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Cultivating Motivation
During Natural Environment Teaching
and Group Instruction for Diverse
Learners

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Introduction

- Roles
- Classroom

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Rationale

- Applied Behavior Analysis (ABA) language interventions have proven success for children with autism (National Autism Project, 2009; Sundberg & Michael, 2001; Prelock, Paul, & Allen, 2011).

- Discrete Trial Instruction/Training (DTT) is an instructional method grounded in ABA principles that is strongly supported in the literature as an effective method for developing language skills in individuals with autism (Carbone & Roxburgh, 2010; National Autism Project, 2009; Smith, 2001).

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Rationale

- One major drawback of DTT noted in the literature is the failure for skills learned in contrived sessions to transfer to naturally occurring situations and generalize to new situations in the future (Sundberg & Partington, 1998; Delprato, 2001; Carbone, 2014).

- Natural Environment Teaching (NET) and other naturalistic approaches provide an alternative to contrived language approaches that provide some protections for the limitations of DTT (Sundberg & Partington, 1998; Delprato, 2001; Carbone, 2014).

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Rationale

- Although a wealth of research promotes the use of natural environment teaching and other naturalistic approaches for the teaching of generalized language skills (Sundberg & Partington, 1998; Delprato, 2001; Carbone, 2014)…

  – Recent research comparing contrived and naturalistic approaches actually found the the skills practiced in the contrived formats were more successful in generalized use than those taught in a naturalistic format (Kane, Connell, & Pellecchia, 2010).

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Rationale

- A combination of both contrived approaches and naturalistic approaches are likely to lead to the balanced language development (Sundberg & Partington, 1998).

  – Natural environment teaching protects against rote learning, promotes the likelihood that natural stimuli evoke responses, is guided by the learner's motivation, and promotes learning likely to generalize to other naturally occurring situations.
  – Discrete trial training allows for frequent opportunities to practice skills with sufficient repetition, and allows for tight stimulus control.

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What is NET?

- Natural Environment Teaching
- "NET involves focusing on the child's immediate interests and activities as a guide for language instruction"(Sundberg&Partington,1998, 257)
- Used to generalize or teach new targets
- Can be conducted anywhere
  - At home
  - In classroom
  - On the playground
  - Instruction is driven by MOTIVATION
- Can be with an individual or a group
  - *Videos of individual and group net sessions

Head, shoulders, knees, & toes

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Very Hungry Caterpillar

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NET Sequence

Table 13-8

The Changing Emphasis of DTT and NET as the Child Learns Language

Phase 1. NET > DTT   Focus on early manding, pairing, compliance, stimulus control

Phase 2. NET = DTT   Focus on mand, tact, receptive, imitation, echoic, and intraverbal

Phase 3. DTT > NET   Focus on academic activities and specific skill development

Phase 4. NET > DTT   Focus on learning from group instruction, from peers, and without a highly structured learning environment, training is more like that of typical kindergarten and 1st grade classrooms

Phase 5. DTT > NET   Focus on academic skills and structured learning characteristic of later elementary classrooms

Table 13-8, Sundberg & Partington, 1998, p. 271

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Determining Motivation

- Observation
- Pairing
- Preference Assessments
- Parent Survey
- Satiation / Deprivation

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Creating Motivational Activities

- First consider what motivates each student
  - Music
  - Instruments
 - Painting
  - Gluing
  - Books
  - Cutting
  - Food

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Creating Motivational Activities

- Use motivational information to help with theme selection
  – Our students enjoy music and instruments, so we taught motor imitations with song and egg maracas.
- Consider individual targets
  – Based on student instructional needs
  – Parent suggestion and/or input

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Creating Motivational Activities

- Refer to individual student programs
  – Example of skills tracking sheet, net data, VB-MAPP
- Stick with the VR – variable rate of reinforcement
- Consider PA state standards
  – PS3.3: Develops social interactions

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Target Selection

- Mastered in intensive teaching
- Transferable to general education
- Guided by student motivation

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Data Collection

- Cold probe procedures
  – If "yes" on the cold probe the target is considered to be generalized to the NET
  – If "no" on the cold probe the target is immediately corrected using error correction procedures and then moved into a three day mastery criteria
    - This target is then taught errorlessly until the three day mastery criteria is met

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Teaching Procedures

- Errorless teaching for all target skills missed on CP.
  – Errorless teaching: Prompt-Transfer-Distract (embedded)- Check
- 2 s time delay (TD) for known skills identified as generalization targets.
  – Error correction for known skills following 2 s TD
  – Error correction: end- prompt- transfer- distract- check

3

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Old McDonald Had a Farm

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NET Test: Egg Shaker Video

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Probe Sheet

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Results

- Students demonstrates great gains demonstrating skills in the natural environment across operants.
- NET skills mastered over 1 month.
  - D: 40
  - T: 21
  - A: 29
  - J: 35
  - N: 37
  - C: 29
  - D: 39

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Barriers to Implementation

- Dynamic – ever changing
- Time consuming
  – Continually changing mastered student targets
  – Different levels of instruction
  – Graphing for each operant in each student's program

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Barriers to Implementation

- Use variations in themes to keep planning simple
- Diverse Learners
- Staff Personality

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