Make It Count!

Ensuring Effective Staff Training Procedures

August 7, 2019

National Autism Conference

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https://kahoot.it/
Game Pin: _______
Objectives

• Share CCIU’s coaching model
• Discuss barriers to effective staff training
• Share evolution to a targeted coaching approach using Behavior Skills Training
• Discuss main takeaways and modifications to fit into YOUR program or service delivery model
Coaching at Chester County Intermediate Unit

• Chester County: 759 square miles
  ★ Single Classroom
  ★ Multiple Classrooms

• Preschool Autism Support Classroom Models
  ➢ 12 full-day classes
  ➢ 8 half-day classes

• Preschool AS Staff: 80+
  ➢ 16 Teachers
  ➢ 18 SLPs
  ➢ ~30 Instructional Assistants
  ➢ ~16 TSS/PCA
Coaching at Chester County Intermediate Unit

- Pennsylvania Autism Initiative (PaTTAN)
- CCIU Internal Coaches
  - 6 coaches
  - Preschool and some school-age support
- Applied Behavior Analysis
  - Science dedicated to improving socially significant behavior
- Verbal Behavior as an Analysis of Language
  - Communication follows the same principles as any other behavior
But my program doesn’t look like this!
SLP involvement in AS Classrooms

- Vocal Programming
- Social Skills
- Intensive Teaching
- Parent Training
- Feeding
- VB-MAPP Assessment
- IEP & Goal Development
- Communication Modality
- Manding (Requesting)
- Play Skills
- Group Instruction
- Staff Training
What other skills are you working on?
So you provide all of this staff training...GREAT!
Have you come across these issues?

1. Assuming staff are “getting it” and procedures are being implemented correctly but THEY’RE NOT!

2. Realizing staff are still struggling, but not knowing why?
Staff Training and Retention

- Within one hour, people will have forgotten 50% of what they have learned
- Within 24 hours, they will have forgotten 70%
- Within a week, 90% is lost

https://www.dashe.com/blog/hijack-learning-retention-rates-by-teaching-learners-to-fish
Evolution of Coaching
Behavior Skills Training Model

Instruction \[\rightarrow\] Modeling

Feedback \[\leftarrow\] Rehearsal

(Buck, 2014)
Targeted Coaching 2017-2018

1. Conducted fidelity checks on all AS SLPs to identify needs in a target skill area
   ➢ “Speech Group”
   ➢ Intensive Teaching
   ➢ Manding

2. Provided training/guided practice in target skill area via remote coaching only

3. Measured changes in SLP behavior via follow-up fidelity checks
Targeted Coaching 2017-2018

Average Baseline vs. Average Final Procedural Fidelity Scores

- **Group**
  - Baseline: 65
  - Final: 90

- **IT**
  - Baseline: 50
  - Final: 80

- **Mand**
  - Baseline: 60
  - Final: 95
Targeted Coaching 2018-2019

• Consistent need across SLPs, teachers, and staff...

Vocal Programming

➢ Assessment
➢ Selecting Appropriate Vocal Programs
➢ Selecting Targets
➢ Implementing Procedures with Fidelity
➢ Training and Monitoring Staff Procedures
Targeted Coaching 2018-2019

- Conducted group vocal programming training for all AS SLPs
- Completed follow-up fidelity checks on echoic procedures within 1 month
- Provided continued guided practice and feedback, plus additional fidelity checks as needed
- Supported with staff training and completing fidelity checks on staff
- Continued training in other areas of vocal programming (e.g., intelligibility assessments)
Instruction

- Vocal Programming Group Training
  - Follow up instruction as needed

**Vocal Programming**

SLPs will be able to:
- Identify relevant steps in the vocal programming process
- Identify assessment options and how to select an appropriate assessment
- Identify a variety of treatment options and select an appropriate treatment(s) based on assessment analysis
- Select functional targets
- Effectively monitor procedures across staff
Instruction

- Vocal Programming Group Training
  - Follow up instruction as needed

Echoic Procedure

- Build momentum with 2-3 “known” echoics (or motor imitation skills)
- Show promise reinforcer
- Present “target” echoic
  - If student echoes correctly the first time, reinforce immediately with promise reinforcer
    - Use differential reinforcement (that is, reinforce a LOT for correct targets emitted on the first presentation vs. additional trials)
  - Continue to present the target echoic up to 3 times in a row until the target is emitted
    - If the target is not emitted, present a different “known” and differentially reinforce with an alternative reinforcer
      - Do not give the promise reinforcer
      - Reinforce less than if the student emitted the target echoic.
Instruction

1. Build momentum with 3-3 “known” echos (or motor imitation skills).

2. Show promise reinforcer.

3. Present “target” echo.
   a. If student echoes correctly the first time, reinforce immediately with promise reinforcer.
   i. Use differential reinforcement (that is, reinforce a lot for correct targets emitted on the first presentation vs. additional trials).
   b. Continue to present the target echo up to 3 times in a row until the target is emitted.
      i. If the target is emitted after the 2nd trial, reinforce immediately with promise reinforcer.
      ii. If the target is emitted after the 3rd trial, reinforce immediately with promise reinforcer.
      iii. If the target is not emitted, present a different “known” and differentially reinforce with an alternative reinforcer.
   c. Do not give the promise reinforcer.
   d. Reinforce less than if the student emitted the target echo.
Modeling

- Video models
- Real-time models with staff
- Real-time models with students
Rehearsal
How do you determine if your training has been effective?

➢ *What tools are you using to assess staff procedures?*
Feedback

• Provided using Treatment Fidelity Checklists as a guide

• Treatment Fidelity includes the strategies that monitor and enhance the accuracy and consistency of an intervention to ensure:
  ➢ it is implemented as planned
  ➢ each component is delivered to the student in a comparable manner by the entire team

Example of transcription data
**ECHOIC PROCEDURE**

**Procedural Fidelity Checklist**

**Student:**
**Instructor:**
**Observer 1:**

**Date:**

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### Inter-observer Agreement (IOA) for Reinforcing Echoic Responding

<table>
<thead>
<tr>
<th>Target</th>
<th>Staff (Y/N)</th>
<th>Coach/Instructor (Y/N)</th>
<th>Agreement (+/-)</th>
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<tbody>
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IOA—

*Does staff reinforce: yes or no? Would coach/instructor reinforce: yes or no?*

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### Target-Related Questions

1. Has an appropriate vocal assessment been performed on the student in order to provide baseline information for target selection? (e.g., vocalization baseline, EESA, intelligibility assessment)

2. Are appropriate sounds or words being targeted based on the student’s developmental level and available speech sound repertoire? (e.g., word length and syllable shapes)

3. Are the targets functional in the sense that they can then be incorporated into other vocal programming for the student? (e.g., mand, tact, intraverbal)

4. Does instructor present 2-3 easy echoic or motor imitation skills before presenting the target echoic?

5. Does instructor identify a strong reinforcer and show it as a promise reinforcer just prior to presenting the target echoic?

6. Does instructor use appropriate intonation when presenting echoics? (i.e., inflection, emphasis, volume)

7. If parity is achieved, does instructor immediately deliver the reinforcer? Yes or no? Would IOA data.

8. If parity is not achieved, does instructor run the target echoic up to 3 trials? Yes or no? Would IOA data.

9. If student responds incorrectly on the next 2 repetitions, does instructor move to an easy skill and reinforce on parity, but less than when student achieves parity for target echoic?

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**Notes:**

Percent Correct: / 9

(Modified from Pennsylvania Training and Technical Assistance Network)
Targeted Coaching Outcomes

# Fidelity checks until SLPs scored 90%+

- 90-100% Echoic Fidelity Check Score
Building Capacity

Internal Coaches

Teachers

SLPs

Staff

 Teachers

SLPs

Internal Coaches

Staff

Teachers

SLPs
Becoming the Coach

- Criteria: 90% or higher on echoic fidelity checks
- Utilized Behavior Skills Training Model to train SLPs to train their teachers and staff
  - Transcription
  - Completing fidelity checklists
- Gathered interobserver agreement (90%) prior to SLPs independently training staff
Instruction

SLP

IA
Modeling
Rehearsal
Rehearsal + Feedback

Instruction → Modeling

Feedback ← Rehearsal

SLP

Teacher
### ECHOIC PROCEDURE

#### Procedural Fidelity Checklist

**Date:** 6/13/2019  
**Instructor:** Paige  
**Student:** X  
**Observer 1:** Sondra

#### Inter-observer Agreement (IOA) for Reinforcing Echoic Responding

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<tbody>
<tr>
<td>1</td>
<td>bed</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>2</td>
<td>cake</td>
<td>Y</td>
<td>Y</td>
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<td>3</td>
<td>cup</td>
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**IOA=100%**

#### Feedback

- **Notes:** Great job presenting a few easy echoics to effectively build momentum; loved how you presented easy target that started with /k/ (cake) immediately before target cup to attempt carryover of /k/ sound from one word to another. Nice job modeling sounds and use of differential reinforcers. Would be helpful if you pulled multiple echoic cards out before starting trials to aid in organization and timeliness of target presentations.

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**SLP**

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**IA**
What are some takeaways?
If you feel like this after our presentation...
Come check out our poster on Parent Training!
Special Thanks to...

• CCIU SLPs, Teachers, IAs, and Students!
  ➢ Especially Jackie, Basil, Brielle, Nikki, Meredith, Kelly, Sondra, & Paige

• CCIU Internal Coaches
  ➢ Lori, Chelsea, & Jenn

• CCIU Supervisors
  ➢ Cathy, Deb, & Sam

• PaTTAN Consultants
  ➢ Melissa & Amy
References


• www.pattan.net
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