Finding the Right Balance for ABA and Occupational Therapy to Collaborate for Student Success.

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May 10, 2017
2017 Annual Virginia Occupational Therapy Association
School Systems Symposium
Virginia Beach, VA
Objectives

• Welcome and Introduction
• Overview of Grafton Integrated Health Network
• Applied Behavior Analysis Perspective and Theory
• Same Goals Different Perspectives
• Collaboration within our Setting
• Resources
• Application and Future Implications
My Mission Statement:

To build a **collaborative** culture in which occupational therapy is an **integrated** part of service delivery throughout the organization through **consultation**, education, team building activities, and development of a sustainable fieldwork program, and intervention model to create an optimal person, environment occupation fit for all clients to live life to its fullest.
Welcome

My Mission Statement:
My purpose in life is to cultivate relationships through the expression of my creativity and my knowledge of human behavior. I am determined to personally and professionally develop from the realization and acceptance of another’s perspective(s) in contrast or correlation of my own. My goal is to define the abilities and challenges of others, as well myself, by understanding the need for behavior through the eyes of empathy and the heart of diversity. I am committed to manipulating any challenge into success(s) for the individual and / or organization, as well myself. My oath to my family and my professional and moral self is to teach others that they have wings, and to help them mount up with their wings to reach their true potential in life. Individuals can only fly as far as they can stretch their wings within the skies they partake in creating.
Introduction: Collaboration

Benefits of Collaboration

- Common Goals
- Multiple Perspective
- Shared Purpose - Team Building
- Improved Communication
- Increased Generalization
- Increased Carry Over
Barriers to Collaboration

- Lack of Time
- Miscommunication
- Misunderstanding of Scope of Practice
- Past Experiences
- Strict Beliefs
ABA Specific Barriers to Collaboration

- Tension between ABA and other related service providers
  - Scheduling Difficulties
  - Not Team players
  - Philosophical Differences
  - Role overlap

- Tension between ABA and Education staff
  - Lack of time with student
  - Edible Reinforcers
  - Classroom Culture
Break Down the Barriers

- Learn from the other’s perspective
  - Mutual Understanding and Respect
  - Equality Among Team Members
- Identify Common Purpose
- Voluntary Participation
- Joint Responsibility
- Collective Decision Making

(Hanft & Shepherd, 2008)
Overview:
Grafton Integrated Health Network

Early Intervention
- Front Royal

Applied Behavior Analysis
- Charles Town, WV
- Richmond
- Strasburg
- Winchester

Therapeutic Day Schools
- Berryville
- Richmond
- Winchester

Short-term Stabilization
- Berryville

Psychiatric Residential Treatment
- Berryville

Community Based Group Homes
- Richmond
- Winchester

Outpatient
- South Riding
Overview:
Grafton Integrated Health Network

Organization: Winchester- Residential

- POD Structure
  - Operations Manager
  - Case Manager
  - Therapist
  - Residential Instructors

- 1 Pod- Day Students
- 3 Pods (3 houses each)
- Elm
  - Pilot ABA program
  - 3 Group Homes Near the school
Overview:
Grafton Integrated Health Network

Organization: Winchester- Schools

- **RBC- older students**
  - Classrooms
    - Vocational
      - 4 transitional classrooms
      - 1 non transitioning crisis class
      - 1 medically fragile class
      - 2 CTE classes
    - Credit Track
    - 2-3 Speech Language Pathologists
    - 1 Direct Services OT
    - Behavior/Psychotherapists
    - BCBAs
    - ABA Specialists

- **Elm- younger students**
  - Pilot ABA program
  - 4 classrooms
    - 1 -2 Speech
    - 1 OT
    - Behavior/Psychotherapists
    - BCBA
    - ABA Specialists
Overview: Grafton Integrated Health Network

Winchester Region:

- 3 BCBAs
- 15 ABA Specialists
- 650ish Hours of ABA services delivered in school and residentially
Welcome!

• Welcome and who am I and who are you:
  – Small look into the life of a clinician and a mom of three children with exceptional abilities.

• What we will be reviewing:
  – A very brief introduction to ABA
  – Similarities between OT and ABA strategies and interventions.
  – Behavior Functions and Breakdowns
  – Reinforcement Contingencies
  – Environmental Modifications and Best Practices

Note: Don’t be afraid to raise your hand with a question at any time!
What is ABA

- Applied Behavior Analysis (ABA) is a discipline concerned with the application of behavioral science in real-world settings with the aim of addressing socially significant issues.
  (Baer, Wolf, & Risley, 1968)
- Applied Behavior Analysis (ABA) is a science devoted to the understanding and improvement of human behavior.
  (Cooper, Heron, & Heward, 1987)
3 branches: Behaviorism, Experimental Behavior Analysis, and Applied Behavior Analysis.
ABA’s Scientific Attitudes:

• ABA is the use of scientific principles of learning and using motivation to teach effectively for skill acquisition, fluency and maintenance as a means of decreasing problematic behaviors.

• The core concept is that the consequences of what we do affect what we learn and what we will do in the future.

• **Positive reinforcement**: behaviors that produce a good outcome are more likely to occur in the future.

• People are motivated by what they get out of what they do:
  - Examples: working to get money, feeling good for helping someone, approval from others, satisfaction of a good book, baby walking to gain access to mommy, satiation from eating, relief from pain from medication use, etc.
Characteristics that make ABA Unique

• The ABA approach to autism is to identify what motivates each individual child or adult.
• Every child is different and learns differently.
• Teachers and all therapists must use what is motivating to the child, not what we think should be motivating to the child to get the most expedited results.
• Starting with discrete goals and working to larger goals – Case example of toileting (bx target) and decreasing toe walking (PT target).
Skinner- ABC’s – Now we’re getting to the good stuff!

Antecedent: Stimulus prior to target behavior; this is also the environmental factors that are present

Behavior: Describe by topography and function

1. Attention (positive social)
2. Escape (negative social)
3. Tangible
4. Automatic

Consequence: Stimulus change after target behavior

Ex: Antecedent (teacher says it’s time to read) $\rightarrow$ Behavior (student throws book) $\rightarrow$ Consequence (student sent to principals office) FX = escape.
Translating those Functions

- Problematic behaviors maintained by escape functions
  - 1. Why do they want to escape?
  - 2. What should be the acceptable escape to teach?
- Problematic behaviors maintained by attention functions
  - 1. Who are they attempting to get attention from?
  - 2. What TYPE of attention should be given to the child?
- Problematic behaviors maintained by access to tangible functions
  - 1. What are they attempting to gain access to?
  - 2. How can we get them more access to bring this access under control through collaboration?
Tying this Together – Similarities and Scope Of Practice

1. Self-regulation
2. Eating
3. Play Skills / Leisure Skills
4. Mobility
5. Writing Skills / academic skills
6. Pre-requisite skills
7. Activity Based Interventions
8. Environmental modifications

1. Teaching coping skills
2. Increasing MO to try different foods.
3. Teaching play skills discretely and through imitative skills.
4. Increasing MO to behavioral cusps to gain more reinforcers in their environment.
5. Imitative skills
6. Instructional control, waiting, accepting “no”/ joint attention, sustained attention.
8. Environmental Modifications
9. Behavior Reduction
Discipline Similarities

- Discipline SILOS
- Communication Barriers with Other Service Providers
- Scientific Reasoning
- Client Goal Attainment
- Stakeholders
- Activity Analysis – what works what doesn’t
- Observation
- Generalization
- Evidence Based Practices
- Idiosyncratic Commonalities between providers.
Discrete Trial Training – Example of a typical Session

• Breaks down learning opportunities into well-controlled, discrete teacher-student interactions
  Instruction → Correct Response → Reward

  OR

  Instruction → Incorrect Response → Correction (no reward)

• [http://www.pattan.net/Videos/Browse/Single/?code_name=instructional_example_second_example1](http://www.pattan.net/Videos/Browse/Single/?code_name=instructional_example_second_example1)

• How could OT provide input here?
Discrete Trial Training

- Provides structure for the learning interaction
- Provides a very large number of learning opportunities in a small amount of time
- Is proven by hundreds of studies to be an effective teaching procedure
  - Fun FACT: Typical proven service levels occur at 30 hours per week for up to 2-3 years.
  - 75% of a developmentally delayed child should be spent within learning opportunities.
Why it works…

• When done at a table it takes away the distractions often found in the natural environment
• Ability to present skill multiple times; where as you may only have the opportunity to present once of twice in natural environment
• Can teach skills before child comes in contact with them in the natural environment
• Generalization needs to be strategically applied to NET and Incidental Teaching.
• Can OT activities be placed in discrete trials?
Use of Contingencies of Reinforcement
Consequences

Two main types

Reinforcement: Increase the occurrence of future behavior

1. Positive reinforcement (ex: Johnny wants soda so he asks nicely for soda and he gets access to it which increases his future likelihood of asking nicely for soda).
2. Negative reinforcement (ex: hands are wet which is uncomfortable so you dry them increasing the likelihood you will dry them in the future).

Punishment: Decrease the occurrence of future behavior

1. Positive Punishment (ex: you wear your favorite hat to class, and your teacher yells at you, telling you to take it off which decreases the likelihood of you wearing a hat in class in the future).
2. Negative Punishment (ex: a teenager stays out passed curfew so her parents take her phone away decreasing her future likelihood of missing curfew).
### Types of Contingencies of Reinforcement

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<th><strong>Positive (+)</strong></th>
<th><strong>Negative (-)</strong></th>
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<tr>
<td></td>
<td>To add, present, provide</td>
<td>To remove, take away</td>
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<td><strong>Reinforcement</strong> – behavior INCREASES in the future</td>
<td><strong>Positive Reinforcement</strong>&lt;br&gt;A stimulus is PROVIDED contingent on the behavior, which leads to a(n) <strong>INCREASE</strong> of behavior in the future.</td>
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ACTIVITY

• Let’s practice some differential reinforcement!

• Need two participants!
ABA
• You must pair yourself as a natural reinforcer.
  i.e.: Conditioned Fun Person= instructional control

OT
• THERAPEUTIC USE OF SELF
• Build Rapport
How to be Successful:
Similar Ideas—Different language

ABA

• Plan ahead/contrive situations to teach
  example: Plan on taking the child outside. Work on
  manding “outside” “Open door”. Teach motor
  imitation/functional skills: putting on shoes, pumping
  legs to swing, making strokes with a paint brush.

OT

• Activity Selection
• Treatment planning
How to be Successful: Similar Ideas—Different language

ABA

- Limit the client’s access to items so they need you in order to gain access and to increase motivation to comply.

  example: Put toys up if teaching manding, limit paint to increase amount of trials for teaching pre-writing strokes.

OT

- Environmental Control

- Limitation of Environmental Variables.

- Evaluation of Environmental Context as it affects performance
How to be Successful

- **Mixing/Varying task:** switch among mands, tacts, intraverbal, receptive ID, LRFFC, motor imitation, echoics, etc. Also vary difficulty: 80% easy 20% hard

- **High Probability /Behavior Momentum:** Intervention were you present 2-5 easy task that are in learners history of compliance are presented quickly before requesting the target task.

- **Premack Principal/Grandma’s Theory:** You make the opportunity to engage in a high p behavior contingent on engaging in a low-frequency behavior
Implement Prompt and Prompt Fading Procedures

• Prompts are **supplementary**
• Found as both stimulus prompts and response prompts
• **Stimulus prompts** are used to condition the correct response is the presence of a discriminative stimuli in stimulus control procedures
• **Response prompts** work directly with the response
• Fading procedures
• Simple prompts for teaching identification of sight words:
  – Does the child know their letters?
  – If not how would you do this?
Visual Examples

- Teaching identification or writing to a child who can draw pictures.
- Spacing of letters.
- Letter formation.

(Cooper, Heron, Heward, 2007, p. 405)
Case Studies

• Examples on how ABA therapists works for the teachers and other related services providers.

• Case Study: teaching students to write their name:
  – Can they identify letters?
  – Can they state letters?
  – ABA integrating OT goals into the 30 hours a week they provide.
Case Studies

• How to Make a Robot Human Again
• Teaching Acceptance to Changing Routines
• De-sensitizing Foods, clothing, and smells.
• Decreasing perseverative behaviors.

• This case came to me with an 80% reduction in targeted behaviors: however the remaining 20% was still too acute for Jane’s parents; AND they were simply exhausted.
Case Studies

• Teaching Basketball to a child with Autism with severe obsessive behaviors.
  – Using Differential Reinforcement of access to his obsession to increase the time between obsessive behavioral outbursts as a means of improving leisure skills.
  – Generalization to family, caregivers, and peers.
Case Studies

• Eating Skills
  – Rumination
  – Self-Induced Vomiting
  – Eating Slowly
  – Trying new foods
Behavior Reduction

• OT and ABA collaboration can work for behavioral reduction!
• Knowing the functions and replacement behaviors is the first please to start.
• BCBA will record any change with the client in their graphs to indicate intervention changes.
Correlation with OT Recommendations and Targeted Behaviors

- Tantrum
- Aggression
- Darting / Elopement
Correlation with OT Recommendations and Replacement Behaviors

- Break to sensory item
- Wait
- Transition from R+
Programming and Data Collection

- Specific targeted skills
  - When to implement new targets (can be either academic or behavioral)
  - Why do we put a carrot in a snow ball?
- Skills tracking sheets
  - Example of skill acquisition (labeling)
  - Example of behavioral reduction (transition w/o plopping)
- Daily probe sheets
  - How to master
- Data should NOT monopolize teaching!
May the Force be with You!

- ABA assumes that if a child is not learning, it is NOT the child’s fault, it is our fault
- We must change the way we are teaching based on data driven decisive action
- We must continue to try different ways of teaching until we find one that works in collaboration with other service providers
- We never blame the child if learning does not occur
- We believe it’s our responsibility to figure out how to teach whatever the child needs to learn – THEY deserve the best!
Applications and Future Implications

What can YOU do?

Where in your practice do you see an opportunity for collaboration?

What are some of the barriers you are facing?
Applications and Future Implications

What can WE do?

How can we as a profession decrease the negative stigma surrounding ABA services and collaboration with BCBAs?

How can this model be supported?

Ideas?
Thank You for Everything You Do for Our Students!

• Thank you so much for attending and please feel free to email me anytime with questions!

• Michelle.l.willingham@grafton.org


