may include: Attention, Escape, Access to Tangibles, Sensory Stimulation.

4. Intervention Strategies

Describe the strategies to reduce the target behavior and teach replacement behaviors.
Include antecedent modifications, teaching procedures, and consequence strategies.

5. Reinforcement Plan

Specify the type of reinforcement (positive/negative), schedule (e.g., fixed ratio, variable interval),
and criteria for reinforcement. Include preferred reinforcers and how they will be delivered.

6. Data Collection

Outline the method for collecting data during intervention (e.g., frequency, duration, interval recording).
Include data sheets or tools to be used and who is responsible for data collection.

7. Generalization and Maintenance

Describe how the behavior change will be generalized across settings, people, and materials.
Include strategies for maintaining behavior over time.

8. Review and Adjustments

Specify the review schedule (e.g., weekly, monthly), criteria for success, and how adjustments will be made based on data and team input.

Name:_____

Antecedents

Behaviour

Attention? Escape? Access to tangibles? Sensory?

Frequency

Target

Frequency

Reward

Date	Achieved				

I hope you have enjoyed part one of my training and I look forward to working with you again during the coming sessions.

Thank you

Geoff

Appendix

A Brief Outline of Common Assessment Processes

VB-MAPP Summary

What is VB-MAPP?

The Verbal Behavior Milestones Assessment and Placement Program (VB-MAPP) is a comprehensive assessment tool used in Applied Behavior Analysis (ABA) to evaluate the language, learning, and social skills of children with autism or other developmental disabilities. Developed by Dr. Mark Sundberg, VB-MAPP is based on B.F. Skinner's analysis of verbal behavior and is designed to guide individualized intervention planning.

Purpose of VB-MAPP

VB-MAPP is used to identify a child's strengths and weaknesses across various developmental domains. It helps clinicians and educators design effective, individualized ABA programs by providing a clear picture of the child's current skill levels and barriers to learning.

Components of VB-MAPP

1. Milestones Assessment

This component evaluates 170 measurable milestones across 3 developmental levels (0–18 months, 18–30 months, and 30–48 months). It covers areas such as manding (requesting), tacting (labeling), listener skills, visual perception, play, social behavior, and more.

2. Barriers Assessment

This section identifies 24 common learning and language barriers that may impede a child's progress. Examples include prompt dependency, behavior problems, and defective manding. Addressing these barriers is crucial for effective intervention.

The 24 Common Barriers in VB-MAPP:

1. **Behaviour problems**
2. **Instructional control**
3. **Impaired mands** (difficulty requesting)
4. **Impaired tacts** (difficulty labelling)
5. **Impaired echoic** (difficulty repeating sounds/words)
6. **Impaired imitation**

7. **Impaired visual perception and matching-to-sample**
8. **Impaired listener skills**
9. **Impaired intraverbal** (difficulty answering questions or having conversations)
10. **Impaired social skills**
11. **Prompt dependency**
12. **Scrolling** (cycling through responses)
13. **Impaired scanning**
14. **Impaired conditional discriminations**
15. **Failure to generalize**
16. **Weak motivators**
17. **Response requirement weakens motivators**
18. **Reinforcer dependency**
19. **Self-stimulation**
20. **Impaired articulation**
21. **Obsessive-compulsive behaviour**
22. **Hyperactive behaviour**
23. **Failure to make eye contact**
24. **Sensory defensiveness**

3. Transition Assessment

This component evaluates whether a child is ready to transition to a less restrictive educational environment. It assesses areas such as learning rate, independence, social skills, and group learning abilities.

4. Task Analysis and Skills Tracking

This section provides a detailed breakdown of skills and sub-skills across various domains. It allows for ongoing tracking of a child's progress and helps in setting specific, measurable goals.

1. Skill Domains

Each domain corresponds to a key area of development:

- **Mand** (requesting)
- **Tact** (labeling)
- **Listener Responding**
- **Visual Perception and Matching-to-Sample**
- **Independent Play**
- **Social Behaviour and Social Play**
- **Motor Imitation**
- **Echoic**
- **Spontaneous Vocal Behavior**
- **Syntax and Grammar**
- **Group Instruction**
- **Classroom Routines**
- **Linguistic Structure**
- **Reading, Writing, and Math (if applicable)**

2. Task Analysis

Each skill is broken down into smaller, teachable steps. For example:

- **Mand Domain** might include:
    - Requests for preferred items
    - Requests using carrier phrases ("I want…")
    - Requests for help
    - Requests for missing items

3. Skills Tracking

- Practitioners use this section to **track progress** over time.
- Each skill is marked as:
    - **Not introduced**
    - **In progress**

- **Mastered**

- This helps in identifying which skills need more focus and which are ready for generalization.

4. Customization

- The tracking system is flexible and can be tailored to the child's individual learning path.
- It supports **data-driven decision-making** for IEP goals and therapy planning.

5. Placement Guide and IEP Goals

The placement guide helps practitioners determine appropriate educational settings and develop Individualized Education Program (IEP) goals based on the child's assessment results. It ensures that interventions are aligned with the child's developmental level and learning needs.

How VB-MAPP is Used in ABA

VB-MAPP is widely used by behavior analysts, speech-language pathologists, and educators to assess and monitor the progress of children receiving ABA therapy. It provides a structured framework for identifying skill deficits, tracking development, and designing effective, individualized intervention plans.