

# ECT: Environmental Communication Teaching

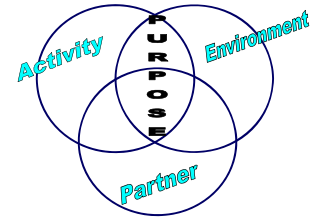
## ECT: Environmental Communication Teaching



Part 2 of 2: ECT  
Data Collection Strategies  
Webinar by: Kelly Fonner, MS  
Assistive/Educational Technology Consultant  
[www.kellyfonner.com](http://www.kellyfonner.com)

## ECT Components

- Activity-Based Objectives
- Environmental Arrangements
- Prompt Hierarchy



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## 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 & a least to most Prompt Hierarchy**
- Step 5 – Plan with Activity Based Objectives Monitor & Adjust with Data Collection**

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POLL:  
insert the Roles Poll here

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# ECT: Environmental Communication Teaching

## AAC Data in the Classroom

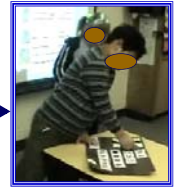
- How are you collecting data on the use of communication systems in your classroom?
- Are you making meaningful use of the data that is collected? Or is it just filed away?
- Are you satisfied that students push a "talking button" when you put it in front of them? Is this really self-determined communication? Or is this a pre-determined task, not really expressive communication at all?
- Can you demonstrate that students are more independent in utilizing their communication system? That they are initiating? That they are using more communicative functions?

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## Remember...

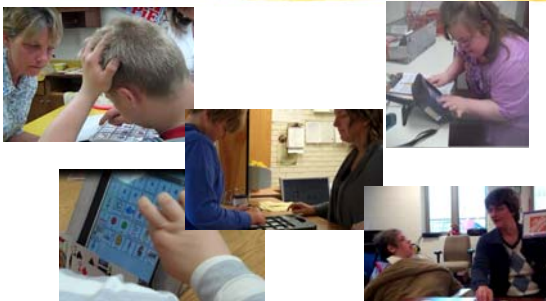


Theory never becomes reality without practice.



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## A Variety of Communication Contexts in School



## ECT STEP 1: Activities have a Social Communicative Context

- Dyadic Interaction
- Joint Action Routines
- Behavior Regulation
- Instructional Activities

Environmental Communication Teaching			
Activity: Planning Worksheet			
Student: _____			
Activity: _____			
LIST OF DAILY ACTIVITIES	COMMUNICATION CONTEXTS	LIST OF SOCIAL ACTIVITIES	COMMUNICATION CONTEXTS
	-0-0-0-0 Joint action See teacher regulate See teacher call		-0-0-0-0 Joint action See teacher regulate See teacher call
	-0-0-0-0 Joint action See teacher regulate See teacher call		-0-0-0-0 Joint action See teacher regulate See teacher call
	-0-0-0-0 Joint action See teacher regulate See teacher call		-0-0-0-0 Joint action See teacher regulate See teacher call
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# ECT: Environmental Communication Teaching

## School-based Activity Ideas

- Arrival at School
- Personal Hygiene
- Morning Meeting
- Current Events
- Reading
- Snack Preparation
- Math Groups
- Classroom or School Jobs
  - Delivering mail
  - Collecting Trash
- Lunch Time
- Art Projects
- Preparing to go home

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What Communication Context are these activities?  
DYADIC – JOINT ACTION – BEHAV REG - INSTRUCT

## Step 2: Focusing on the Communication Purpose:

### Activities can Target...

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



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## More than 1 Communicative Function per Activity

- Requesting an Action, Object, Person, Information
- Directing Attention to Self, Object, Person, Action
- Rejecting/Refusing
- Commenting
- Giving or Seeking Information
- Expressing Feelings
- Greeting
- Reinforcing
- Comply
- Answer
- Social Niceties

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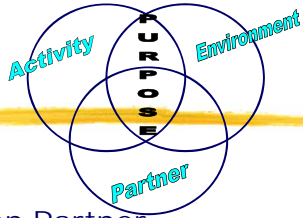
## Step 3: Environmental Arrangements

- Materials: Too many, too few
- Locations: Out of reach,
- Change Activity Style: Students doing the work instead of adults, sharing instead of everybody having their own, student lead activities
- Schedules: First-Then, Lists, Daily
- Others: Out in hallway, In Office, Jobs

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# ECT: Environmental Communication Teaching

## STEP 4



You,  
the Communication Partner

*Communication is a 2-Way Street.  
We want to practice adult  
behaviors that elicit (not inhibit)  
communication*

## Some things you can do to Encourage Communication

- Don't exempt your student's communication turn
- Don't anticipate every need
- Make different types of choices available
- Sabotage known routines
- Slow down
- Create silly situations
- Model device use
- Focus on use in natural settings
- Cut back on "show speech" performing tricks
- Increase expectancy of communication
- Promote peer interaction



## Quote

**"It's easy to be an over-achiever in the land of lowered expectations"**

**Michael Williams,**  
Consultant &  
Editor- *Alternatively Speaking*



<http://www.augcominc.com/index.cfm/as.htm>

## Spoken Prompt Hierarchy

- 1. Set the Environment -----Pause
- 2. Ask Open Question -----Pause
- 3. Suggest/Give Partial Prompt -----Pause
- 4. Model/Request for Communication-----Pause
- 5. Provide Full Model -----Pause

**Descriptive Feedback Follows  
Communication**

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## Non-Spoken Prompt Hierarchy

- 1. Set the Environment -----Pause
- 2. Raised arms, Gesture,  
Or Light Shadow -----Pause
- 3. Point or Light to Choices ----- Pause
- 4. Model/Point or Light to Response ----- Pause
- 5. Provide Full Physical Model -----Pause

**Descriptive Feedback Follows  
Communication**

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## 1. The Pause

- **If an environmental cue or a transitional cue has just occurred**
- **Focus your attention on the person and PAUSE**

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## 2. Open Question

- **If the student does not respond to the pause by making or attempting a response...**
- **Ask a what, why, who, when, where, or how question, (staying within the communication function) and then PAUSE**

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Skills

## 3. Partial Prompt

- **If the student does not respond to the open question or produces a minimal response...**
- **Provide part of the response by:**
  - **Make suggestions that fall within the topic,**
  - **giving a hint or a clue, modeling the first few words (or sounds) of the answer, and then PAUSE**

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Skills

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## 4. Request for Communication (command)

- If the student responds to the pause or the open question with behavior that is:
    - Inappropriate in the case of an instructional question, or
    - at a lower level than desired for that person
  - Request that the student use another form or elaborate on the response, and then PAUSE
- Always remember that communication intentionality is the student's – so it's not that they are "wrong"

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## 5. Full Model

- If the student has never produced the response you are seeking...
- Provide a full model for the response, and then PAUSE.
- If the student does not respond to the partial prompt or mand or does so incorrectly in the case of an instructional question...
- If the person has an AAC system, provide the model for him to imitate if they choose.
- Always remember that communication intentionality is the student's – so it's not that they are "wrong"

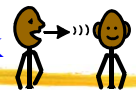
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## \* Descriptive Feedback

- Use after the student has produced a communicative response, or
- Use after the last step of the prompt hierarchy that you need to use
- Descriptive Feedback is specific to the communication behavior:
  - "You asked for more juice and here it is."
  - "You asked for some scissors, (as you are handing the scissors to them) what are you going to make?"
  - It could also be that a student gives you 1 word & you model a string of words in reply

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## Descriptive Feedback



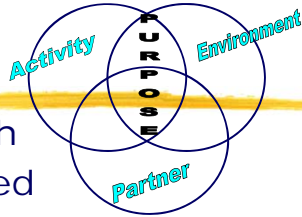
- Just respond naturally
- Confirms message sent by the student
- Don't re-ask questions
- Opportunity to expand upon language &/or device use
- Respond to intelligible utterances or indistinct gestures by requesting that the student "say it another way"

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## STEP 5

### Planning with Activity Based Objectives



*Planning the routine & the environment; what's to be done & what could be said. It's about getting everyone on the "same page".*

## Not everyone has experience

- Sometimes not everyone has experience with AAC
- Scripting can be a good starting point, a "cheat sheet" for the adults
- Make sure that they understand that it's not for all the time & you don't only do scripts
- Scripts can be a source of data collection

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## Using the ABO (Activity Based Objectives) Format

Team Name: \_\_\_\_\_ Student FIRST Name: \_\_\_\_\_ Activity Name: \_\_\_\_\_ (Activity#1-2-3)

Activity Based Objectives for the Student	Promoting Intensity for the Activity				Descriptive Feedback (Communicance and related communication)
	STEP 1: Environmental Cue	STEP 2: Open Question	STEP 3: Partial Prompt	STEP 4: Command	
1)					
2)					
3)					
4)					
5)					
6)					
7)					

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## Go Fish Script

-remember, doesn't have to be in this order; she doesn't have to say all messages

Activity Based Objectives for the Student	Promoting Intensity for the Activity					
	STEP 1: Environmental Cue	STEP 2: Open Question	STEP 3: Partial Prompt	STEP 4: Command	STEP 5: Full Model	Descriptive Feedback (Communicance and related communication)
1) Emma will say "Stephane, let's play GoFish"	Directed by EA to get cards and ask Stephane to play	What do you need to ask Stephane	Gesturer/ Point to voice output device	Point to Let's Play GoFish message	EA takes Emma's hand and points to picture symbol	Stephane says okay and comes to the table
2) Emma may say she has a pair	Emma has 1 or more pairs in her hand	What do you need to check first?	Gesturer/ Point to cards (and/or pairs)	Check to see if you have any pairs	Point to pairs	Do you have any more pairs?
3) Emma ask Stephane or Linda for a card	Emma has no more pairs in her hand	Who are you going to ask?	Gesturer/ Point to voice output device	Ask Stephane or Linda for a card	EA points to messages on voice output device	Emma is given the card she requested or told to GoFish
4) Emma places her pair on the table or takes for another card	She has been given the card she requested or told to GoFish	What do you need to say?	Point to voiceoutput device	Say: I have a pair or that's r/n done	Point to messages on voiceoutput device	Stephane or Linda asks Emma if she has a card they need
5) Emma gives the card she's been asked for or says GoFish	She doesn't have the card she's been asked for	What do you need to say/point?	Gesturer/ point to card or voiceoutput device	Give this card or say GoFish	Points to the card to get or the GoFish message	Stephane or Linda says I have pair or r/n done
6) Emma counts her cards & tells who has won	The cards are all gone	Who won?	Point to voice output device	Say Winner winner chicken dinner	Points to person's picture and winner message	
7) Emma asks to play again	The game is over	What do you want to ask?	Point to voice output device	Ask Stephane if she wants to play again	Points to Do you want to play again message	Stephane says: Ok or no thanks

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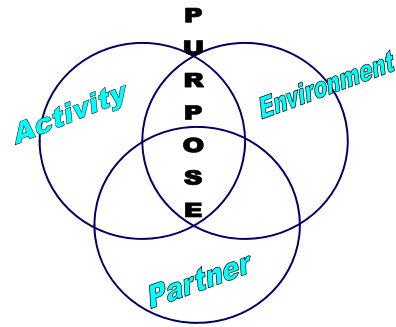
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## Guidelines for Preparing Activity-Based Objectives

- Should state what the student can do or say to complete the steps of the activity
- Cues and prompts are added and taken away as needed
- They describe the activity at the final criterion
- Use only verbs such as Ask Tell Say and Answer to describe the communication from the student
- Remember that all communication has equal value regardless of the modality being used

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## Data Collection on ECT



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## Collecting Data on Student Progress

- Video segments
  - Baseline of activity
  - Intervention segments (approximately once a month)
- ECT Prompt Hierarchy tracking
- ECT Prompt Hierarchy charting

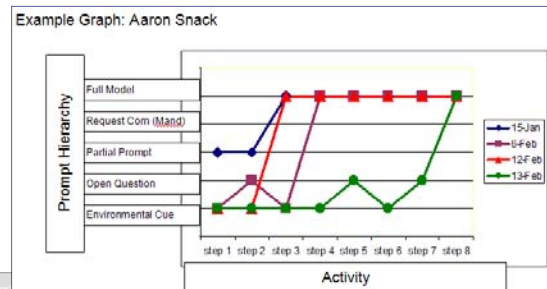
Example of a data collection form for ECT. It includes a list of steps for an activity and a table for tracking progress.

1. Complete instructions for each of the following activities.  
 2. With each step, a student will be asked to communicate a request for the item.  
 3. With the teacher's assistance, the student will be asked to communicate a request for the item.  
 4. The teacher will then provide the item to the student.  
 5. The student will then be asked to communicate a request for the item.  
 6. The student will then be asked to communicate a request for the item.  
 7. The student will then be asked to communicate a request for the item.

Step	15-Jan	12-Feb	13-Feb
1			
2			
3			
4			
5			
6			
7			

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## Data collection on Support in the Activity

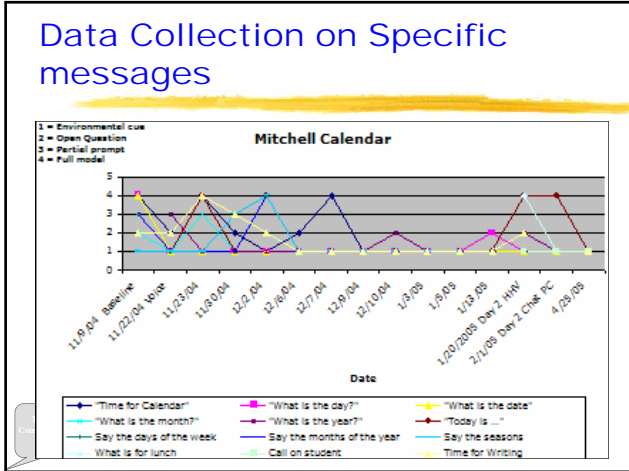


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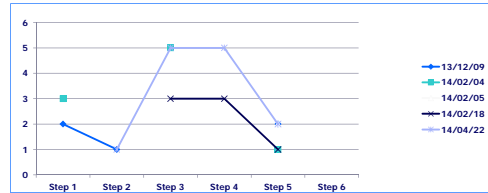
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## Data Collection on Specific messages

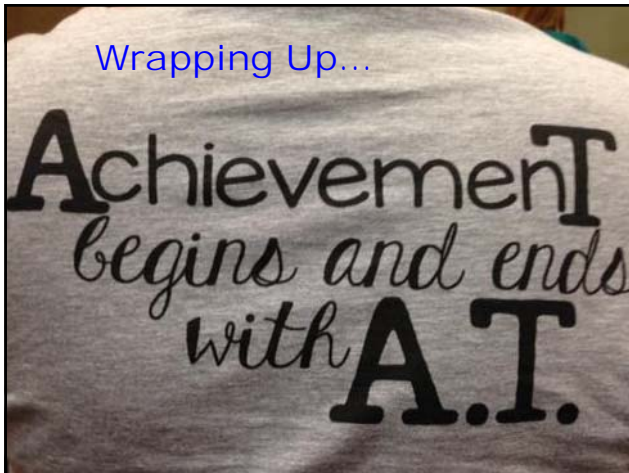


## Student from 2013-14 in Snack Activity

- Using different devices (voice, sign, PODD, lotech AAC) depending on context
- More aware of peers – seems to enjoy spending her snack time with them (some more than others)
- Starting to correct errors when peers point out that what she has said doesn't make sense.
- Less reliant on adults during this interaction
- People involved in the activities greatly affects her success



Wrapping Up...



## What Can You Do?

- Give Information in Situational Components
- Practice with Feedback
- Model Techniques
- Address Their Concerns
- Build on success



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## Getting Feedback – on Videos (thru email or Virtually)

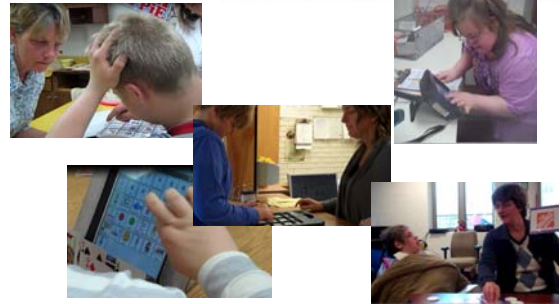
Team \_\_\_\_\_ Student \_\_\_\_\_ Activity \_\_\_\_\_ Taping (date) Initial – 1<sup>st</sup> – 2<sup>nd</sup> – 3<sup>rd</sup> – final

TASK/ACTIVITY	TEACHING ARRANGEMENTS	VOCABULARY MESSAGE	AAC DISPLAY	MESSAGE SELECTION STRATEGY
Instructional objective	Materials/arrangements	Prompt to trial	Physical arrangements (layout)	Mode of instruction
Instructional format	ECT Core Principles	Message form (mode)	Physical support	Assignment of behavior
Age-appropriate to	Developmental level	Age appropriate of Message Goals	Prompt to trial (arrangements)	Prompt to trial
Curriculum	Material design/physical supports (for teaching)	Prompt representation	Transport	Plan reinforcement

**Feedback comes from Trained ECT consultants**

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## A Variety of Communication Contexts in School



## ECT Training Sequence

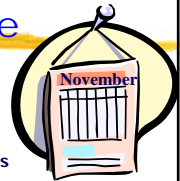
- **Introductory Training**
  - Presentation - foundation material
  - Selection - target students & activities
  - Development of Activity Based Objectives
- **Back at school**
  - Videotape preintervention sample
  - Complete & revise ABO's
  - Implement revised activity
  - Videotape sample of revise activity



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## ECT Training Sequence

- **Beginning of Winter**
  - Review ECT strategies/ABO's/prompts
  - Issues with AAC displays/messages
  - View & cover issues related to tape samples
- **Back at school**
  - Implement revisions
  - Begin collecting data based on ABO's
  - Video taping post intervention of first/second activity

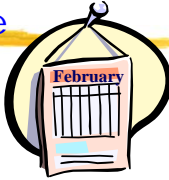


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## ECT Training Sequence

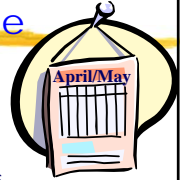
- **End of Winter**
  - View/cover issues related to tape samples
  - Provide feedback on AAC displays
- **Back at school**
  - Final revisions to activities
  - Tape final clip of activities



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## 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



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## Creating Action Plans for the Work of ECT

**Action Plan for Training**  
Working with Student and Staff with Communication

The purpose of this action plan is to identify all of the tasks of responsibility, and to do it with team members to a common goal. Each responsibility should be assigned to a team member and each team member should be responsible for completing it. The team will meet weekly to discuss progress.

**Team Members:**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

**Task/Milestone**

Task/Milestone	Assigned To	Due Date	Status

**Team Communication**

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

Team Communication



For more information about ECT training & virtual consultation afterwards

Contact:  
Kelly Fonner  
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Assistive/Educational Technology Consultant  
[www.kellyfonner.com](http://www.kellyfonner.com)

Don't Forget Part 1 & 2 will be on AbleNet University for Review

