Assessing During Instruction: Measuring REAL Success for Communication

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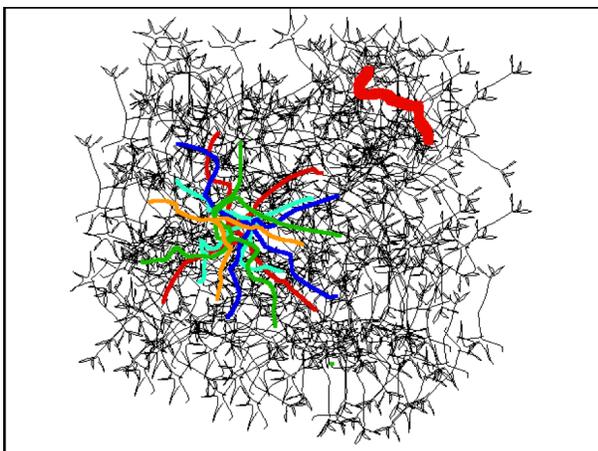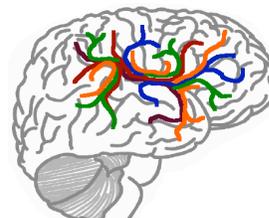

The Brain Builds Connections

Based Upon Associations to Known Understandings

Neurologically, Learning is:

- **Strengthening** Existing Connections

- **Adding** New Connections by Association

- **Discarding** Unused Connections

"What Fires Together Wires Together"

"Use it or Lose it!"

Connections are Formed within
Natural Contexts
It has to make sense to the kid!

Connections are Formed within
Multiple Modality Experiences with Active Participation

Problems with Learning Language in Educational Settings

- Mismatch between need for data and the needs of the child
- Typical classroom interaction patterns are set up for children who already have language skills
  - Mostly one way - teacher instructing, kids responding
  - Not suited to following the child's lead

Problems with Testing and Assessment

Gayle Porter and Teresa Iacono, 2006

"Catch 22" in AAC

"We can't determine the child's true level of functioning because of the child's lack of reliable means of communication.

We can't plan viable communication intervention because of the lack of data regarding the child's true level of functioning"
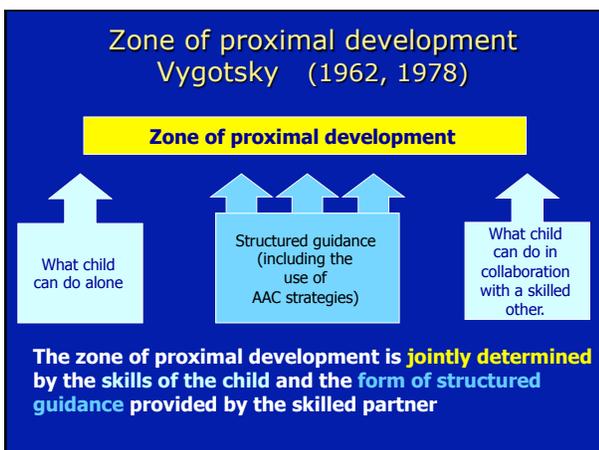
Goossens', 1989, p. 14

Catch 22 !

1. Aided language does not naturally exist in the environment
   - Child cannot spontaneously "uptake" something that is not there
   - Professionals intervene - provide aided language based on their expectations of what's possible
2. Child can only demonstrate ability to use what has been set up for use
   - The "different" communication behaviours of children who have complex communication needs may influence the input naturally provided by others.
3. Others can only be influenced by child's use of what has been set up to use.

Dynamic Assessment

"Vygotsky (1978) argued that standardized tests (in which the tester cannot actively intervene to enhance the test taker's performance) provided data only on the individual's past history and present functioning, not on his future potential. He sought to find out where (and how) education could optimize each individual's performance across a variety of skills."

Olswang, Bain, & Johnson (1992).

Zone of proximal development
Vygotsky   (1962, 1978)

Zone of proximal development

| What child can do alone | Structured guidance (including the use of AAC strategies) | What child can do in collaboration with a skilled other. |

The zone of proximal development is jointly determined by the skills of the child and the form of structured guidance provided by the skilled partner

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Dynamic assessment

- Quantitative
  - Determine amount of change in test-teach-test
  - Ready to learn a skill

- Qualitative
  - Identify processes or factors that interfere with the person's successful completion of task
  - Identify processes or means that enable the person to learn to successfully complete task
  - Identify how the person solves problems and suggests specific strategies
  - Bridges assessment – intervention gap

An initial focus on receptive input

- Provides children with opportunities to learn, over time, how aided symbols are used to communicate.

- Provides opportunities to observe the child's response to this mode of communication and discover, over time, the strategies which will enable the child to communicate more effectively.

Remembering the Intent of AAC:
Communicative Autonomy

- Communication is a function of the child's intent
- Autonomous message
- Enable an individual to say what they want to say

Beginning Communicators talk on their own topic first

Requiring too much 'correctness' early in the language learning process, can derail the developmental process, by undermining the child's confidence as a learner

Many communication turns are non-obligatory

When answering questions becomes the focus of language instruction and testing:

- Then the natural process of language learning through interaction is disrupted – changes the pragmatics
- Always ask questions - Only **learn the pragmatic function "answer"**
- Directed to "Tell me .." - next turn is **"compliance"**
- Child may learn that the purpose of AAC system is to answer questions – to do work
  - Not learn it is a tool to express own messages

When answering questions becomes the focus of language instruction and testing:

- The child begins to assume a more **passive** role
  - Waits to be asked questions or told what to do
  - Put her efforts into 'pleasing' the adult, instead of expressing her own ideas

Being too narrow in writing the measurable outcome of a goal that states <u>what a child must say</u> and <u>how often</u> he must say it, can actually <u>lead to **inappropriate instruction** and decreased opportunities for learning</u>

In Research and Clinical Practice: Pragmatic Use of Communication is Measured by it's Appropriateness, Not by Quantity

Appropriateness is dependent on the interaction with communication partners in specific contexts

## During snack, (Name) will request a drink 4 out of 5 times - Problems:

drink

- Does (Name) want a drink?
- How do you know if he is requesting a drink 4 out of 5 times that he wants a drink?
- What determines 5 times?
- What does he learn about communication if he has to ask for drink when he doesn't want one?
- What if he wants to say "I want to go play now"?

During math activities (Name) will respond to the question: How many? when presented with a group of 1 -10 items

Problems:

- If the child answers with an incorrect number, then the child has met the communication component of this goal: respond to the question how many, but has not met the criteria on the content of this goal – understanding quantities
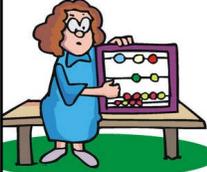
More Problems:

- It is very easy to inadvertently mix content and communication in the same goal

- This makes it difficult to know what the child is achieving - a correct answer - or an appropriate form of communication
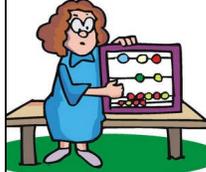
Writing IEP Goals and Objectives

Goals must be measurable, but do not have to be measured in a testing format

Collecting Data

Data collection must be reasonable and reflect real communication

Name:
Goal:

Date	Context	Message	Notes (partner's response)	Independent? Yes/no

Language Sample

Language Sample Form

Student: p.

*For each series of communicative turns, start with writing **date**, **time** and **context** on one line and then start recording the conversation on the next line. Use one line for each new communicative turn

Who	Message		

Code: Speech = Plain text
Interpretations / gestures = Enclosed in parenthesis
Aided Language (PODD) = Underlined. Add: [sgd] if speech generating device is used
Sign Language = Capital letters
List or array of choices and concrete items according to a context = Italics or Cursive
Phrase or word represented by one symbol or one activation in aided systems = / /

Code: Plain text = Speech

Interpretations / gestures = Enclosed in parenthesis

Aided Language use (Light Tech, such as PODD) = underlined, *SGD (Speech Generating Device)

Capital letters = Sign Language

Italics or Cursive = list of choices and concrete items according to a context (used for children who scan)

/ / = phrase or word represented by one symbol or one activation in aided systems

" " = speech- word approximations from student

Language Sample Forms

Language Sample Form

Name _____ Date _____

Person	Language sample
Child	I want /to do something / play / categories / toys /ball
Teacher	Oh, you want to play with the ball, do you? Lets see what kind of balls we have.
child	categories / describing words / big
Teacher	That's a good idea, I love playing with the really big ball, now if I could just remember where it is….
child	(child points to closet)
teacher	You want me to look in the closet?
child	(child nods)

Code: Plain text = Speech
Interpretations / gestures = Enclosed in parenthesis
Aided Language use (PODD) = underlined
Capital letters = Sign Language
Italics or Cursive = list of choices and concrete items according to a context
/ / = phrase or word represented by one symbol or one activation in aided systems

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Language Sample Form – Partner Assisted Scanning

Student: Allie   p. 1

*For each series of communicative turns, start with writing **date**, **time** and **context** on one line and t recording the conversation on the next line. Use one line for each new communicative turn

Who	Message
8 / 23 /09	2:30 - Eating blueberries
Allie	(reaches for PODD communication book)
Linda	Do you have something to say?
Allie	(Yes) / Quick Word / Uh oh
Linda	Uh oh, you ate them all. Do you have more to say?
Allie	(Yes) / more
Linda	Oh, you want some more blueberries
Linda	Back to start / I think is / great - Those blueberries are great
Linda	More to say / Favorite – Those blueberries are your favorite

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Language Sample Forms

Language Sample Form

Name _____ Date _____

Student	Communication Partner
I want /to do something / play / categories / toys /ball	
	Oh, you want to play with the ball, do you? Lets see what kind of balls we have.
categories / describing words / big	
	That's a good idea, I love playing with the really big ball, now if I could just remember where it is….
(child points to closet)	
	You want me to look in the closet?
(child nods)	
	Alright, lets see if it is in there.

Code: Plain text = Speech
Interpretations / gestures = Enclosed in parenthesis
Aided Language use (PODD) = underlined
Capital letters = Sign Language
Italics or Cursive = list of choices and concrete items according to a context
/ / = phrase or word represented by one symbol or one activation in aided systems

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Language Sample Form - Variation

More specific information for SLPs and skilled data recorders

Date/context	Who	Message	Response to question	Initiation observed by others	Initiated by student	Made sense to partner	Communicative function	Length of sequence	Length of utterance

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Quick Language Sample

(Less skilled data recorders)

Studnt Name: _____

Date child initiated	To whom	How	Message that the child communicated	Context
6/7/11	Kate	Looked at book	Want / bathroom	Math – independent
6/7/11	Kate	vocalized	Think / silly	Group – children ma funny sentences
6/7/11	Sue	Seemed upset	stop	Reading - worksheet
6/7/11	Kate	Touched book	Something's wrong / sick / tummy / go / home	lunch
6/7/11	Mary	Looked at book	goodbye	End of day

Sample goal for a child at the beginning stages of aided language input

(Name) will show increasing interest and attention to someone using a comprehensive aided communication system (such as a PODD) to talk to him/her in natural contexts throughout the day.

- Define "attention" specifically for this child

- Minimum of (10) times during the school day in a variety of contexts.

- looking towards the communication symbols or the communication partner
- calming during this process
- looking away to the side but with a stillness as if listening
- responding the partner's message

Possible Data Collection Chart

Date	Opportunity presented (Someone talks to the child using PODD)	Total	Child Attended (look towards, calmed, responded to the message, etc.)	Total	Notes on type of attention being observed
09/10 /09	THL THL	10	THL I	6	Mostly looking at book, and vocalizing

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Possible Benchmarks
(based on the child)

- Increased attention to Modeling of Communication System for a variety of communicative functions in
  - 2 contexts
  - 4 contexts
  - 6 contexts

Possible Benchmarks
(based on the child)

- Increased attention based on the number of symbols modeled in sequence:
  - 1, 3, 5, etc.

- Decrease in level or numbers of prompts needed to facilitate attention (see chart) for increasing length of utterance modeled

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Level of Facilitation Used to Gain Attention

Name: Date: Context or duration charted:

Facilitations used to get attention to symbol	Attention to symbol	totals
Moved symbol to child's gaze	THL II	7
Moved column of symbols to child's gaze		
Moved communication display to child's gaze	III	3
highlight with flashlight	I	1
tapping point	THL	5
shaking of symbol/display	THL THL	10
Use of a slant board		
simple point		

Modeled / Attended to

Date / context	# of symbols in sequence attended to / out of # modeled
x/xx/xx Circle time	3/3, 2/4. 2/2, 0/2, 1/1, 1/1, 3/3
Bathroom	2/2, 1/3, 1/1, 1/1
Language arts	3/3, 6/6, 1/1,

Decrease Challenging Behaviors

With the use of aided symbols to assist receptive understanding in natural contexts throughout the day, (Name) will show a ___% decrease in the following behaviors... (or increase in

___ appropriate behaviors)

Initiating

Within natural contexts throughout the day, (Name) will initiate use of their communication system by one of the following methods: (define specifically for this child) and attempt to communicate something via   ___ (define access strategy). Measured by increasing in frequency over baseline.

Name:
(Acceptable forms of initiation for this child can be listed on this form here)

Date:	Number of times child initiated use of PODD	Totals:
09/10/09	THL III	8

Name: date:

Method of initiation	Number of times during the day	Totals
Look towards PODD	THL II	7
Vocalization	III	3
Activate single message device: "I have something to say"	THL THL	10
Wave Wrist Band	THL	5
Change in Affect	THL I	6

(Name) will intelligibly initiate communication with an expanded range of communication partners (measurement of baseline vs. current)

	(✱) Baseline date:	(✔) Followup date:		
Partner	Initiates by Vocalizing	Initiates by Raising arm	Initiates by looking at the book	Other: please specify
Mother	✱ ✔	✔	✱ ✔	Eye gaze
father	✱ ✔	✔		
Ann (sibling)	✱ ✔	✔	✱ ✔	Pulling arm
Peter (good) friend	✱ ✔	✔		
James (good) friend		✔	✱ ✔	
Joanne (child in class)	✔	✔		Needs assistance from class assistant
Sam (child in	✔	✔		Needs

Communicative Functions

For early communicators: Write goals that will show an increase in the number of communicative functions expressed and used appropriately by the child in natural contexts. We can not determine which functions the child will select to use first.

- request objects
- request/direct actions
- request assistance
- request recurrence

- request cessation
- ask questions
- express opinions
- protest
- complain, etc.

As the child's ability to express ideas increases, then writing goals to focus on more specific operational, pragmatic, semantic, syntactic or strategic skills might be appropriate.

Expressing communicative functions must be based upon the child's intent and therefore can only be modeled by others in contexts and not specifically prompted

Therefore, progress cannot be measured by the reduced amounts of prompts needed.

Progress is measured by the increasing use of communicative attempts and functions by the child in natural contexts.

Within natural contexts throughout the day, (Name) will use an increasing number of communicative functions or intents expressively with his/her communication system using _____ access strategy.

Examples of communicative functions and intents:
- Request objects
- Request action
- Request activity
- Request a turn
- Reject, protest, complain
- Respond/acknowledge
- Inform (draw attention to something)
- Clarify or specify for example in the case of something is wrong
- Comment on action/object
- Express an opinion
- Ask a question
- Answer

Communicative Function	Number of times expressed with PODD	Totals
Request objects	THL II	7
Request action	III	3
Request activity	THL THL	10
Request a turn	THL	5
Reject, protest, complain	THL I	6
Respond/acknowledge	THL II	7
Inform (draw attention to something)	III	3
Clarify or specify for example in the case of something is wrong	THL	5
Comment on action/object	II	2
Express an opinion	THL I	6
Ask a question	THL II	7
Answer	III	3

Name: _____ Date: _____

Vocabulary Use

Within natural contexts throughout the day, (Name) will use an increasing amount of vocabulary (items in the communication system, sign, speech, etc) to express intents.

Use Language Sample Forms
and/or

Keep track of vocabulary used expressively over the course of the day/ week or specified period of time

Name: Date:

Vocabulary item (write in as used)	Number of times used expressively
More	THL
Done	III
Uh oh	THL III
I want	THL
Book	II
Computer	III
I like	III
Great	II
Silly	I
Don't like	I
Scary	I

Utterance Length

Within natural contexts throughout the day, (Name) will increase the length of utterances, by using two or more words/symbols in a meaningful message

Use Language Sample Forms

Ask Questions

(Name) will appropriately ask a variety of questions, providing partner with sufficient information to understand her specific question. E.g. "Why",   "What ….", "Where...." "when.....", "who...."   "how…". " Whose ….." "Can I …" "Do you ….." (as measured across all activities during a school day)

Name:

Date	Number of questions asked by child and understood by partner	Number of questions asked by child and **NOT** understood by partner	Total Understood (or percentage of attempts)
x/xx/xx	THL I	III	

Question:	Number of questions asked by child and understood by partner	total
Why.	THL II	
What	II	
Where	III	
when	THL II	
who	III	
whose		
How		
Can I	THL II	
Do you		
Other Yes/no questions:	Did you do that?; Does she have it?;	

Syntax

(Name) will use appropriate syntactical forms (sentence structure) to provide sufficient information to enable trained partners* to understand his message without contextual cues.

*Trained partner = person trained how to use partner-assisted auditory scanning communication book

Use Language Sample Forms

Functional and Appropriate Use

 (Name) will participate in class discussions and interact directly with peers to express a range of meanings.

- Relate information
- Ask questions
- Answer questions
- Give oral presentations

Relating information

Date	Message	Cued?	Partner
10/09	I went to the movies Saturday	Y	Peer
10/09	I went to the movies Saturday	N	Assistant
10/09	I saw dinosaur museum	N	Class

Ask questions

Date	Message	Cued?	Partner
10/09	What is that?	N	Peer
10/09	What am I supposed to be doing?	N	Teacher
10/09	Why caterpillar turn butterfly?	N	Class

Oral presentations to class

Date	Oral presentation	Assisted	Asked / answered questions	Assisted
10/09	Show and tell	Y	Answered only	Y
11/10	Platypus project	N	Answered only	Y
12/11	Show and tell	N	Asked and answered	Y

Answer questions – note it does not have to be a correct answer.

Date	Partner	Question	Type of Question	Answer
10/09	Teacher to class	How many apples are in the picture?	G	A - R
10/09	Assistant	How many balls?	D	A - DK
10/09	Peer	Where is the pen?	G	A - R
10/09	Teacher	Why do you think the boy got into trouble when he ate all of the apples?	D	A - RC
10/09	Teacher	How do you think he felt?	D	I - IR

Type of question:
D = Direct question to the student – obligatory to answer.
G = General question: student did not have to volunteer to answer this question (not obligatory), i.e. the question was generally asked to a group of people. Note you do not need to include all general questions asked to the whole class/a group in a school day (there will be too many). Only include questions the student volunteers to answer.

Answer: (A= Appropriate, I= Inappropriate)
A - R = student gave a relevant (although not necessarily correct) answer.
A - DK = Student indicated, "I don't know"
A - RC = Student requested clarification / more information / indicated they did not understand the question.
A - CT = student appropriately changed topic, needed to communicate about something else.
I - IR = Student gave an irrelevant answer, inappropriately changed topic.
I - NR = Student did not respond to question.

Oral presentations to class

Date	Oral presentation	Assisted	Asked / answered questions	Assisted
10/09	Show and tell	Y	Answered only	Y
11/10	Platypus project	N	Answered only	Y
12/11	Show and tell	N	Asked and answered	Y

When Writing and Measuring Goals

- Ask: How will this impact the child's long term destination of being able to say what she wants to say, to whoever she wants to say it, whenever she wants to say it?

- Keep in mind Pat Mirenda's principle for evaluating effectiveness of intervention: Does it matter?