PRACTICING APPLIED BEHAVIOUR ANALYSIS (ABA)

An Introduction - Handout

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Foreword

This training document was developed by asktoks.com for use by asktoks.com. Asktoks.com was founded on the belief that we can change the world's response to autism and mental health issues through education, sharing information and a positive approach to every interaction. It is with this belief in mind that this introductory manual to Applied Behaviour Analysis was created.

Applied Behaviour Analysis is a science of behaviour that enables us to think positively about, developmental disorders, find opportunities and build on strengths. This introductory manual is aimed at the general public, families of children with developmental disorders, professionals working in the medical, mental health, social care and education sectors (including teachers, classroom facilitators, special educators, therapists etc.) and anyone who may be curious about the management and treatment of these disorders. It was developed with the aim of addressing the need to build capacity through training, in Nigeria, in the use of behavioural techniques to treat and educate children with autism spectrum disorders, other developmental disorders and undiagnosed behavioural challenges.
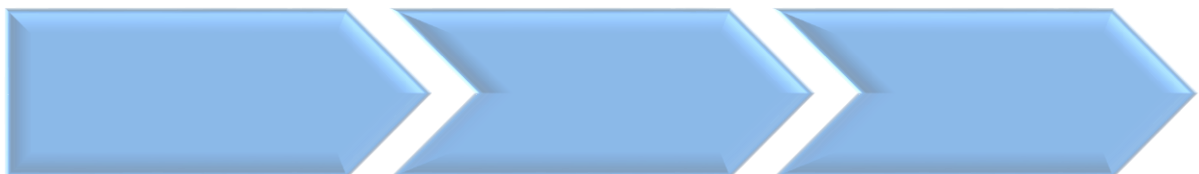
INTRODUCTION TO ABA

What is ABA?

Applied Behaviour Analysis (ABA) is a process of studying and modifying behaviour. It is a widely-researched intervention used to treat mental and developmental disorders like addiction, schizophrenia, autism spectrum disorders and other non-diagnosed behavioural difficulties. ABA has also been used in other disciplines such as sports, business and organisation management and education.

What is ABA used for?
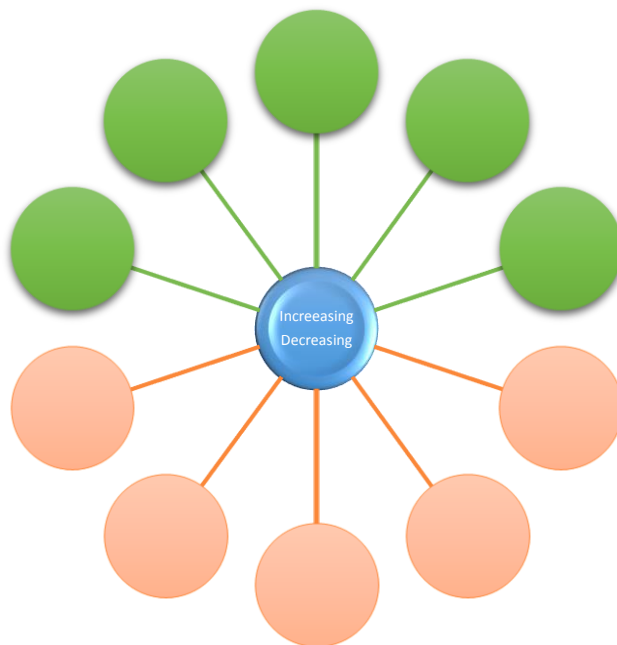
Principles of ABA

Based on the principles of operant conditioning, which looks at the relationship between

Antecedent	Behaviour	Consequence
Wave from a friend	Approach friend	Visiting and chatting

TEACHING STRUCTURE

The teaching structure is essentially a simple sequence of instructions, responses and consequence called discrete trails.

Discrete Trial Teaching (DTT)

The discrete trial consists of three parts that relate directly to the principles of operant conditioning above.

Natural Environment Teaching (NET)

Natural environment training is much less structured than DTT and occurs in informal settings such as during play.
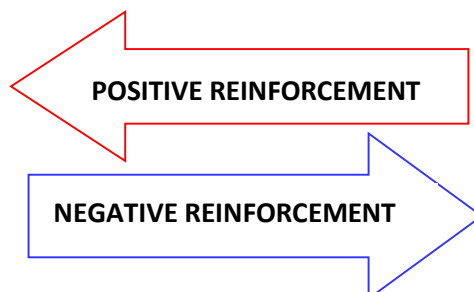

The SD

The Response

The Consequence
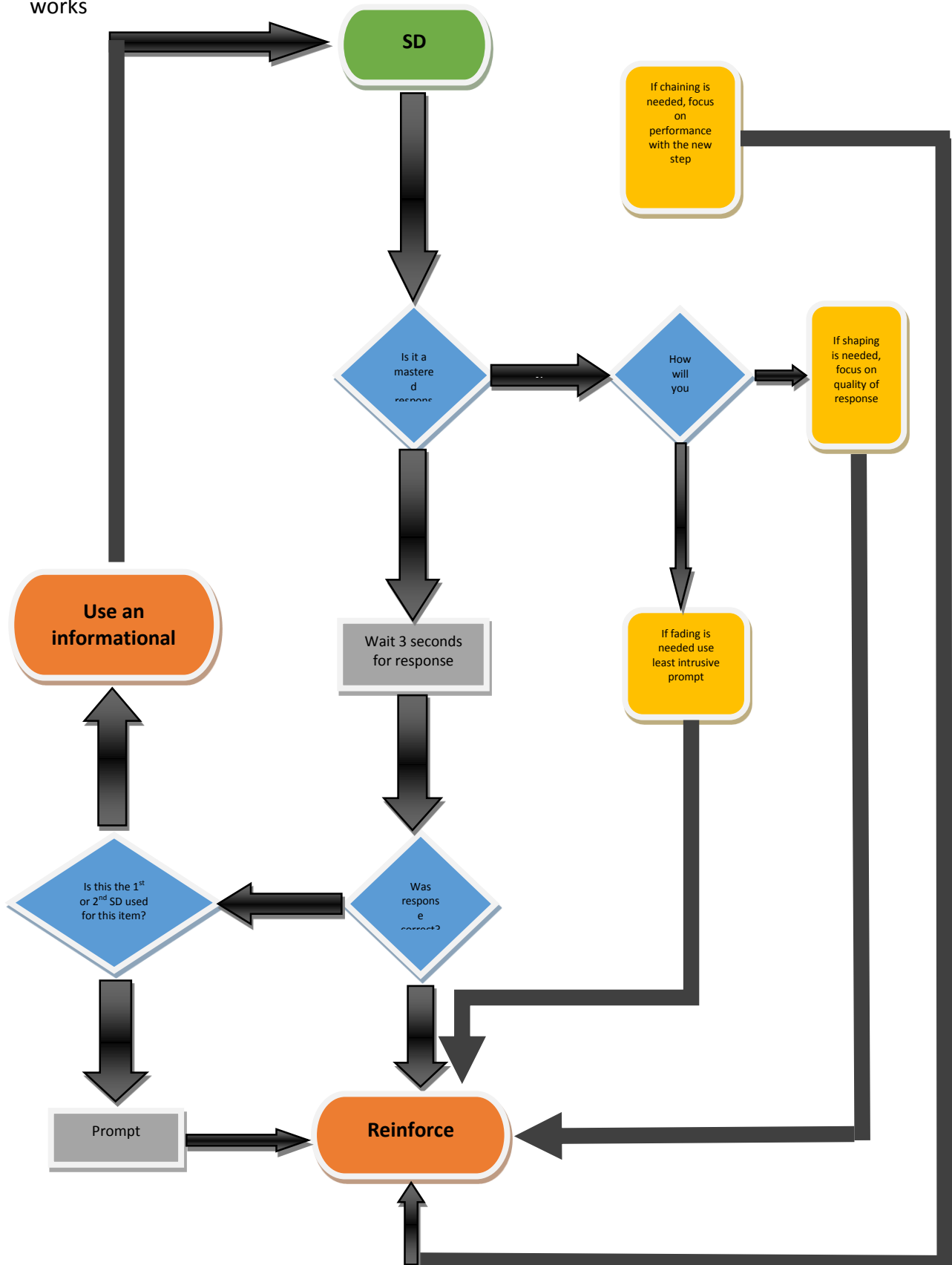

- There are different types of reinforcement;

  - Positive reinforcement - adding stimulus to increase behaviour, and

  - Negative reinforcement - removing stimulus to increase behaviour

POSITIVE REINFORCEMENT

NEGATIVE REINFORCEMENT

TEACHING TECHNIQUES

You need a method of getting the learner to reach the correct response. Prompting, shaping and chaining are your teaching techniques for producing new behaviours. Here's how it works

SD

If chaining is needed, focus on performance with the new step

Is it a mastered respons...

How will you

If shaping is needed, focus on quality of response

Wait 3 seconds for response

Use an informational

If fading is needed use least intrusive prompt

Is this the 1st or 2nd SD used for this item?

Was response correct?

Prompt

Reinforce

Prompting

When you are teaching a completely new skill you need to add this step to your discrete trial. The prompt is used to assist the learner in completing the desired response but it must be faded as soon as possible because the aim is always for the learner to complete the task independently and without adult help.

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Learning through success!
I Can Do!

Types of prompts

Physical

Demonstration / Modelling

Gestural

Verbal

Visual

Other

Shaping

Shaping is used when the target behaviour does not yet exist in the learner's repertoire and a prompt cannot be used.

It involves reinforcing successful approximations of the target behaviour.

Only approximations most similar to the target behaviour are reinforced.

All other behaviours or previous approximations are no longer reinforced and therefore are extinguished.

Chaining

 Chaining is the reinforcement of successive elements of a behaviour chain. It is used when the behaviour you want to teach is a series of related behaviours that occur one after the other.

Forward Chaining

Backward Chaining

Generalisation

Once a skills is mastered in the structured setting (usually as a table-top activity), it is taught in a more general setting. The purpose of this is so that the learner will be able to demonstrate the skills they have learnt in conditions other than those they were taught in.

Generalise in the following ways (these are called modalities)

Materials / Stimuli   Distance

Environment / Location   Distraction

People / Presenter   Reinforcement

Language / SD

REDUCING BEHAVIOUR

Teaching Methods

The teaching procedures described above are concerned with increasing behaviours that are in deficit. Children with autism may also display excesses of behaviour that need to be reduced, for example hand flapping or tantrum behaviour.

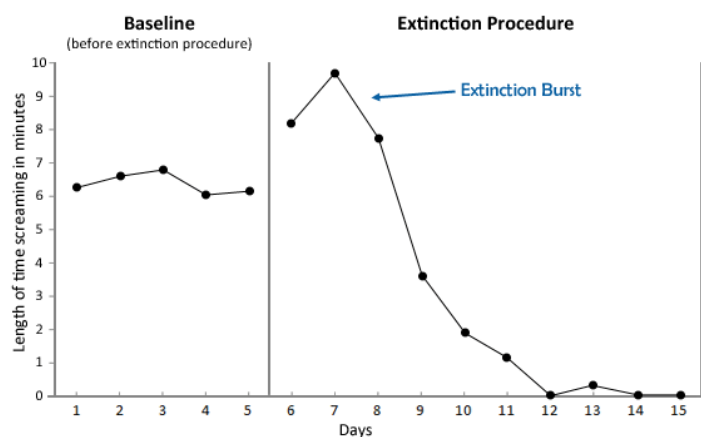## Reinforcement and Inappropriate Behaviour

- Examples of behaviour maintaining factors:

  - Attention from an adult
  - Access to other positive consequences following behaviour
  - Opportunity to escape

Extinction

"Extinction refers to withholding reinforcement from a previously reinforced response"

(Kazdin, 1994)

Overcorrection

Overcorrection means that the learner is required to carry out an activity to correct the situation that has been created by their behaviour.
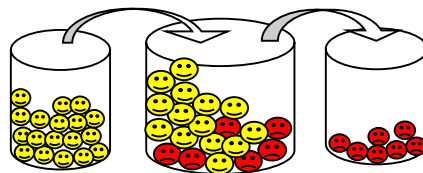
Restitution

Positive practice

Time Out

"…*time out from reinforcement* (or simply time out), *which refers to the removal of all positive reinforcers for a certain period of time"* (Kazdin, 1994)

Replacement Behaviour

It is not enough to extinguish an inappropriate behaviour, you also need to teach replacement, more appropriate behaviours.

Differential Reinforcement of Other Behaviour (DRO)

The process involves reinforcing any behaviour that is not the unwanted behaviour. A time period is identified, within that period the learner receives reinforcement for demonstrating other behaviours without demonstrating the unwanted behaviour.

Differential Reinforcement of Incompatible Behaviour (DRI)

The aim is to replace the unwanted behaviour with the more appropriate incompatible behaviours.

Summary

This workshop has given you an introduction to Applied Behaviour Analysis, as a process of studying and modifying behaviour. It works by monitoring how changes to the environment can effect what people learn a6nd the rate at which they learn. This information is then used to change behaviour.

The principles of ABA as the relationship between antecedents, behaviour and consequences were discussed and examples of these as they apply to your own life situations were also given. Through such examples, the principles of ABA are turned into a simple teaching structure that flows from SD to Response to Positive Reinforcement.

The characteristics of each of the three components in the discrete trial have now been outlined, bringing you to a better understanding of the discrete trial as a teaching tools which uses prompting, chaining and shaping to encourage new skill.

Generalisation taught you how to turn the skills taught in a contrived setting into functional skills the learner will use in everyday life.

Finally, despite all the wonderful things you are teaching, some learners may still exhibit inappropriate behaviours that prevent them from learning effectively from their environment. The techniques for reducing these behaviours have been introduced along with measures for replacing them with more socially acceptable ones.

The processes described in this workshop are extremely technical and no practitioner can become fluent in using them over night. It takes months of intensive practice with constant supervision and on-going training for even the best practitioners to become skilled in the techniques of ABA. The aim of this workshop is merely to introduce you to these techniques so that with proper guidance, supervision and on-going training from a behaviour analyst, you will enjoy the utter unpredictability and unrivalled rewards of working with children.

End of Workshop

Thank you for attending our workshop on an Introduction to Practicing Applied Behaviour Analysis. We hope that you have enjoyed this training program and will find its contents useful in all your further interactions with children with autism spectrum disorders, other developmental disorders and behavioural difficulties. We look forward to your participation at the next workshop.

Please provide your feedback on the forms provided.

For further information on any of the topics discussed within this manual, please contact:

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