Embedding Enhanced Milieu Teaching into Educational Settings

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Agenda

• Defining Naturalistic Language Interventions and Enhanced Milieu Teaching (EMT)
• Goals and Benefits of Using EMT
• Environmental Arrangement (EA)
• Responsive Interaction (RI)
• Milieu Teaching (MT)
• Putting It All Together
• Questions
Learning Outcomes

• List three primary components of Enhanced Milieu Teaching (EMT)

• Apply environmental arrangement strategies into your classroom to promote language development

• Discern how and when to use effective prompting procedures to elicit communication
What Do We Know about Naturalistic Language Interventions?

• May be used for young children
  
  (Kaiser & Grim, 2005; Kaiser, Hancock, & Trent, 2007)

• May be effective for generalizing the use of functional language
  
  (Kaiser & Hester, 1994)

• May result in increases in language development for young children
  
  (Kaiser, Hemmeter, Ostrosky, Fischer, Yoder, & Keefer, 1996; Hancock & Kaiser, 2006)
What Is Enhanced Milieu Teaching (EMT)?

- A naturalistic, conversation-based strategy designed to teach language and communication skills to children while they are in the earliest stages of developing language

(Kaiser & Trent, 2007; Kaiser et al., 2007)
EMT Is a Hybrid Model

EMT

Environmental Arrangement (EA)

Responsive Teaching (RT)

Milieu Teaching (MT)
What Are EMT Strategies?

- Setting up interactive context between communication partners
- Notice and Respond – Balanced Turn-taking
- Modeling and Expanding Play
- Modeling and Expanding Communication
- Time Delay Strategies
- Prompting Strategies
Who Can Benefit from EMT?

- Over 50 empirical studies have reported that EMT may be beneficial for children:
  - With autism spectrum disorders
  - With significant cognitive and language delays
  - Who are from high-risk, low-income families

(Hancock & Kaiser, 2006)
Recent Research on EMT

- http://vkmc.mc.vanderbilt.edu/kidtalk/research/

- Other research investigating benefits of EMT include:
  http://vkmc.mc.vanderbilt.edu/kidtalk/info-for-professionals/

- Some additional handouts/resources:
EMT Is Most Effective When...

- Children have at least 10 verbal productive words
- Children have MLU’s ranging from 1.0-3.5
- Children are verbally imitative

(Hancock & Kaiser, 2006)
Three Strengths in Using EMT

• Similarities between EMT and adult-child interaction have been linked to increased language learning and the emergence of positive relationships between the dyad

• The incorporation of environmental arrangement (EA) strategies creates a strong context for teaching language that is considered imperative for a child to learn language

• Due to the fact that there are a number of intervention strategies that comprise EMT, the interventionist can tailor the intervention to suit the child’s individual style of learning and current developmental levels of language skills

(Kaiser & Hester, 1994)
Who Can Teach EMT Strategies?

(Trent, Kaiser, & Wolery, 2005)
Three Goals for Working with Children and Using EMT

- Increase rate of child communication
- Increase diversity of child communication
- Increase level of child independence
Environmental Arrangement (EA)
Environmental Arrangement

• a.k.a. “setting up an interactive context”

• Intentionally arranging environment to promote (and increase) likelihood that a child initiates communication with his/her communicative partner

(Kaiser & Trent, 2007)
EA Strategies for Caregivers

Selection of Materials

Arrangement of Materials

Management of Materials

(Hancock & Kaiser, 2006)
Selecting Materials

- Toys that require assistance in opening and assembling
- Toys that are interesting and highly preferable
- Toys/tasks that allow you to partner with the child
- Toys with multiple parts

(Hancock & Kaiser, 2006)
Selecting Toys for Your Classroom

• What are some toys/routines in your classroom (or at your school) in which students typically need assistance?

• Which toys are highly preferable?

• How do you know they are highly preferable?

• During which activities and routines can you interact with your students?

• Are there activities/toys in which multiple parts are used?
Arranging Materials

Keep some toys in containers to promote child communication

Limit number of materials available at one time

Have some toys in sight and out of reach

(Hancock & Kaiser, 2006)
Managing Materials

Violate Expectations

Add materials when child begins to lose interest

Be a gatekeeper
Manage Materials Cont’d

Provide only 1-2 parts to encourage child to request more

Provide only some materials needed for an activity

(Hancock & Kaiser, 2006)
Let’s Reflect on EA

• Routines in which you can use these strategies?

• Ideas for materials?

• Children in which these strategies may be appropriate/inappropriate?
Examples of EA

- Use limited number of materials
- Adult has possession of materials and uses as session progresses
- Communication partners are in close proximity
- Remain on same eye level

(Kaiser & Delaney, 2001; Hancock & Kaiser, 2006)
Responsive Interaction (RI)
Responsive Interaction (RI) Strategies

• Used to maintain the child’s engagement in the conversation and to support the child’s emerging language development

  (Trent-Stainbrook, Kaiser, & Frey, 2007)

• Considered to be key behaviors of the adult in using EMT strategies

  (Kaiser & Delaney, 2001)
Examples of RI Strategies

- Follow child’s lead
- Respond to child’s verbal/non-verbal behaviors
- Balance communicative turns
- Expand child’s communicative acts
- Model language at child’s level
Why Use RI?

• Focuses on decreasing caregiver directiveness while caregiver responsiveness

• Creates a more balanced conversation between the communication partners

• Increases how often a child is responded to contingently

• Teaches caregivers to follow child’s lead and respond to child communicative attempts

(Hemmeter & Kaiser, 1994)
Following the Child’s Lead

• Why is there an emphasis on following the child’s lead?

• What are ways in which you follow children’s leads at your school?
Turn-Taking

- Respond to child’s verbal/non-verbal turns
- Balance communicative turns between child and adult
- Mirror and map child’s actions
Modeling Language

• Using RI strategies is an ideal way for adults to model new language for children

• When modeling new language for children, caregivers should use a specific word(s) for actions, objects, and events, especially in place of general pronouns (Ex: it, those, that, etc.)

(Kaiser & Delaney, 2001)
Modeling Language and Target Talk

• How can we model language?

• How can we target specific language with students?
Target Talk

After adult learns to follow child’s lead and use balanced turn-taking, target talk is introduced

- Developed through analysis of language samples and baseline sessions

Transcribed analysis of language samples between adult and child are coded for MLU and syntax

- Adult is required to model each target at least once during interaction

Lays foundation for child to create more complex sentences
# One-Word Targets

<table>
<thead>
<tr>
<th>Target Words:</th>
<th>Noun</th>
<th>Verb</th>
<th>Protoverb</th>
<th>Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examples:</td>
<td>Cat, mommy, playdoh, ball, baby, etc.</td>
<td>Sit, open, sleep, eat, drink, go, etc.</td>
<td>In, out, on, off, etc.</td>
<td>Help, more, alldone, again, want, give, need, etc.</td>
</tr>
</tbody>
</table>
# Two-Word Targets

<table>
<thead>
<tr>
<th>Targets:</th>
<th>Agent + Action</th>
<th>Action + Agent</th>
<th>Modifier + Noun</th>
<th>2-Word Requests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examples:</td>
<td>Mommy opens, baby sleeps, block in, etc.</td>
<td>Go car, push down, open lid, etc.</td>
<td>Blue car, two cars, big car, etc.</td>
<td>Help me, go again, my turn, need milk, etc.</td>
</tr>
</tbody>
</table>
## Three-Word Targets

<table>
<thead>
<tr>
<th>Target Phrases:</th>
<th>Agent + Action + Object</th>
<th>Preposition Used in 3-Word Phrases</th>
<th>Modifier in 3-Word Phrases</th>
<th>3-Word Requests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examples:</td>
<td>Mommy sits down, we drive cars, Elmo eats cookies, etc.</td>
<td>Put in the bucket, drive under bridge, etc.</td>
<td>Wear red dress, drive blue car, throw big ball, etc.</td>
<td>I need milk, want more cookies, give another block, etc.</td>
</tr>
</tbody>
</table>
# 4-Word Targets

<table>
<thead>
<tr>
<th>Target Phrases:</th>
<th>3-5 Word Phrase Using Modifier</th>
<th>3-5 Word Phrase Using Prepositional Phrase</th>
<th>4-Word Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examples:</td>
<td>I wear blue shoes, Nelly eats two cookies, etc.</td>
<td>Car goes on the ramp, I put blocks in the box, etc.</td>
<td>I want more water, daddy read another book, etc.</td>
</tr>
</tbody>
</table>
Expansions

• Lets child know that adult is listening to him/her

• Adult models language at a slightly higher level than what the child is currently using

• Serves as a bridge to the next step in language development

• Most powerful strategy used to facilitate language development

  (Hancock & Kaiser, 2006)
Examples of Expansions

• Child: “car.” Child: “sketti.”
• Adult “drive car.” Adult: “Spaghetti.”
• Adult: “We drive cars.” Adult: “eat spaghetti.”
More Expansions

• Child: \{points to car and vocalizes\}.
• Adult: \{points to car\} Car!

• Child: \{gives car to adult\}.
• Adult: ?
Video

Lunch 1

Lunch 2

A presentation of COLORADO DEPARTMENT of EDUCATION

Results matter
Milieu Teaching (MT)
Milieu Teaching (MT) Strategies

• Procedure used when a child exhibits interest in his/her environment and the adult prompts the child to use new language

  (Hancock & Kaiser, 2006)

• Adults are advised to limit the use of this strategy during interactions with children for times when the child is prompting a specific language target

  (Kaiser & Delaney, 2001)
Important Points for Using Milieu Teaching Strategies

• Using prompts too often can be overwhelming and frustrating for a child and the conversational, responsive nature of the interaction may disappear

• Children should not be prompted to use the targeted language more than twice during one milieu teaching episode

(Kaiser & Delaney, 2001; & Kaiser, 2006)
Important Points (cont’d) for Using Milieu Teaching Strategies

Regardless of whether or not a child responds correctly with the desired target language, the adult responds with positive consequences, states the desired target language, and continues with RI strategies

(Hancock & Kaiser, 2006)
Three Strategies of Milieu Teaching

- Time Delay
- Mand-Modeling
- Modeling
Time Delays

Provide least amount of support for child

Occurs when adult sets up the environment to encourage the child to make requests without relying on verbal supports of the adult

Example: If child shows signs of disengaging, hold up two choices for a child to use without naming the object.

(Kaiser & Grim, 2005)
Mand-Models

• Include a question in the verbal prompt by the adult.

• Prompt may be an open question or a choice question.
  (Kaiser et al., 2007; Kaiser & Grim, 2005)
Models – “Say” Prompts

• Provides the most support to a child

• Adult explicitly says, “Say ____________” when a child demonstrates interest in obtaining an object or wants an action to occur again (Kaiser et al., 2007; Kaiser & Grim, 2007)
Embedding Milieu Teaching Strategies into Daily Routines

• When can you use milieu teaching strategies?

• What considerations should you make when deciding to use milieu teaching?
Example of Milieu Prompting Sequence

- Child: (sees adult with ball and indicates interest in playing with ball) {Vocalizes and points.}
- Adult: “What do you want?”
- Child: {vocalizes and points.}
- Adult: Say “ball.”
- Child: “ball.”
- Adult: “roll ball!” (rolls ball to child)
Questions?
REFERENCES


