Applied Behavioural Analysis

ABA is the study of behaviour and how we can apply the principles of behaviour to all learning. It is a broad term that is used to describe a variety of interventions that can be used to shape and change behaviour and teach new skills.

The Principles of ABA

1. Each student must have a program created that matches his/her specific strengths and needs (individual program)
2. Analyse the skill or task that needs to be taught; break it down into the smallest components or steps that it would take to do the task or skill (task analysis)
3. Teach each step separately (discrete trial and prompting)
4. Plan to reinforce each step with something that is highly motivating for the student (reinforcement)
5. Practise each step repeatedly until the student can carry out that component of the skill with no prompting (mastery and prompt fading)
6. Build each step systematically until the whole task can be completed independently by the student (skill development)
7. Frequently collect data in order to monitor the student's acquisition of the skill and the effectiveness of the program (data collection)
8. Teach the student to complete the task in different settings, with different people and at different times (generalisation)
9. Build skills developmentally in order to build a strong foundation that will serve to inspire self-initiated life-long learning

Teaching Strategies from Applied Behaviour Analysis (ABA)

Three components are necessary for learning according to the basic principles of ABA.

1. A stimulus should serve as a cue for the child to make a response – and the child must attend to this stimulus.
2. The child must enact behaviour immediately following the stimulus.
3. The child must experience some type of consequence that marks correct performance.

With time, the child should learn the behaviour more quickly and be able to use the skill in a widening range of contexts. This process is called generalisation.

Basic practices of effective teaching used in ABA include the following:

Capturing Attention
It is crucial to capture and maintain an infant's attention until the instruction has been given, action accomplished and consequence administered.

Dr Julie Peterson

Antecedent-Behaviour-Consequence (ABC)
An antecedent is a stimulus that occurs before behaviour and the consequence is an act directly following the behaviour. The manipulation of antecedents and consequences either strengthens or weakens specific behaviours. It is the nature of the consequence that determines the nature of the relationship – whether a positive or negative behaviour.

Prompting Desired Behaviours
It is the adult's role to identify whether the skill or behaviour is in the child's repertoire but is not emitted in appropriate contexts, or if the skill is not familiar to the child at all. The adult must find a way to prompt the behaviour under specified stimulus conditions.

Managing Consequences
In order to build strong habits that are not easily extinguished, generalise appropriate behaviour and reduce unwanted behaviours, an adult must skilfully manage consequences. The strength, timing and frequency of reinforcements are factors that can affect the quality and consistency of behaviour.

Fading Prompts
Prompts should be systematically faded so that the behaviour is emitted in response to the stimulus rather than the prompt. This technique should be used to teach a child to generalise skills or demonstrate them out of the familiar context.

Functional Assessment or Analysis of Behaviour
A functional assessment is the process of identifying the purpose and reinforcers of a specific behaviour. Sometimes, the functions that behaviour plays may be too difficult to identify and may require a full functional analysis. This involves actively testing the effects of a variety of consequences to identify the variables that support it.