Communication Strategies for Children who have Rett Syndrome: Partner-Assisted Communication with PODD

Adopt these Beliefs:

- Not having speech is not the same as not understanding
- Everyone Communicates
- Respond to all communication as intent - build a sense of competence
- Requiring too much 'correctness' early in the language learning process, can derail the developmental process, by undermining the child's confidence as a learner
- Dynamic and Raw - Not Edited and Polished
- Not Sterile Like Performing a Script
- Not a One Way Process - Dependent Upon the Communication Partner's Responses - Not All Thought Out Ahead of Time
- When the Goal is Communication, We Need to Accept and Expand Upon Whatever the Child Does
- Communication happens all the time
- Communication is NOT just an activity
- Communication Begins with Intent
- Getting from Intent to Action is What is Difficult for children with Rett Syndrome (Apraxia)
- The result of the effort, must be worth the effort
- Communication is about something we don't already know
- We can not know what another person is thinking
- Assume the Child has Something to Say
- See your role as the person discovering what the child wants to say
- Keep your expectations **open**

The Juggling Act

- Girls with Rett Syndrome may not have reached, or may have lost, automaticity with many skills, especially those with a motor response, and thus need to focus attention on each component to be successful
- To be able to communicate effectively, many individual components must be coordinated. For example:
    - **Sensory-motor demands**: motivation, strength, motor planning, muscle tone, endurance, motor automaticity, auditory filtering, auditory processing, tactile processing, proprioceptive processing, reaction

time, visual discrimination, visual scanning/memory, visual tracking, integrating multiple sensory inputs.
    - **Cognitive demands:** motivation, cause/effect, initiating, discriminating purpose and function, developing cognitive schemas, making active choices, trial and error, problem solving, memory
    - **Language components:** motivation, processing of language in activity, relationship to and monitoring of the communication partner, pragmatics, processing of questions, auditory filtering, processing of symbol set, syntax/ grammar, attention to task, memory
- Juggling means that the child may only have some of the 'balls in the air' at any given time, and having all the 'balls in the air' will be rare. **This explains why performance is so inconsistent and can not always be predictably repeated**
- Need to take successes and move on, as opposed to requiring repetition of the task over a given number of trials
- Provide opportunities for repetition/practice within natural contexts without pressure. Use variation and natural motivation

Parallel Programming:

- Coordinating all components of a task on an automatic level is extremely challenging for children with Rett Syndrome
- Child can become easily frustrated
- If we wait for everything to develop in a coordinated fashion, we will be waiting forever
- We don't want to hold the child back in one area because of deficits or difficulties in other areas
- We need to be careful not to get stuck trying to 'prove' mastery
- The answer to this problem is to work on individual components in parallel.
- Use functional and natural contexts to give the child opportunities to develop skills, where only one component is cognitively challenging her at a time. For ex: motor, cognitive, language, etc.
- Child needs to experience success with at least one component at a time - engineer activities so this is possible
- The task should not be so difficult that the child doesn't experience some sense of success, nor too boring as to not be worth the effort
- Provide a variety of these types of activities throughout the day - to challenge the child in all areas of development, but mainly just one at a time.
- Plan as a team to make sure individual skills are moving in a coordinated direction and will eventually be able to be integrated into meaningful tasks
- Help the child make associations see the relationships between skills that she is developing

- Model component skills as well as integrated skills, so the child can see how things will eventually work together

What is a PODD? (Pragmatic Organization Dynamic Display) Communication Books

- Created by Gayle Porter, Melbourne Australia
  - More than 15 years of development with a wide variety of access technologies, formats, and language levels (began in 1993)
  - Questions, concerns, difficulties, discussions, trials: Learned what did and did not work for different children (adolescents, young adults)
  - Team input
  - System designers (speech pathologists, Gayle Porter,
  - Jann Kirkland, Louise Dunne)
  - Other staff (physiotherapists, OTs, teachers, assistants, conductors)
  - Families and Children
- Comprehensive, multi-page communication books for communication "all the time"
- Designed to be used receptively and expressively in natural daily contexts
- Shared principles, aim, beliefs for AAC intervention
- PODD Communication Books are one part of a multi-modal language learning environment that includes a range of gestures, speech, sign language, adapted equipment, communication displays, and voice-output devices

PODD Generic Templates (Pragmatic Organization Dynamic Display) Communication Books

- Commercial Product: Direct Select Podd Communication Books (Currently Available) 2 other versions in planning stages (auditory/visual Considerations, and alternative access PODDs)
- Generic Templates of PODD Communication Books
  - Ready to print and customize using Boardmaker
  - Designed to try with children before customizing for individual children
  - Designed with common principles for organizing vocabulary to facilitate the child moving from one book to another as their language skills improve
  - Designed for receptive and expressive use
  - Designed for communication 'all the time' in natural everyday contexts
  - Graded developmental progression across different page sets
  - Increasing complexity of pragmatics, semantics, morphology and syntax.
    - Early functions – below 18 months language level – talk about here and now
    - Expanded functions – 18 months and above – includes categories

        - Key word
        - Expanded key word Complex syntax
    - The information file provided with each page set describes the language included in that PODD communication book
- Direct access templates (currently available in 2 formats)
    - CD set of Boardmaker templates
    - Information files describing language level and organization for each template set
    - Step by step directions
    - Extensive application manual
    - 3 Styles of PODDs:
        - One page opening
        - Two page opening
        - Two page opening plus a side panel
    - Templates for 14 different PODD Communication Books
        - Australian version - A4 size paper
        - North American version - Letter size paper
        - Order from:
            - Mayer-Johnson: www.mayer-johnson.com
            - CPEC: podd@cpec.com.au
            - Spectronics: www.spectronicsinoz.com
- Alternative access templates (not yet available)
    - eye-gaze
    - partner-assisted scanning
    - coded access
    - combination access methodologies
- Alternative visual / auditory presentation templates (not yet available)
    - High contrast reduced visual complexity symbols
    - partner-assisted auditory scanning
    - partner-assisted auditory plus visual scanning
    - direct access to high contrast symbols.
- Templates for Speech Generating Devices - (Future Development)

Current Communication Strategies and Challenges

- Currently, we offer children a limited set of choices - According to our agenda of what we think or want the child to say
- Children begin using language based upon their own agendas, long before they can talk about what we want them to talk about
- We need to provide enough language for the child to say what she wants to say
- Children are often asked direct questions with a right or wrong answer or given limited choices that don't go anywhere
- There is a need for children to initiate and carry-on a conversation

- Currently, vocabulary flies in out of thin air and then poofs back into oblivion at the end of the activity. Activity specific vocabulary is great, but it needs to become a part of the child's larger system
- We need to be presenting vocabulary that doesn't disappear and can be built upon, instead of replaced.
- The brain builds understanding based upon patterns
- Current strategy: "20 Questions"
- Need a way to systematize "20 Questions" so the child can begin to recognize a pattern in how vocabulary is presented
- Working memory can only deal with a limited amount of information at a time - especially auditory memory
- Need to develop automaticity of operational skills, so attention can be focused on interaction and communication

Creating a Multi-Modal Language Learning Environment

- Typical children learn language by being immersed in a native language learning environment, where they can freely interact with, and try out their developing skills
- Language is not learned by straight imitation, it is learned through broad experiences that provide multiple repetitions of concepts, vocabulary and conventions. This provides a scaffold from which children can construct language
- Input before Output - Receptive language input is necessary for developing language expression
- Analogy to Foreign Language Immersion
- "Catch 22s" - Circular dilemmas

  "a set of circumstances in which one requirement is dependent upon another, which is in turn dependent upon the first" (Oxford English dictionary)
  - "Catch 22s" 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)
  - Children can not be expected to know how to use something until they are given an opportunity to learn how to use it in natural contexts
- Aided Language Stimulation (Goosens', Crain and Elder) - Multi-Modal Language Stimulation - information needs to go in before it comes back out
- Children most effectively learn to use augmentative communication through the same methods that they learn to use verbal communication - through modeling in natural and functional contexts
- Children who will need to use scanning systems have very limited opportunities to observe others using similar systems to communicate
- Talking to the Child with his system:
  - Validates the child's means of communication

    - Acknowledges that children learn to communicate in the way they have experienced communication
    - Gives the partner a good perspective on what the child is facing
- What are you Modeling?
    - Modeling more than just "this picture means this"
    - Also modeling important concepts such as
    - "Oh I can say that using…."
    - "This is the type of context I can say it in"
    - "That's how I go about taking up my turn to say that in this situation"
    - This way of communicating is valued and responded to by others
- Modeling and a simulated immersion environment are powerful teaching tools
- Utilize communication books/boards/devices to point to or indicate communication symbols receptively throughout the day. This is important even when child may need to use a different access strategy - such as scanning or eye-gaze. Model the child's access strategy at least some of the time.
- Drill and practice, rote learning is not very effective for learning language
    - Language concepts need an emotional and meaningful connection to be stored in memory
    - Learning language in functional situations facilitates generalization
    - Anything that has some intrinsic motivation for the child is more likely to be practiced in different settings and used by the child.
- Early vocabulary must be first introduced receptively in contexts
- Expand upon any efforts by the child to communicate, using vocabulary, communicative functions, and longer utterances just above what the child is able to express. This helps guide the child and provide a model for higher levels of language usage
- A wide variety of communicative functions need to be represented. For example:
    - initiate or call attention
    - greet
    - accept
    - reject
    - protest
    - request objects
    - share and show objects
    - request information
    - name
    - acknowledge
    - answer
    - comment on action/object
    - express feelings
    - assert independence
    - ask questions
    - share information

        - relate events
        - call attention to how things are related - similar and different
        - talk about past and future
        - negotiate and bargain
        - state opinions
        - tease
        - threaten
        - make up stories
        - express manners and consideration for others
- Model and encourage self-talk using multi-modality supports
- Avoid asking too many questions, use more comments and social expressions ("that's silly", "uh oh!". "we need to clean it up.")
- When asking a question, provide a concrete or multi-modal means for student to respond ("Do you want chocolate or regular milk" - showing both containers or pictures for child to select from)

POOD Features (Gayle Porter):

- PODDs Provides a wide range of Vocabulary
    - For learning
    - Adult to model
    - Child to use
    - Express a range of meanings
    - Throughout the day
    - For a range of functional purposes
    - To stimulate language development
    - Enable child to (learn to) meet their varied communication requirements
- There are many ways to organize vocabulary
        - Different Aids for Different Purposes: Schedules, picture menus, behavior supports, song boards, topic setter books, following directions, task sequence
        - Choice making Displays
            - Provide vocabulary to make choices
            - Limited to requests
            - Does not include vocabulary to interact
            - Consider use of objects and unaided auditory scanning
        - Multiple Activity/ Topic Displays
            - Provide vocabulary to interact in one situation / about one topic
            - Include a range of words to express a range of communication functions related to the targeted activity/topic.
            - Can increase the efficiency (speed) of communication during the targeted activity/topic
            - Displays engineered spatially in the environment

- Core vocabulary boards
  - Core vocabulary to be used "all the time"
  - Limited vocabulary – may add other activity / topic vocabulary.
  - Use of hinting strategies extends possible messages – partner guesses more specific words
  - Gail Van Tatenhove as part of Pixon project. Core vocabulary board available for free download: http://www.vantatenhove.com/materials.php
- Books of vocabulary arranged by categories
  - Lots of Vocabulary
  - Need to Flip pages to create sentences
  - No natural branching- You need to think about the category of the word before knowing how to find it - more cognitively challenging
- General interaction displays
  - Provide general vocabulary to communicate across a range of activities & between activities.
  - Say a LITTLE ALL THE TIME
  - Limited vocabulary – used alongside activity / topic displays
  - Can be used as introduction to PODD Communication Books
- PODD Communication Systems
  - Comprehensive Personal Communication Systems - Always with the person
  - Contain core and fringe, general and individual vocabulary
  - Designed to allow expression of a range of communication functions
  - May not include vocabulary to intensively communicate about a specific topic or in a specific situation
  - Require movement through multiple levels - based on natural branching
  - Strategies to enable "partner powered" level changes
    - Go to "page number" instructions
    - Color coded page tags
    - Operational commands (go back to page 1) (oops)
  - Features of PODDs Customized for Individual Needs
    - Select the PODD based upon the child's communication and language learning requirements - both current and developmental
    - Select number of items on a page according to:
      - visual skills
      - cognitive skills
      - physical skills
    - Design layout for the child's access method - direct select, eye-gaze, partner-assisted scanning, coded access
    - Present as a light-tech communication book and also on a high-tech speech generating device when possible
    - Always have lists on the back of every page to add more vocabulary on the spot
    - Update books as needed

Navigation in a PODD- "partner powered" level changes

- The term used to describe the routes used to move between pages in a PODD.
- Emphasis in the design of PODD on the child being able to (learn to) direct the movement between pages using
    - Go to "page number" instructions
    - Color coded page tags
    - Operational commands.
    - Partners may initially use the link and operational commands to assist children to navigate to the required
- Partners turn pages in the communication book
    - Increases efficiency, reduces communication breakdown
    - Exception: children who can efficiently use the page tags to
    - directly turn to the page they require.

What functions may be expressed with this vocabulary?

"**Store**"

- Request - "Let's go to the store"
- Question – "Are we going to the store?"
- Relate information – "I went to the store."
- Tell a story – "We went to the store .."
- Pretend – "Let's play going to the store"
- Etc.
- What type of branching organization suits each function?

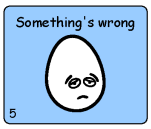
Pragmatic Branch Starters (Gayle Porter):

- Two purposes:
    - Provide faster predictive links to pages of vocabulary commonly required to express a particular communication function.
    - Compensate for the reduced use of environmental supports, gesture and intonation generally used to establish the communication intent of 1-2 word utterances.
        - Typically developing children use one word as a "mega word" that means a lot more than just the word by itself. The child adds props, gestures and intonation to clarify the communicative function that conveys his message
            - intonation for questions
            - excited movement toward for I want or I like
            - worried facial expression and intonation and moving away for something that is scary or worrisome
            - Assertive tone with pantomime gestures, sometimes with a prop, for calling attention to himself as an actor in a pretend activity

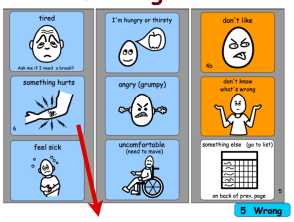
        - One word messages can be easily misinterpreted when children are not able to add the context with props, gestures and intonations - such as with AAC
        - Pragmatic branch starters set the context and function - compensating for the lack of gestures and intonation
        - These pragmatic branches naturally lead the child through the PODD to corresponding messages that are related to that communicative function or when less predictable, they lead to the categories index
        - Pragmatic organization establishes the pragmatic intent of the message first before getting to the detail
- PODD books usually begin on page 1 with quick words
    - vocabulary that is important to say quickly
    - vocabulary that is dependent on the current context, activity or conversation
    - vocabulary that is related to what a communication partner just said
    - social expressions
    - words that can be used in many situations throughout the day
    - Note: depending upon the language complexity of the PODD book, and number of symbols per page, there may be two pages and then they would be labeled 1a and 1b
- Pragmatic branch starters begin on p. 2 and are reached through "more to say" from page 1.
- The function of 'more to say' is that it is not one of my quick things on the first page or two. This works well for children who can visually scan the page and for children who are able to directly point to and select vocabulary items on the page
- For Children who can not visually scan the page and who rely on auditory/visual partner-assisted scanning, the book is arranged slightly differently
    - Quick words are moved to section 2 (2a and 2b - depending upon the style of the book)
    - Pragmatic Branch starters are moved to the first page
    - A link to the quick words section is placed in the upper left corner as the first item scanned on page 1. This allows for fast access to the quick words, but doesn't require the child to scan through each of them to get to the pragmatic branches.
    - Note: since the current version that is available commercially is for direct selectors, these pages can be swapped for the auditory/visual scanner using Boardmaker
- Examples of Communicative Intents:
    - I want something

- Something's wrong
- I'll tell you what I think (or I like and I don't like)
- It's time for something
- Let's chat
- I'm asking a question
- Let's pretend
- I have an idea
- I'm telling you something
- I'm making up a story

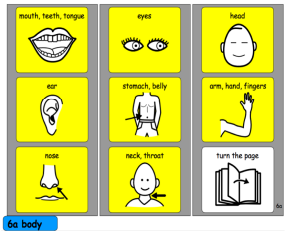
"Something's wrong"
go to page 5



"Something Hurts"



"stomach"



- Examples of Quick Words:
  - more
  - different
  - done
  - me, mine, my turn
  - you, yours, your turn
  - someone else
  - hurry
  - stop
  - uh oh!
  - help
  - look
  - I don't know
- Follow numbered pages from each pragmatic branch starter
  - Page one - intent: I'll tell you what I think - go to page 4
  - page 4 - choose item - that makes me mad!
  - Page one - intent: Something's Wrong - go to page 5
  - page 5 - choose item - I'm tired!
  - Page one - intent: Something's Wrong - go to page 5
  - page 5 - choose item - something hurts - go to page 6 (body parts)
  - page 6 - choose item - tummy
  - Note: body parts could also be reached via "what itches", a tickle game or categories

Additional Types of Vocabulary Organization with in a PODD Communication Book

- **Categories:**
  - Categories often referred to as sections
  - Branches to categories are found throughout the PODD and are most often used once the main intent of the message has been established.
  - Categories can be based upon:
    - Part of speech

        - Semantic associations
        - Pragmatic function
    - NOTE: Category pages in PODD are different from typical category pages due to the inclusion of predictably associated vocabulary
    - Predictably associated vocabulary reduces the number of page turns to communicate a message in sentence format for the direct selector. For the scanner, this may be abbreviated to less items and/or used as a list of "little words"
    - Sub Categories are used when they are more efficient

- **Activity specific** pages are included in the PODD and may be in the main book if used frequently, or located around the environment with the activity, for less frequent activities, or when the PODD book gets too large
    - variety of vocabulary related to one activity
    - Linked from I want or It's time for / activity page. For example: read a book, would branch to an activity specific page of vocabulary frequently used when reading a book
    - Stay on this page during activity, unless child indicates something else to say, in which case you would follow navigational branch such as: go back to start or go to categories

- **Chat and Story pages** - personally relevant messages that can change over time
        - Used to reduce:
        - the number of items in the main navigational index
        - the number of turn the page operational commands required to access vocabulary within each category
        - limit the number of TURN THE PAGE operational instructions to access vocabulary within each category to one, or at most two
        - Attempt to use conversational wording

Predictably associated vocabulary

- PODD uses a strategy of including predictably associated vocabulary in all sections / categories of a communication book.
- Vocabulary may be included in multiple locations
- Increases efficiency (reduce number of page turns)
- Increases partner use of expansion / ease of providing aided language stimulation.
- Traditional practices for organizing vocabulary by category only include words directly associated with that category - specific category content words
- The range of predictably associated vocabulary included in a section depends on
    - the number of items on each page opening
    - current stage of language development

Customizing the PODD

- The PODD is meant to be customized - according the the needs, environments and desires of the child
- It may be helpful to first try a generic book with a child. Write on it, and add vocabulary to lists, before spending the time to customize for the individual
- Frequently, too much time is spent on customizing up front, before it has been established which layout and language level works best for the child. It is better to get started with a generic book and learn about the child through the dynamic assessment process before deciding on and customizing a particular PODD book for that child
- The important thing to understand, when customizing a PODD book is to leave the general structure or "road map" as designed and just replace specific vocabulary items within that pattern. Do not change page numbers or links

Features of PODD that reduce load on working memory

- Systematizes presentation of vocabulary to build upon the brain's ability to learn and automate patterns
- Predictability of PODD means there is one less thing the child has to juggle in the communication process
- Reduces random language experiences and presentation of symbols that have to be consciously processed as new, each time they are encountered in a new context.
- Pattern of vocabulary arrangement can be emphasized by the rhythm of presentation
- Natural branching means that the child doesn't have to use the meta cognitive process of planning what link to follow. Instead, it allows the child to just follow the flow of the intent – based on the organization of vocabulary in the PODD.
- Uses recognition memory – reducing load on recall memory

Direct Selection PODDs - Sample Tips and Tricks - One Page Opening with 12 items on a page (Expanded Functions)

- Learning to "talk PODD"
- Familiarize yourself with the vocabulary of page 1, 1a, 2a and 2b
- Look at the symbols – use color and shape cues instead of trying to read everything
- Always start on page 1 and follow the numbered branches
- Respond to the options appearing on each page - remember the vocabulary is limited, so go with what is there
- DO NOT look for each word in turn in English word order
- Go with the flow or gist of what you want to say
- Can't find a word – write it on the list
- Don't worry – you can always model OOPS!
- Name each symbol that you point to and then re-phrase what you are saying in English word order. For example: More to say / Something's wrong / something

hurts / head (say each as you point to them) Then say something like: "Oh my head really hurts!"
- Only turn a page if you point to a symbol and say what it says
- If the child is using the book to talk to you, you turn the pages as they point to symbols (child doesn't turn the pages, until if and when, she becomes very efficient at that skill)
- Try it!

Partner-Assisted Communication Strategies with PODD

"Smart Partner" vs. Technology:

- Because the partner is human as opposed to a computer, she can be "smarter" than the computer
- Communication Partners can:
    - Read subtle nonverbal cues and adjust the interaction as needed
    - Interpret movement - recognize intent and ignore associated reactions
    - Alter timing according to the child's reaction
    - Focus on developing language and communication skills separately from motor skills
- Accuracy of motor skills is not as crucial for success

Strategies for Learning Partner Assisted Communication - Receptive Language: We Need to Learn it too!

- The partner needs to become fluent in communicating with this system in order to be able to immerse the child in the learning of the system
- The child will be using messages as we communicate in speech – but a different process to communicate these messages.
    - Different structure:
    - Different pace
    - Different pragmatics
    - Different interactive strategies
    - Feels a little different at first
    - Not difficult, just different
    - Requires some practice to feel comfortable as the communication partner
- Children learn to communicate using a PODD the same way that they learn to use speech. (It is the same messages that we use in speech but it is a difference process.)
- The child needs to experience an environment where their PODD system is one of the ways people communicate. People around the child will need to learn how to communicate with this system to provide these models - Create a multi-modal language learning environment

- Start with receptive language - input before output
- Create a multi-modal communication learning environment
- Symbolize communicative intent
- Model communicative intent in context
- Use conversational language ("That looks like fun," "Your car is crashing", "That's big", "I'm going to throw the ball", etc.)
- Encourage others to model - including peers and siblings
- Model a form of "Yes" / "No" as you go (Use what will be most likely to be learned by the child, and also most clearly interpreted by others)
- Model initiation
- Ask Questions - using the system
- Avoid asking too many questions, use more comments and social expressions ("that's silly", "uh oh!",, "that looks yummy.")
- When asking a question, provide a concrete or multi-modal means for student to respond ("Do you want chocolate or regular milk" - showing both containers or pictures for child to select from)
- Ask open ended questions with no right or wrong answer
- Model operational speech as well as social speech
    - Use different tone, voice and expression for self-talk and operational speech than you do for the actual social communication.
    - State why you are turning to a particular page: "I'll tell you who" …"go to 14"… so I'll turn to page 14 which is the people page
- Position yourself for best observation by the child visually and auditorally
- Model and encourage self-talk using multi-modality supports ("Hmmm…. I'm looking or what I want to say… I don't see it, I'm pointing to 'turn the page'… I'm turning the page… there it is!… I wanted to say I'm surprised!)
- Watch the child for clues of active listening and self-talking along with you to guide your pace and acknowledge his/her efforts
- Model How the Child Will Need to Use the system as Often as Possible

How do you model a partner-asssisted scanning PODD?

- Sometimes in the reality of the day doing the full listing model all the time will mean that the child won't get as many models of the language, so sometimes for efficiency, direct or partial models are used. In addition, the full model can be very wordy. Numerous experience with the direct or partial model helps to focus the child on the targeted vocabulary on each page - without the extra verbal clutter. New communication partners, should just start with the direct model until they are more comfortable with the PODD book.
- **Full Scan model** – The partner goes through every item, one by one (or group/item) beginning on page 1 and following the links until the whole message is completed. This is the way for the child will use the system and should be modeled when practical - at least some of the time.

- **Direct model** – Starting on page 1, directly indicate (point, name, show) the item that you want to say. Follow that link to the the indicated page and then once again directly indicate the desired item. Continue this method until you finish communicating your message. This method allows the child to hear the larger "road map" of the targeted item on each page.
- **Partial model** – Starting on page 1, directly indicate (point, name, show) the item that you want to say. Follow that link to the the indicated page and then when the last page is reached, use the full scan model. ex: say/point to SOMETHING'S WRONG, turn to the something's wrong page and directly point to SOMETHING HURTS, turn to the body part page and start scanning: HEAD (shaking my head no), NECK (shaking my head no), TUMMY (nodding my head YES).
- **No book talk** –include the branch pathway words in general conversation without actually using the book, e.g. "I'm telling you something, It's going to happen, Oh, I need a People word, the whole family, go back to categories, Places, are going to the movies, go back to categories, Days and times, tonight. Parents often memorize sections of the book after using them frequently, and then can talk to the child while cooking, driving or other activity that makes it difficult to use the book

Strategies for Learning Partner Assisted Communication – Expressive Language:

How do we know when the child is ready to use the PODD expressively?

- There are no pre-requisites for using a PODD receptively to model how this system of communication is used.
    - An initial focus on receptive input not only provides the child with essential opportunities to learn, over time, how aided symbols are used to communicate, it also provides parents and professionals with 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.
- For some children receptive input and general opportunities are all that's required to stimulate spontaneous expressive communication. Some children will begin expressively using the PODD after only a few models, other children will require many months (years) of receptive input.

Develop Habits for Learning to Listen

Learning to Listen: Observe for and Encourage Initiation

- Observe the child for possible times when she might want to communicate. This may include some of the following examples:
    - Change in body tone
    - Becoming fussy or looking worried
    - Becoming excited
    - Child looking at or reaching toward her book
    - Child raising her hand
- Pause periodically during activities to leave a space for the child to initiate
- Offer the child "Do you have something to say?"
- If the child indicates "yes, she has something to say" then start using the book with the full scan - starting on page one
- If the child indicates "no, she doesn't have anything to say", that is fine, too
- Never insist or try to force the child to communicate
- Respond to everything that the child communicates with an interesting comment - whether it makes sense or not

Learning to Listen: Operate the System for the Child and Have a Conversation

- Use a monotone voice when scanning items
- It is fine to abbreviate the auditory cue for an item to make it simpler – For example: I think, instead of I'll tell you what I think.
- Wait for a yes or no response from the child. You can verbally reference what you see the child is doing for yes and no to give her feedback
- Scan each item one at a time going down each column before moving to the next column
- When a child is ready, begin listing all the items in the column and asking if it is in that column in order to speed up the scan. Note: It is a good idea to have used this method when talking to the child, before expecting them to know how to do it.
- Recap what the child has said so far, as you turn the pages for her
- Rephrase the message, after a distraction
- Rephrase the message in a socially engaging voice, after the child has communicated something.
- Offer, do you have more to say about that? Use the flap
- Expand upon what the child says, using the PODD
- Have a conversation

Encouraging Expression;

- Recognize when the child may have something to say. They may start to fuss, make a sound, look at you, look at their book, etc. Ask them if they have something to say and if you get some type of positive look or confirmation, begin using the book to give them an opportunity to tell you something. At this stage the child may not have a clear yes and no, but do your best to read the child's body language and assume that he is being intentional. Don't worry if the child doesn't say anything profound. Any experience using the system will be helpful. Think of babies and toddlers learning to speak for the first time. They may only use a word approximation, gesture or intonation, and we don't always know what they are trying to tell us, but we try to figure out what they are saying, attribute meaning to their attempts and over time they get better at letting us know what is on their minds. Remember that at this stage whatever the child says IS CORRECT and should be responded to as an interesting comment.
- While working with the child, pause periodically and provide an opportunity for the child to communicate, without requiring them to do so.
- Offer the child: "Do you have something to say", when you see a change in the child's: affect, attention, body movements, vocalizations, raising/waving arm, or looking toward communication book
- Engineer opportunities for Expression according to communicative intent
- Provide opportunities for expression after modeling. Children may be more able to use the system to say something immediately after it has been modeled.

How do I respond to the child's communication? - Learning to Listen

- Assume the Child has something to say
- Respond to all Communication as Intent - Build a Sense of Competence!
- After the child indicates "yes" to an item, you say that word or phrase out loud and respond to the child's message as if she had just spoken it
- Do not ask the child to re-confirm each word – but do respond appropriately to any looks/behaviors that indicate you have got it wrong. Regularly recap the message to assist everyone to remember what has been said so far. For example: Something's wrong, something hurts, etc. A good time to do this is as you are turning pages to continue the message.
- Always ensure that you provide the opportunity for the child to add more information to their message. Ask the child if she has more to say about that, if yes, ask her if it is on this page or section, does she want to go to categories, or does she want to go back to start.
- The child will communicate ideas in key words and phrases – not typical complete English sentences. Once the child has finished his message, rephrase the meaning in a complete sentence and check for confirmation with the child. If the child says yes, respond to the message as if it was spoken by the child. If the child says, no, you can refine your guess to see if meant something close to that. Once you figure

it out, you can then model how the child might use the book to tell you more about that. If you can't figure it out, ask the child if he can tell you more about it.

- Recap and provide auditory feedback as you go, to keep the child's focus on the communicative interaction
- Expand upon what the child says, using the system when possible. Once the child has completed their message, use the system to expand your understanding of the message. Continue your conversation using the child's system. THINK "If the child spoke that message, what would I typically say next?" Expand upon any efforts by the child to communicate, using vocabulary, communicative functions, and longer utterances just above what the child is able to express. This helps guide the child and provide a model for higher levels of language usage
- Have a conversation!
- Communicate Respect

But the child doesn't have a clear YES / NO – do I need to teach one first? How will I know what they are trying to say?

- Remember there are no pre-requisites to begin talking to the child using a PODD (providing opportunities for the child to learn).
- Don't wait for a clear yes and no - read whatever the child can do now
- You can begin using the PODD prior to the development of a clear yes/no response
- Discovering and/or teaching movements for expressive communication takes time
- Start with any look of acceptance (e.g. a pleased look or a look toward you) for "yes" and then slowly move to a more clear form of confirmation.
- **NOTE**: It is important not to rely on a smile for yes, since the child may simply be happy to be chatting, or may be responding to something funny. It will also not make sense to say "yes" when the message he is communicating is something sad or is in reference to not feeling well.
- Use of both a confirmation (yes and no) and negation can make the communication more clear. This gives the child more control and is easier for the communication partner. Confirmation alone (yes) requires the partner to be very "tuned in" to timing of items presented and subtle responses from the child, adding a "no" puts the child back in control of the pace.
- Yes and No should not be used for random questions - because the answer is hardly ever just yes or no - Always use the yes/no within the context of partner-assisted scanning of the PODD
- Some children will also benefit from sensory motor programs to develop motor control and learn specific movements for communication. (PT, OT)
- Verbally reference (say out loud) the movement you observed and the meaning you assigned to this movement. This provides the child with feedback to understand your response and may stimulate attempts to produce clearer movements. A more experienced partner stating their observations and interpretations also assists new partners to observe and appropriately interpret the child's movements

Ways to Indicate Yes and No:

- If yes and no can be said verbally by the child, this is probably easiest
- Nodding your head for yes and shaking for no are the best non-verbal means if they can be achieved by the child because they are understood by the general community.
- Experiment with two voice-output devices such as Personal Talkers from Attainment Company. Hold "no" to one side of the child's head and "yes" to the other side or under her chin. Model the use on yourself, before asking the child.
- **NOTE**: If both sides of her head are equal in the ease of turning - place the "NO" switch on the child's left side. NEVER switch the yes and no sides, once you have established this plan (Make sure that if the child uses step scanning with her head, that you place the 'no' switch in the same location as the step switch and the 'yes' switch in the same location as the select switch.
- Gently brushing each switch against her cheek or chin as you ask "yes" and "no" can give her a cue where the switches are. If she turns toward a switch, activate the switch, even if she doesn't push hard enough to activate it herself. This will give her the feedback that she said "yes" or "no". Later this strategy can be faded to use just your hands where the switches would be placed, and later she may just turn or nod her head herself. **NOTE:** Mounting the switches, instead of holding them, may be too difficult at first. The act of holding the switches and socially connecting to the child with your touch and facial expression helps her respond
- Additional Ideas for using voice-output switches for "yes" and "no"
    - Hold "no" by cheek (turn head as if saying no) and hold one under her chin (nod head as if saying yes)
    - Hold 'No' by her cheek, and 'Yes' out in front of child to reach to confirm
    - Eye gaze to Yes/No placed in front of the child to each side
    - Direct selection - holding switches out in front of the child
    - "Personal Talkers" by Adaptivation work well: http://www.adaptivation.com

Tips, Hints and Tricks for Partner Learning

1. Establish the HABIT that the communication book is always with the child
First thing: If you carry the book with you and have it with the child at all times for the first week - you are doing great!

2. Always start on page 1 and follow the numbered page links. Don't get overwhelmed by the size of the book. You will only go to pages that you need by following the links, but the rest of the vocabulary is there, if you need it. Remember, children will learn to use their system in the way partners model it

3. Use the system to "talk" to the child in normal every day contexts all day long, whenever possible

- Model Initiating
- Model Self-Talk:
- Verbal Referencing - acknowledging what you see the child doing that may be used as intentional communication
- Model a Range of Communicative Functions
  Make sure to model messages children might like to say, not just adult instructions and questions.
- Encourage Others to Model
- Model How the Child Will Need to Use the system as Often as Possible

4. Set Manageable Goals, Then Add More Conversation as you learn parts of the book

- Start with words on the quick word page
- Use the book to give opinions
- Use the book to say where we are going
- Use the book to ask a question

5. Practice, Practice, Practice!

6. Can't find a word? - Write it on the List!

7. It is Good to Make Mistakes:
Communication Partners May Also Get "Stuck" - Use this as a "Teachable Moment" - with Self-Talk and Repair Strategies - often the flap or side panel of a PODD has "Oops" that can be used when you get to a page and realize that you didn't want to go there.