AAC in the Classroom for Students with Significant Disabilities

Session 3 – Analyzing Data from LoTech AAC & Apps

Webinar by:
Kelly Fonner, MS
Assistive/Educational Technology Consultant

A 3 Part Series:

AAC in the Classroom for Students with Significant Disabilities

Session 1 – A Progression Strategy From BIGmack® to SoundingBoard and Beyond

Session 2 – Implementation & Data Collection on LoTech AAC & Apps

Session 3 – Analyzing Data from LoTech AAC & Apps

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POLL:
How Many of You Have been with Us?

1) This is my first session. I haven't viewed either of the other Sessions.

2) This is my 3rd session!

3) I viewed session 1, but not session 2

4) I viewed session 2, but not session 1

5) I have no idea if I have viewed one of the previous sessions

6) Would rather not respond.

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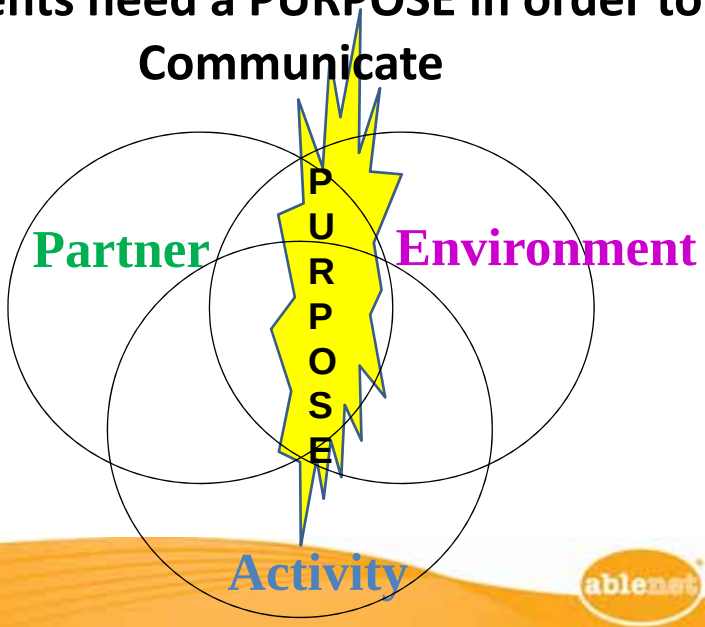
Students need a PURPOSE in order to Communicate



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Remember...

Theory never becomes reality without practice.

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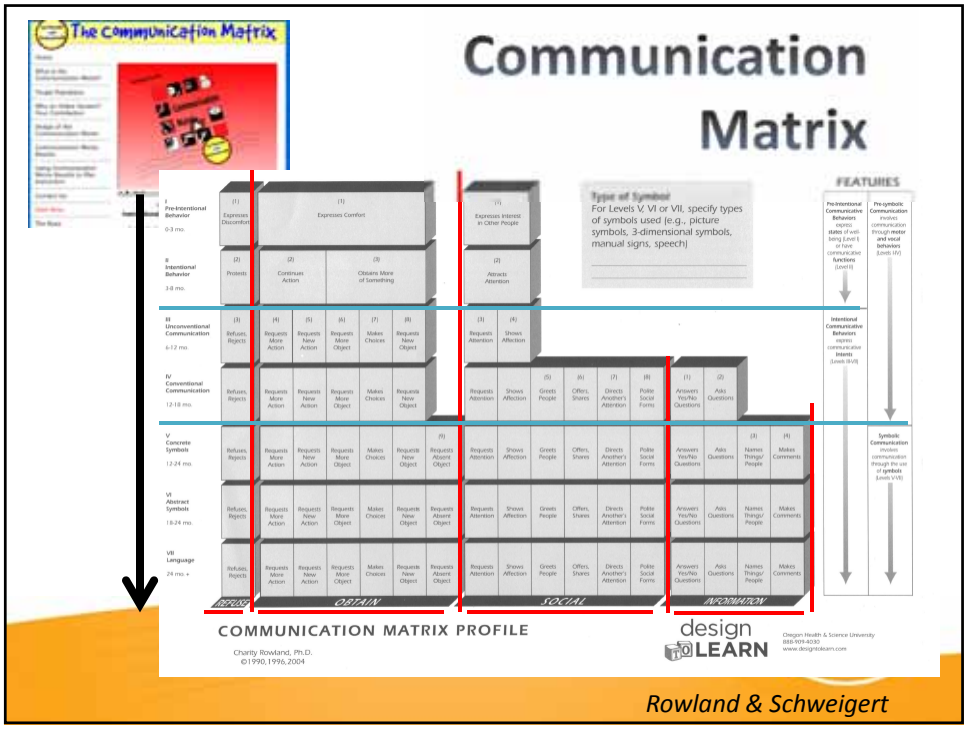
Communication Enhancement Process (CEP) Project

Oakland County Schools, Michigan (6 years)

Ohio – Regions 2, 3, 8, & 9 (1st year)



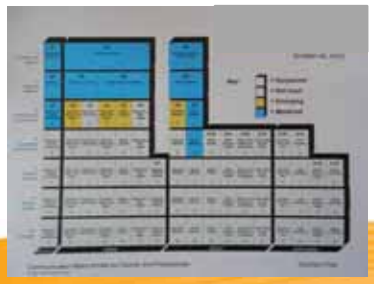
Data Collection Results 2013-14 with Communication Matrix

Student & Target Activities

- 21 year old w/DownSyndrome & Lennox-Gestaut Syndrome
- Leisure Choice Activity
- Group Greeting Activity

Assessment Dates Pre/Post

- October 16 2013
- March 23 2014



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Data Collection Results 2013-14 with Communication Matrix

Student & Target Activities

- 20 year old w/Severe Multiple Disabilities
- Music Choice Activity
- Group Turn Activity

Assessment Dates Pre/Post

- October 14 2013
- March 24 2014

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Data Collection Results 2013-14 with Communication Matrix

Student & Target Activities

- 14 year old w/Angelman Syndrome
- Snack Activity
- Group Report Activity

Assessment Dates Pre/Post

- October 11 2013
- March 25 2014

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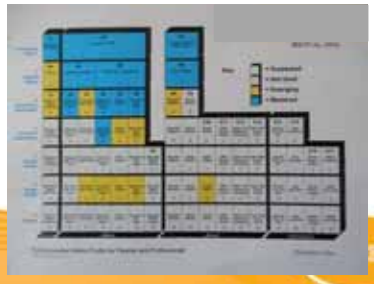
Data Collection Results 2013-14 with Communication Matrix

Student & Target Activities

- 13 year old w/Rett Syndrome
- Arrival Routine Activity
- Greeting Activity

Assessment Dates Pre/Post

- October 14 2013
- March 24 2014



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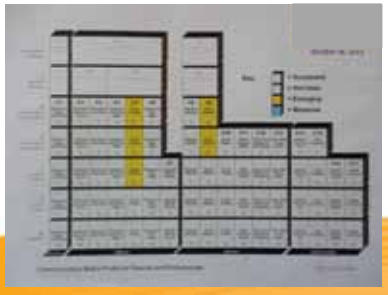
Data Collection Results 2013-14 with Communication Matrix

Student & Target Activities

- 9 year old w/CP, Autism & Seizure Disorder
- Snack Activity
- Leisure Choice Activity

Assessment Dates Pre/Post

- October 16 2013
- March 25 2014



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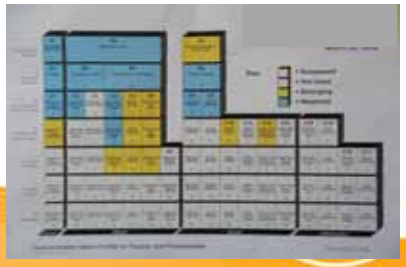
Data Collection Results 2013-14 with Communication Matrix

Student & Target Activities

- 7 year old w/Autism
- Preference Assessments in Food & Leisure
- Reinstatement Activity in Reading
- Group Turn Taking Activity

Assessment Dates Pre/Post

- October 17 2013
- March 26 2014



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Data Collection Results 2013-14 with Communication Matrix

Student & Target Activities

- 7 year old w/Phlean McDermid Syndrome
- Snack Activity
- Group Call to Leave Activity

Assessment Dates Pre/Post

- March 8 2013
- March 13 2014

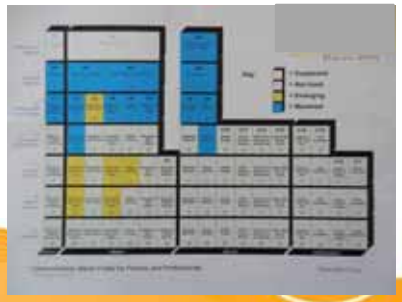
Data Collection Results 2013-14 with Communication Matrix

Student & Target Activities

- 3.10 year old
- My Turn Activity
- Group Turn Activity

Assessment Dates Pre/Post

- October 17 2013
- March 2014



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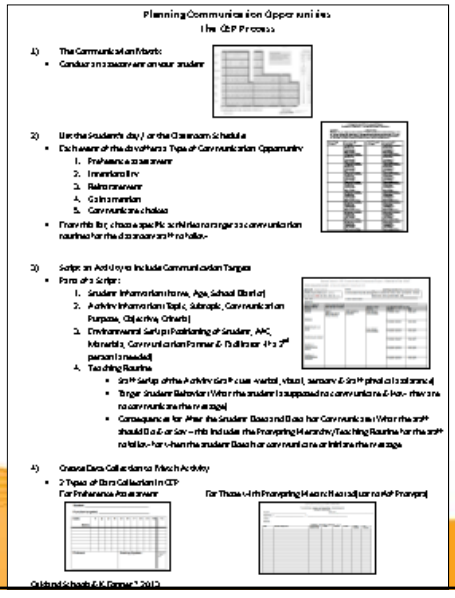
The CEP Process

1. **Communication Matrix**
2. **Day Map of Activities**
3. **Script of Activity & Prompting Hierarchy**
4. **Data Collection**



Communication Activity Purposes

- Preference Assessment (p13-15)
- Establishing Intention Communication(p16-20)
- Reinstatement
  - I want more! (p21-22)
  - Time to change (p22-23)
- Gaining Attention (p25-32)
- Communicating Choices (p33-35)
  - Choice Making
  - Preferred items
  - Non-preferential items/ Distractors
  - Rejection

ACTIVITY

Preference Assessment Script

Script ID# : for office use only **District: Other** **Date: 9/24/2013**

Student First name: Click here to enter text. **Age Range:** 9-12

Activity Topic: Leisure **Communication Purpose:** Preference Assessment

Sub Topic: Preference Assessment. **Criteria (Measureable):** Daily, once a day, 9 out of 10 opportunities within 30 seconds

Objective Student will communicate a preference by touching/grabbing/reaching towards the item when given a choice of 2 items.

ENVIRONMENT	TEACHING ROUTINE ---------->				
Setting, Partner, Position	**Staff Set-up of Activity**		**Student Target Behavior**	**Consequence given by staff**	
				Student	**Staff**
Setting: Classroom	**Staff cues (verbal, visual):** Present 2 items visually (hold steady) and say "Student, which one do you want?"	**Staff assistance (physical):** If the student is on the floor, sit behind him to help maintain steadiness. There may be a need for a 2nd staff member to present the items from the front.	**What student communicates:** "I want that one" **How student communicates:** touching/grabbing/reaching towards one item	**If student does:** touching/grabbing/reaching towards the item	**Then staff:** 1) Activates communication device "I want that" 2) records choice 3) if student plays with item for over 15 seconds the staff will say "Student likes the ____." 4) After 30 seconds, remove item & represent 2 new items
Materials: age appropriate set of 10 toys, sensory items, books				**If student doesn't:** touching/grabbing/reaching towards the item	**Then staff:** 1) records non-choice 2) presents 2 new items
Positioning of AAC device: out of student's reach, to be activated by staff after selection					
Positioning of student: 1)at table, 2)on floor , 3) in stander					
Position of Communication Partner: 1)beside him; 2) behind him; 3 in front of him					
Position of Communication Facilitator: may be needed when he is on floor					

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Data Collection Charting

For students that you are doing a preference assessment or teaching a communication intent/behavior

- **Data Collection through Daily Performance Data**
- **(p.15, 16, 39)**

Student: _____

Function targeted: _____

Date: / Items	1	2	3	4	5	6	7	8	9	10	%
Protocol					Scoring System						Session Total %

Marking Code for Preference Assessment

- **List each item to be presented**
- **Present 2 items**
- **Mark + chosen, - not chosen**
- **If no choice, 2 -**
- **Give item chosen for determined period of time, remove, give next pair**

Data collection from Design To Learn

Preference Assessment Data & Analysis

DATE	30-Sep										
Preference Assessment – Snack Items											
ITEMS	1	2	3	4	5	6	7	8	9	10	11
Craisins				-				+		+	+
Fritos		-	-		+				+		
Lays Wavy C	-								-		
Pop Chips				+		-		-			-
Pretzels	+				-					-	
Tostitos		+	+			+	+				
Drink							-				

DATE	###											
Preference Assessment – Snack Items												
ITEMS	1	2	3	4	5	6	7	8	9	10	11	Totals
Craisins	+						+	-			+	6/8
Fritos			+		-				+			4/7
Lays Wavy Chips	-		-	+							-	1/6
Pop Chips	-		-			-				+		2/8
Pretzels		+					-	+		-		3/7
Tostitos				+		+			-			6/7
Drink												0/1

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Reinstatement Requesting "More"

Script ID# : Project staff only

District:_____ **Age Range:(circle)** Birth-2, 3-5, 6-8, 9-12, 13-26

Activity Topic:(circle) academic, community, food, job, leisure, PE,self help, sensory, social, other _____

Communication Purpose:(circle): preference assessment, refuse, obtain, gain attention, reinstate, make choice, social, get information, other_____

Sub Topic scarf

Criteria (Measureable) Once daily during leisure time; Increase use over baseline from accidental swipes of switch to initiating reinstatement within 3 minute period

Objective: Student requests more of interaction with desired item

ENVIRONMENT	TEACHING ROUTINE ---------->				
Setting, Partner, Position	Staff Set-up of Activity		Student Target Behavior	Consequence given by staff	
				Student	Staff
Setting: Classroom Materials: Scarf, wobble switch covered w/scarf material connected to voice output Positioning of AAC device: Switch n tray to L side of student; device below Positioning of student: In WC with tray Position of Communication Partner: In front of student Position of Communication Facilitator: NA	Step #1 Staff cues (verbal, visual, sensory): Introduce Scarf "Here's your scarf"	Staff assistance (physical): Swipe scarf over her to start activity to gain attention And PAUSE 10 seconds	What student communicates: "more scarf waving" & other scarf related messages How student communicates: Swiping/Pulling on Wobble Switch	If student does: Request more	Then staff: Swipes scarf over her for 10 seconds & comments on "more scarf" & "you like scarf"
				If student doesn't After 10 seconds Request more	Then staff: Taps hand & Says "Kaylan – More Scarf"
				If student doesn't: After 10 seconds Request more	Then staff : Using Hand Under Hand Brings student Hand to Switch to Activate

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Data Collection Charting

For students that you are doing a preference assessment or teaching a communication intent/behavior

- **Data Collection through Daily Performance Data**
- **(p.15, 16, 39)**

Student: _____

Function targeted: _____

Date: / Items	1	2	3	4	5	6	7	8	9	10	%
Protocol					Scoring System						Session Total %

Marking Code for "More"

- **List each item to be presented**
- **Present ONE item at a time**
- **Mark with + if chosen**
- **Give item for predetermined period of time**
- **Change to next item when no longer requesting**

Data collection from Design To Learn

Reinstatement Data & Analysis

date	Scarf Reinstatement											Totals
"More"	1	2	3	4	5	6	7	8	9	10	time	
baseline	+	+	+	+	+	+					3m	6
22-Feb	+	+	+	+	+	+					2.46m	6
1-Mar	+	+	+	+	+	+	+	+			3m	8
8-Mar	+	+	+	+	+	+	+	+	+	+	3m	10

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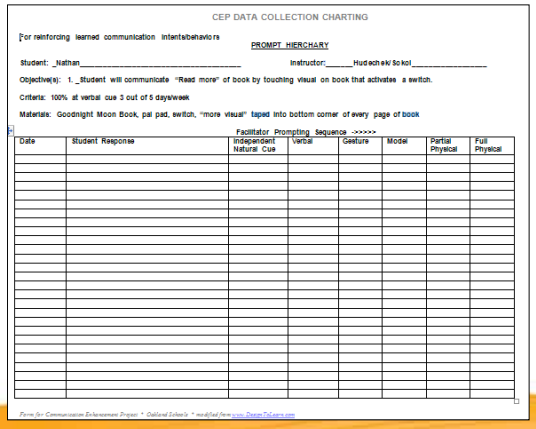
Reinstatement with Prompting Hierarchy

Oakland Schools Communication Enhancement Project
COMMUNICATION SCRIPT

2014 *

Data Collection with Prompt Hierarchy



CEP DATA COLLECTION CHARTING

For reinforcing learned communication intents/behaviors

PROMPT HIERCHARY

Student: _Nathan_____ Instructor:_____Hudechek/ Sokol _____

Objective(s): 1. _Student will communicate "Read more" of book by touching visual on book that activates a switch.

Criteria: 100% at verbal cue 3 out of 5 days/week

Materials: Goodnight Moon Book, pal pad, switch, "more visual" taped into bottom corner of every page of book

Facilitator Prompting Sequence ->>>>>

Date	Student Response	Independent Natural Cue	Verbal	Gesture	Model	Partial Physical	Full Physical

Form for Communication Enhancement Project * Oakland Schools * modified from www.DesignToLearn.com

Marking Code

- **Prompt given, student didn't communicate**

+ **Prompt given, student did communicate**

X **Prompt was not given**

Data collection from Design To Learn

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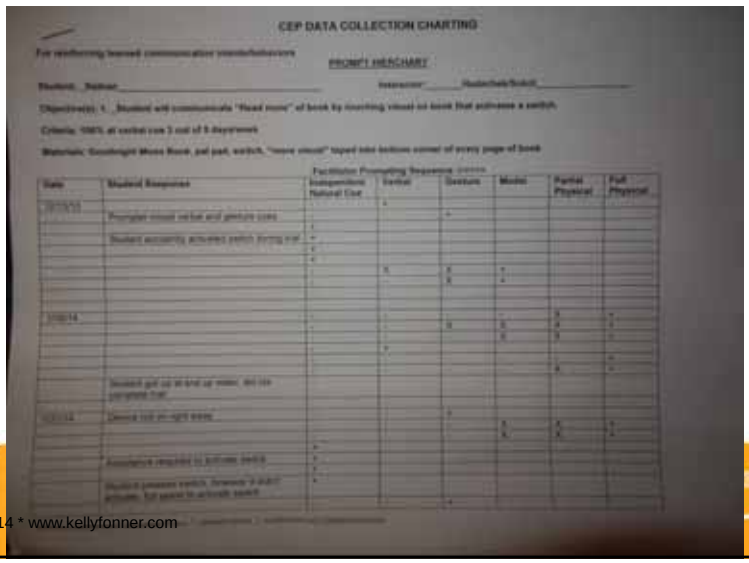
Data Collection in "More" Reading Activity p1



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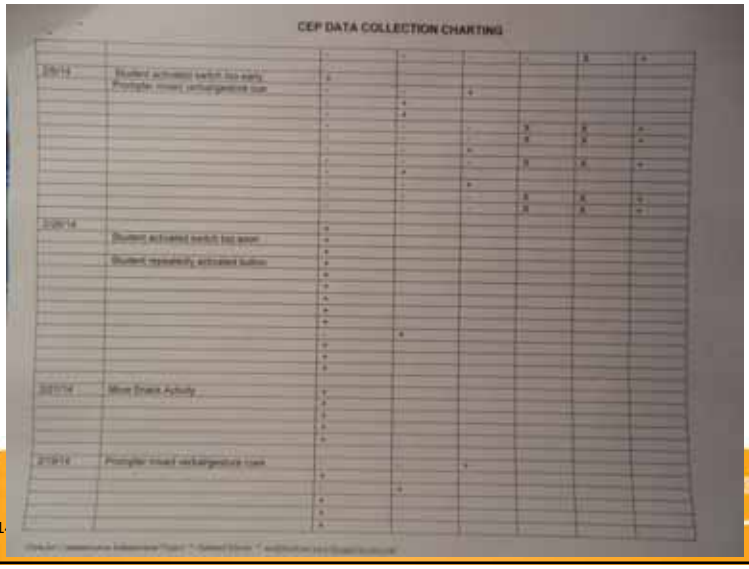
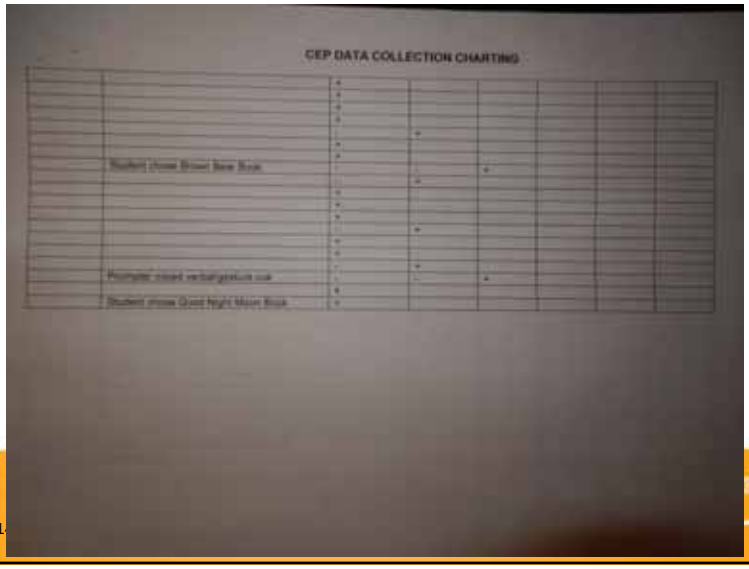
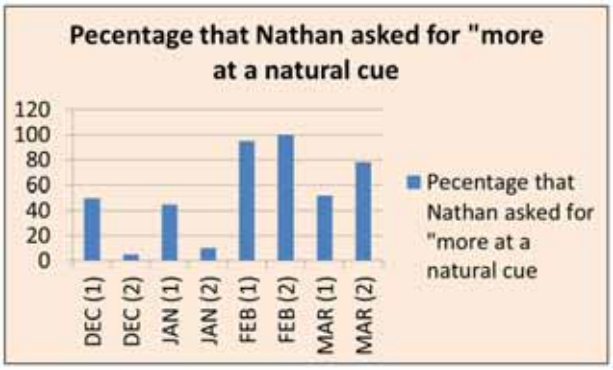
Data Collection in "More" Reading Activity p2



Data Collection in "More" Reading Activity p3



Data Collection - Percentage asked "More" at Natural Cue



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"Go" Activity with Prompt Hierarchy

Script ID# : Megan Hudechek and Megan Sokol **District: Huron Valley Schools** **Age Range:** 3 - 8

Activity Topic: Leisure **Communication Purpose: Make choice**

Sub Topic: Click here to enter text. **Criteria (Measureable): 2x daily**

ENVIRONMENT	TEACHING ROUTINE ---------->				
Setting, Partner, Position	Staff Set-up of Activity		Student Target Behavior	Consequence given by staff	
				Student	Staff
Setting: classroom Materials: big mac switch and visual choices of walk, wagon, scooter, and walk on big macs. Positioning of student: ambulatory in classroom Positioning of AAC device: big mac is permanently placed on window next to door. It is within height range of all students. Positioning of student: ambulatory and needs to walk to door. Position of Communication Partner: at door Position of Communication Facilitator: Click here	Step #1 Staff cues (verbal, visual): Step#1: Depends upon the time of day"Ruby, it's free choice time, what do you want to do?"	Staff assistance (physical): Click here	What student communicates: I want to go bike, go walk, go wagon ride etc. How student communicates: By manipulating big mac with the picture choice she wants say "go walk or ___" .	If student does: walk towards door	Then staff: Stand by door and wait.
				If student doesn't: manipulate switch	Then staff: point to big mac. NO VERBAL
				If student doesn't: manipulate switch	Then staff: Model manipulating switch. NO VERBAL
				If student doesn't: Manipulate switch	Then staff: Say, What do you want to do?" and move her hand to swithch
				If student doesn't: manipulate switch	Then staff: Tell me you want to go & move hand to swtich
				If student doesn't: manipulate switch	Then staff: tell me you want to go & physically assist

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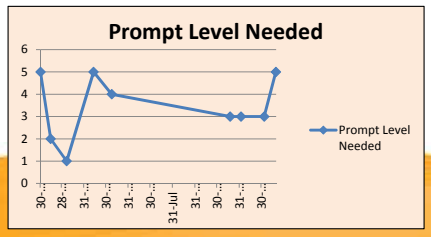
Data Collection on "Go" Activity

Ruby Data Collection							
Prompting Hierarchy							
Date	AAC Mode	Independent Natural Cue	Verbal	Gesture	Model	Partial Physical	Full Physical
18-Oct	PECS	-	-	+			
2-Nov	"	-	-	+			
4-Dec	"	-	-	+			
20-Dec	BigMack	-	-	-	-	+	
30-Jan	"	-	-	-	-	+	
13-Feb	"	x	+				
7-Mar	"	+					
13-Apr	iPad/iCon	x	-	x	x	+	
8-May	"	-	-	-	+		

Date	Prompt Level Needed
18-Oct	3
2-Nov	3
4-Dec	3
20-Dec	5
30-Jan	5
13-Feb	2
7-Mar	1
13-Apr	5
8-May	4



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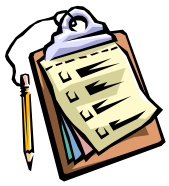
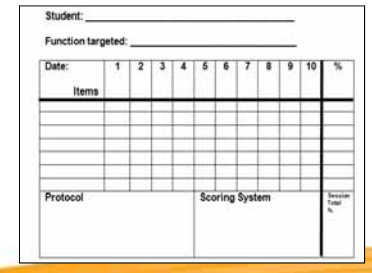
Data Collection connected to the type of Activity



Preference Assessment & Simple Communicative Intent

With a Prompt Hierarchy



Data collection from Design To Learn

Components of a Communication Script

1) Objective(s)
2) Criteria
3) Materials
4) Environment (Setting, Partner, Positioning)
5) Teaching Routine
   - Staff cue & assistance (verbal, visual, physical)
   - Student target behavior (what do they communicate & how/mode)
   - Consequence (what happens if they do & what happens if they don't)

Some AAC Tools Used in CEP Activities

- Dedicated Tools
- Apps

Being an Effective Communication Partner

Partner

- Give time to respond
- Avoid excessive use of questions
- Avoid repeating or questioning a child's message
- Make available communication tools where & when needed

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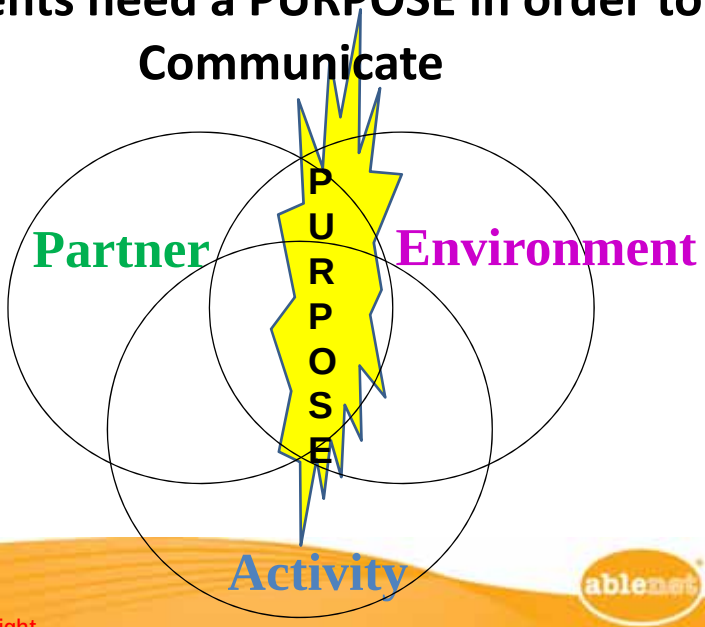
Students need a PURPOSE in order to Communicate



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Thank you!

Please feel free to email with any questions or information on CEP training after the viewing this information:

kfonner@wi.rr.com
@kellyfonner

Available for webinars, consultation & training

www.kellyfonner.com

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Planning Communication Opportunities
The CEP Process

1) The Communication Matrix

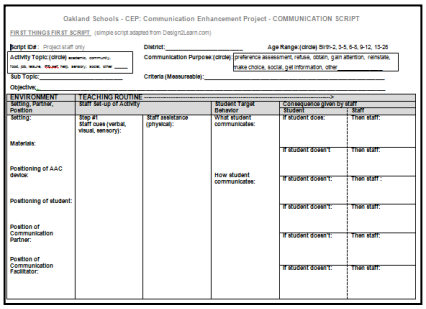
- Conduct an assessment on your student

2) List the Student's day / or the Classroom Schedule

- Each event of the day offers a Type of Communication Opportunity
    1. Preference assessment
    2. Intentionality
    3. Reinstatement
    4. Gain attention
    5. Communicate choices
- From this list, choose specific activities to target as communication routines for the classroom staff to follow

3) Script an Activity to Include Communication Targets

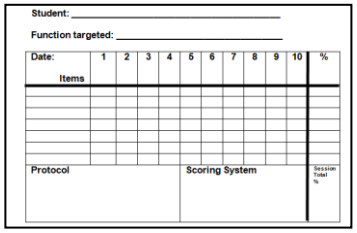
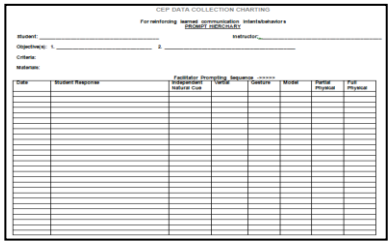
- Parts of a Script:
    1. Student Information (Name, Age, School District)
    2. Activity Information (Topic, Subtopic, Communication Purpose, Objective, Criteria)
    3. Environmental SetUp (Positioning of Student, AAC, Materials, Communication Partner & Facilitator -if a 2nd person is needed)
    4. Teaching Routine
        - Staff SetUp of the Activity (Staff cues -verbal, visual, sensory & Staff physical assistance)
        - Target Student Behavior (What the student is supposed to communicate & How they are to communicate the message)
        - Consequences for After the Student Does and Does Not Communicate (What the staff should Do & or Say – this includes the Prompting Hierarchy/Teaching Routine for the staff to follow for when the student Does Not communicate or Initiate the message



4) Create Data Collection to Match Activity

- 2 Types of Data Collection in CEP

For Preference Assessment



For Those with Prompting Hierarchies (adjust to #of Prompts)