# **ECT: Environmental Communication Teaching**





Part 1 of 2: Strategies for Implementation

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- ➤ Are there students in your classroom that have complex communication needs?
- Do students have communication systems (including tablets with apps) that go unused?
- ➤ Are devices assessed for & purchased without implementation plans?
- When you offer suggestions for use, are they met with doubts?

# POLL: How Many of You are...

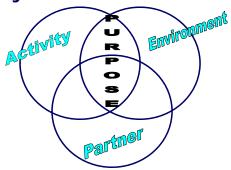
- 1. Administrator
- 2. Assistive Technology Specialist
- 3. Consumer of A.T.
- 4. Family Member / Care Giver
- 5. Occupational Therapist

- 6. Physical Therapist
- 7. Sales Representative
- 8. Speech/ Language Pathologist
- 9. Teacher
- 10. Other



## **ECT Components**

- > Activity-Based Objectives
- > Environmental Arrangements
- > Prompt Hierarchy





### **ECT Foundation**



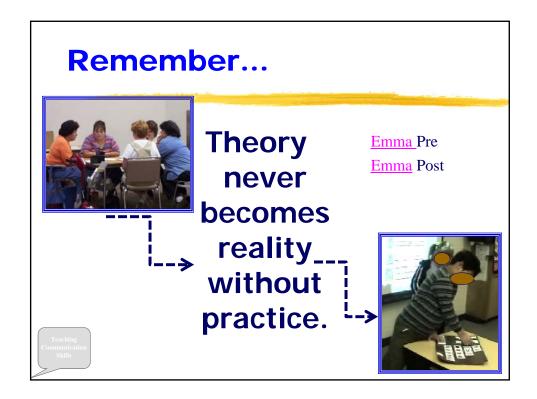
- Grant
  - George Karlan & Irene McEwen, Purdue University
- Timeline
  - Research years 1988-1992; continues US Nationwide
  - States involved: IN, PA, FL, TX, WI, OH, GA, IL, OK, CA, Canada
- Goals of Grant
  - 1. Increase communication in augmented speakers
- Teaching 2. Communication Skills

2. Impact classroom staff implementation strategies through adult learning strategies

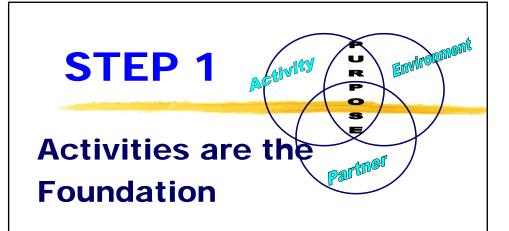
### **ECT Steps to Implementation**

- **Step 1 Activities are the Foundation**
- **Step 2- Prepare for Communication Interaction**
- **Step 3- Arrange the Environment to Promote Communication**
- **Step 4- Communication Partner Strategies in a least to most Prompt Hierarchy**
- **Step 5- Plan with Activity Based Objectives**





# Team Composition Core Team Core Team Classroom Teacher Instructional Assistant Speech Language Pathologist Additional Members OT's, PT's, Vision, Psychologists Parent Administrator



The task itself must provide a solid foundation for the communicative interaction that occurs within it.



### **Communication Context: Dyadic**

- > Social Interaction
  - > arriving
  - departing
  - breaks or transitions between classes or work or community activities



picture from www.dynavoxsystems.con

### **Communication Context: Joint Action Routines**

Angel

- > Activities that are common
  - > to home activities
  - > to school routines
  - ▶ to job activities
  - > to community activities
- > Scriptable
- **➤ Context Specific** Vocabulary



picture from www.ablenetinc.com

# **Communication Context: Behavior Regulation**

- What the AAC user says to...
  - direct the actions of another
  - have basic daily needs met for
    - hygiene
    - > getting around
    - > physical care
    - dressing



picture from www.prentrom.com



Devrin

# **Communication Context: Instructional Language**

- Participating by Presenting, Answering & Asking questions...
  - > in class
  - > in a meeting
  - > in an interview



picture from www.ablenetinc.com



Bryan

### **Activity Structuring**

### Identify:

- Natural Environments
- Routines within those environments
- Specific skills required throughout the activity
- Discrepancies between current and desired performance
- Existing or new communication requirements



**Communication messages** 

# Requirements for an Activity

- ➤ How is it Initiated?
  - What is the transition from the previous activity?
- > How is it Maintained?
  - What are the operations that must be carried out?
  - ➤ What must be said to carry them out?
- ➤ How is it Terminated?
  - What actions end the activity?
  - Who ends the activity?

# **Target Activities with these characteristics**

- "Process" rather than "product" oriented
- ➤ Represents class of activities (examples: cooking, art, reading, exercise, games)
- ➤ More than one "selection" for activity type can be offered at any given time
- Activity occurs 3-4 times each week



Isn't that what it's all about? If we can't demonstrate our knowledge, what's the use of learning?

### **Activities can Target...**

- **➤ Vocabulary Expansion**
- > Language Development
- > Multi-modal Communication
- ➤ Replacing "Bad Behaviors" with Communicative Behaviors



### **COMMUNICATIVE MODEL**

- **≻** Social Contexts
- **➤ Social Regulation Functions**
- **Communicative Functions**
- Communicative Behaviors

Teaching Communication Skills

# Categories of Communicative Function

- Requesting an Action, Object, Person, Information
- Directing Attention to Self, Object, Person, Action
- > Rejecting/Refusing
- **Commenting**
- **➤** Giving Information
- ➤ Seeking Information

- Expressing Feelings
- **≻** Greeting
- Reinforcing
- **≻** Comply
- > Answer
- Social Niceties

### **Communicative Behaviors**

- **≻**Modality
  - **≻**Spoken
  - **≻**Gestural
  - ➤ Manual sign (unaided symbols)
  - **➤ Visual-graphic (aided symbols)**
  - >Multiple modality usage



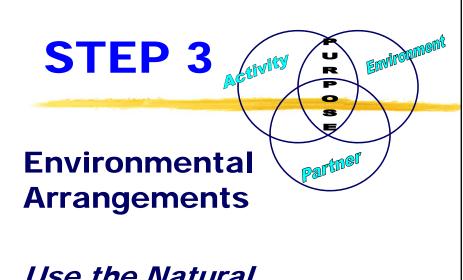








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Use the Natural Environment to Initiate Communication

# **Environmental Arrangements**

- interesting materials& activities
- materials in view, out of reach
- materials with which need assistance
- novel elements
- > small amounts
- > inadequate portions
- sabotage of familiar routine



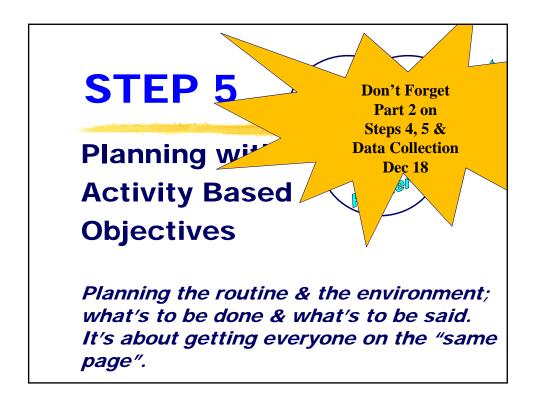
- provide choices
- > schedule systems
- picture-based prompt cues for talking

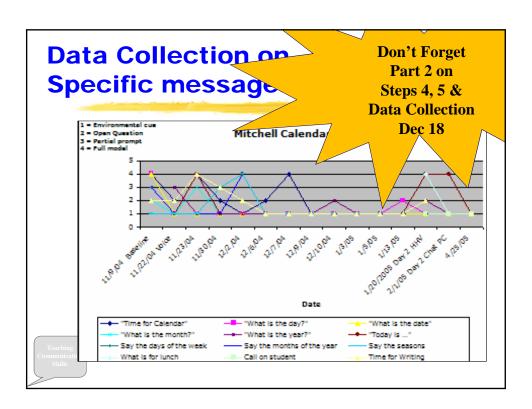
### Consideration in Arranging Displays

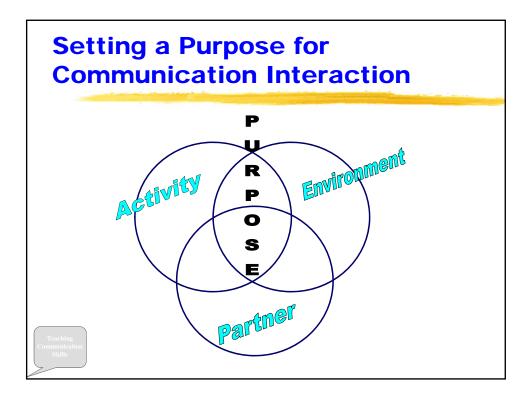


- Position of communication board/display for access as well as interaction with task
- Communication display as mnemonic device for task performance
- Adult involved in activity may benefit from having their own display
- ➤ Include critical sequences in activity
- Sufficient symbols for choice-making throughout the activity
- Messages that have potential to be generalized and grow









### **Quote**

"You must learn from the mistakes of others. You can't possibly live long enough to make them all yourself."

### Sam Levenson

American humorist, writer, television host and journalist



### **ECT Training Sequence**

- > Introductory Training
  - > Presentation foundation material
  - > Selection target students & activities
  - > Development of Scripts
- > In school Application
  - > Video pre-intervention sample
  - Complete & revise scripts
  - > Implement revised activity
  - Video sample of revise activity

### **ECT Training Sequence**

- Beginning of Winter
  - Review ECT strategies/scripts/promp
  - ➤ Issues with AAC displays/messages
  - > View & cover issues related to video sample

### ➤ In School Application

- > Implement revisions
- > Begin collecting data based on scripts
- Video post intervention of first/second activity

### **ECT Training Sequence**

- **≻ End of Winter** 
  - View/cover issues related to tape samples
  - ➤ Provide feedback on AAC displays



- ➤ In School Application
  - > Final revisions to activities
  - Video final clip of activities



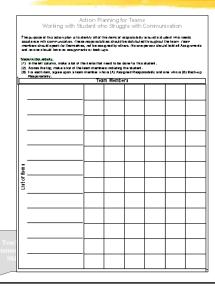
### **ECT Training Sequence**

- **≻ End of Year** 
  - > Teams present to group
  - ➤ Share changes in team behaviors
  - ➤ Share changes in targeted students
  - ➤ Next year staff involved
- **►Next Steps** 
  - carry over/plan next year





# Creating Action Plans for the Work of ECT



- List of Responsibility Items
- List of team members
  - Assign main responsibility
  - ➤ Assign a back-up

### **Additional Training**

- Boardmaker or Specific AAC Device or App Training
- On-site Visits or Virtual Consultation



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