What is Applied Behaviour Analysis?

Applied Behaviour Analysis (ABA) is an applied science, based on the principles of learning and behaviour, which uses specific methods to teach socially significant behaviour. Examples may include: teaching someone to point to request objects rather than whine or grab, making a snack or using public transportation.

What is behaviour?

Behaviour is everything we do. We need to be able to measure and observe it.

Functions of behaviour:

The function of a behaviour is the reason that it occurs. In Applied Behaviour Analysis (ABA), there are four main functions of behaviour:

1. **Escape:** To engage in a behaviour to escape from an activity, object or a person in the environment. Examples may include: covering one's ears to avoid loud noises, avoiding crowds, ignoring demands or requests, or running away from specific people.
2. **Attention:** To engage in a behaviour to gain attention from others. Examples may include: crying or whining to bring someone over, throwing an object to make a loud noise, or calling a person by their name.
3. **Sensory:** To engage in a behaviour that provides sensory benefits. Examples may include: hand flapping, body rocking, or vocal stereotypy.
4. **Tangible:** To engage in a behaviour to gain access to preferred items. Examples may include: grabbing items, whining or crying while reaching, or climbing to gain access.

What is reinforcement?

The process where an item or event is either delivered or removed immediately following a desired behaviour with the goal of increasing that behaviour in the future. The item or event that occurs after the desired behaviour is called a "reinforcer". We know that reinforcement has occurred if the behaviour increases over time as a result of the reinforcer.

- **Positive Reinforcement** occurs when something is added to the environment following the desired behaviour. Examples may include: Giving a child a preferred toy when he cooperates with a request made of him / her, giving the food item that the child has verbally requested, or giving an allowance for completion of specific and defined chores within a set time period.
- **Negative Reinforcement** occurs when something is removed from the environment following the desired behaviour. Examples may include: removing a loud noise when a child says, "too loud", providing a break from a task when a child asks for a "break", or doing the dishes to avoid a parent's nagging.

How to teach new skills:

Use prompts to assist the child to learn the new skills. Prompts should be paired with instructions and gradually faded as the child or youth learns the new expectation. Some examples of prompts may include:

- **Visual prompts** provide information in visual form. Examples may include visual sequences of activities or a single picture of an item or activity.
- **Modelling prompts** provide a demonstration of the desired action to the learner. For example: washing your hands next to a child when teaching him / her to wash their hands, or using the desired volume of voice when speaking to a learner who is speaking either too loudly or softly.
- **Full or partial physical** assistance where the caregiver assists the child or youth to complete the task. For example: helping a child or youth hold their toothbrush while directing the up and down or side to side motion.

Maintenance of skills:

Maintenance refers to the use of the new skill over time. If opportunities are not present for the individual to use their skills, they will be lost. Examples may include: a child or youth who is taught to tie their shoes and is given new shoes with Velcro closures, or a child or youth who is taught to make their own snack, but their snacks are always provided for them.

Generalization of skills:

Generalization refers to how skills are transferred to new environments and new people. If opportunities to use newly learned skills are not transferred to the people and places in your life, they will be lost. Examples may include: a child who is taught to respond to simple instructions must be able to do so for all caregivers in any environment.

References:

Cooper, J. O., Heron, & T. E., Heward, W. L. (2007). *Applied Behavior Analysis* (2nd ed.). Upper Saddle River, NJ: Pearson Education, Inc.