

Effective Communication Programming:
Evidence-Based Practices, Practitioner and
Parental Expertise

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Communication Bill of Rights (1 of 5)

- The right to interact socially, maintain social closeness, and build relationships
- The right to request desired objects, actions, events, and people
- The right to refuse or reject undesired objects, actions, events, or choices

Communication Bill of Rights (2 of 5)

- The right to express personal preferences and feelings
- The right to make choices from meaningful alternatives
- The right to make comments and share opinions

Communication Bill of Rights (3 of 5)

- The right to ask for and give information, including information about changes in routine and environment
- The right to be informed about people and events in one's life
- The right to access interventions and supports that improve communication

Communication Bill of Rights (4 of 5)

- The right to have communication acts acknowledged and responded to even when the desired outcome cannot be realized
- The right to have access to functioning AAC and other AT services and devices at all times
- The right to access environmental contexts, interactions, and opportunities that promote participation as full communication partners with other people, including peers

Communication Bill of Rights (5 of 5)

- The right to be treated with dignity and addressed with respect and courtesy
- The right to be addressed directly and not be spoken for or talked about in the third person while present
- The right to clear, meaningful, and culturally and linguistically appropriate communication
- See Brady, et al., 2016 for Guidance on practice paper on the Rights document
- (National Joint Committee for the Communication Needs of Persons with Severe Disabilities, NJC)

Suggestions for Use of Communication Bill of Rights

- [Located on ASHA website: www.asha.org](http://www.asha.org)
- Laminate and post
- Use it for program improvement-TEAMS & TA
- Connect rights to evidence-based and best practices
- Include in pre-and inservice professional preparation
- Advocacy
- (Brady et al., 2016)

Communication Development: A Developmental Perspective

- Intentional behavior precedes intentional communication
- Unconventional (idiosyncratic) expressive communication is followed by increasingly conventional expressions
 - Respecting inventions of expressions-invented gestures
- Meaning of symbols + distancing should lead to language for most children
- We see this applied in the *Communication Matrix* (Rowland, 2011).

Symbolic Communication and Language

- Symbolic communication is MORE than communicating with abstract representations, known as symbols
- DISTANCING
 - Self and others
 - Self and environment
 - Between referent and representation (toward abstraction)
 - Use of representations separate in TIME and SPACE
- Distancing without typical vision and hearing (the distance senses)

(Bruce, 2005a, 2005b; Werner & Kaplan, 1988)

Tri-Focus Framework

- Learner
- Communication Partner
- Environment

Tri-Focus Framework: Associated Strategies

- Enhancing communication partner's sensitivity
- Utilizing routines
- Increasing communication opportunities
- Modifying the communication environment
- Augmenting input
- (Bashinski & Bruce, 2018; Bruce & Bashinski, 2017)

Utilizing Routines

- Routines involve predictable sequences-good for emotional safety and language development
- Routines may occur as part of the day-the daily schedule
- Within activity routines-careful planning...
- Between activity routines

Increasing Opportunities

- Children who are deafblind are especially reliant on adults to create communication opportunities
- Create pauses within a well known activity routine
- “Forget” an anticipated item (in a well known context)
- Teach others how your student/child communicates
- Observe others and coach them (See research from Janssen, Damen & other researchers, Netherlands-works for all ages)

Modifying Communication Environments

- Lighting
- Noise Levels
- Distractions
- Positioning
- Equipment needs
- Communication Partners and their skills

Augmenting Input

- Providing receptive experiences in child's form
- Using low and high technology, as individually appropriate
- Using more than one communication form in a single conversation-sign and speech, photos and speech...
- How can you use this in TA?

Four Aspects of Communication Framework (discussed this morning)

- Form
- Function
- Content
- Context
 - Physical environment
 - Communication partner
 - Individual's characteristics
 - Activities and routines
 - Process of communication (initiate, sustain, terminate)

Learning through Touch

Learning with Low Vision

- Whole to Parts
- Parts to Whole
- Let's appreciate the additional cognitive load that learning parts to whole requires.

Grounding in Experience

- Meaning-making and its connection to experiences
- Experiences---memory---meaning
- Selecting representations that represent the child's experience/perspective = SALIENCY (critical to memory)

Video Explanation: Experience & Size

- Video that illustrates the importance of EXPERIENCE and a mother's sensitivity to teaching small, smaller, smallest AND big, bigger, biggest
- Child is actively engaged
- Vocabulary is grounded in an actual EXPERIENCE that is physical
- Early words often evolve from ACTION
- Critical family role in providing EXPERIENCES

Insert Video: Experience & Size Concepts

Interprofessional Collaborative Practice (IPCP)

- On IPCP and the World Health Organization (WHO)
- IPCP "involves the collaboration of professionals and family members who hold different bodies of knowledge and experience for the purpose of bringing multiple perspectives into consideration when planning and implementing services (Bruce & Bashinski, 2017, 8, 162-163).

Access to and Engagement in the General Curriculum

- The general curriculum is expressed in symbols
- Many of our learners are presymbolic
- How do we engage presymbolic learners in the general curriculum?
- Need to ground understanding in EXPERIENCE
- Need consistency, repetition-avoid the tourist curriculum
- Offer predictable and repeated receptive messages

Making Decisions about What to Teach: Communication & Literacy (1 of 2)

- Grounded in assessment
- Represent findings in signal dictionary or communication profile
- Address receptive and expressive communication

Making Decisions about What to Teach: Communication & Literacy (2 of 2)

- What would the child and family most like to communicate about?
- What would enhance the child's participation in family, school, and other community contexts?
- What messages/content would express a variety of intents/functions (e.g. not just requests)
- What else?

Individualizing Communication, Language, and Literacy Instruction (1 of 3)

- Individualizing includes teaching each child at the correct level-that level at which the child can understand with minimal adult support (just above what he/she can do independently-the ZPD)
- Individualization is about meeting the needs of each student. Some of these needs are expressed in the Individualized Education Plan (IEP) and are provided for in federal legislation. Individualization (in the U.S.) was established as the cornerstone of special education services in 1975 (Gartin & Murdick, 2005).

Individualizing Communication, Language, and Literacy Instruction (2 of 3)

- Maximize learning opportunities for each child
- Individualizing communication includes sharing in the forms/modes that are accessible to the child
- Individualizing includes selecting the equipment, materials, technologies, and instructional approaches and strategies that are suitable to each child (according to that child's strengths and needs)

Individualizing Communication, Language, and Literacy Instruction (3 of 3)

- Individualization includes optimal positioning to support alertness, access, and engagement
- Individualization includes providing the appropriate types and levels of related services (such as occupational therapy)
- Individualization includes figuring out what works best for each child

Personalizing Communication, Language, and Literacy Instruction

- Personalizing means that interactions and lessons are ABOUT the life of the individual who is deafblind.
- Personalization is a concept that is already recognized in early intervention (in the area of literacy).
- Personalizing includes simple strategies such as using the child's name.

Why is it important to ALSO personalize?

- Personalized lessons that are grounded in shared experiences reduce memory load, making it more likely that spontaneous communication will occur (Kucirkova, Messer, & Whitelock, 2010)
- The sharing of positive interactions and memories is linked to the achievement of literacy (Janes & Hermani, 2001)

Hints about Personalization from the Field of Deafblindness (1 of 2)

- Miles (2005) lists the social functions of reading and writing and advises us to support children who are deafblind to participate in as many literacy functions as possible
- Personalizing literacy connects to the functions of “dealing with emotions” and “organizing and supporting memory” and possibly “identifying things” (as in things in own life)

Hints about Personalization from the Field of Deafblindness (2 of 2)

- We've long known about the importance of grounding some conversations in the child's interests (See Nelson, van Dijk, McDonnell, & Thompson, 2002).
- European research: Shared experiences as a necessary basis for affective attunement and meaning making (Martens, Janssen, Ruijsenaars & Riksen-Walraven, 2014)

(Bruce, Janssen, & Bashinski, 2016)

Evidence-Based Practices in Communication and Literacy

- Original review of studies for the CEEDAR Center, in print in 2014 (Ferrell, Bruce, Luckner, 2014). Updated analysis in communication and literacy (covering 1990-2015) in Bruce, et al., 2016).
- CEEDAR rubric ratings – levels of evidence:
 - Strong
 - Moderate
 - Limited
 - Emerging

Defining Evidence Levels

- Strong: 1+ strong causal design + 1+ moderately strong – or- 5 single subject design -or- 5+ correlational studies
- Moderate: 3+ moderately-strong causal designs -or- 3 single-subject designs (with 20+ participants and 2+ different research teams) -or- 3 correlational designs -or- 2+ meta-analyses or syntheses (with quality indicators for syntheses)
- Limited: At least 1 causal design study -or- 1 single-subject design study -or- 1 correlational study -or- 1 meta-analysis or synthesis (with quality indicators for syntheses)
- Emerging: Primarily relying on professional literature other than research studies

Reviewing Findings: Communication (1 of 4)

- Communication development and social interactions should be emphasized every day in the context of natural environments. LIMITED
- Communication programming should address forms/modes, intents/functions, content, context, and pragmatics. EMERGING
- Apply child-guided approaches to support communication development and different types of dialogues. LIMITED

Applying Child-Guided Approach

- Starting with child, sensitivity to what they know, their comfort level
- Echo-resonance phenomenon
- Importance of coactive movement techniques
- Following child's lead (although he also applied behavioral principles) and expanding the child's utterances
- Conversations of different types-including the body in taking turns
- Drawing techniques and much, much more

(van Dijk, 1967)

Review of Findings: Communication (2 of 4)

- Apply systematic approaches to increase the rate and variety of communicative intents/functions expressed. MODERATE
- Implement individualized communication programming that reflects knowledge of the student's level of communication. EMERGING
 - As in the *Communication Matrix* (Rowland, 2011)
- Improve adult communication partner skills through systematic demonstration and modeling. LIMITED-updated to MODERATE
 - Note body of research by Janssen and her colleagues

Applying Systematic Approach

- Especially effective for increasing rate of expressive communication, vocabulary size, and expanding intents/functions
- Clear beginning, middle, and end for each lesson
- Apply principles of behavioral theory
 - Reinforcement of appropriate type and level-commensurate with child's performance
 - Fading
 - Shaping
 - Modeling
 - Levels of prompts-appropriate to task

And more...

Adult Communication Partner Skills

- Studies by Janssen, Damen...
- Can coach adults and peers to improve their responsiveness
- Use modeling, then observe and provide feedback.

Review of Findings: Communication (3 of 4)

- Tangible representations/symbols are a critical form of communication for prelinguistic students who are deafblind.
MODERATE



Description of Slide Photos on Tangible Representations

- The photo on the bottom left is a communication page displaying whole and partial objects. Above each object is a print label (although there could also be a braille label). The labels are: arrival, go home, work jobs, circle time, bathroom, and playground. Some of the representations (objects) are similar to what they represent and others are not. For example, there is a plastic hand used to represent arrival and a few links to represent playgroups (and mostly likely the act of swinging).
- The photo on the bottom right shows a teacher sitting across from her deafblind students. She is holding the student's hands (preparing for a co-active experience). Between them is positioned the anticipation shelf (daily schedule) that they will set up together.

Tangible Symbols

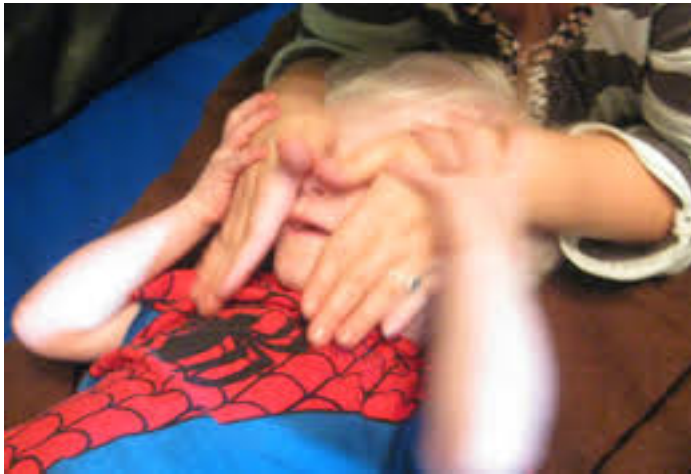
- Iconicity!
- Saliency! –whether homemade or when selecting from a set
- Mounting to clarify when it is an object and when it is a representation
- Many opportunities to practice
- Consistent naming
- Growing in complexity over time

Reviewing Findings: Communication (4 of 4)

- Tactile approaches and strategies are effective
 - Touch cues
 - Hands for learning
 - Tactual sign language

MODERATE

(See works by Chen)



Description of Slide Photos on Tactile Approaches

- The photo on the left shows a child lying down and an adult's hands over the child's face, with the child's hands on her. This appears to be a coactive game of peek-a-boo.
- The photo on the right is a sample page from the book, "Making Tactile Books and ASL for a Preschool Child who is Deafblind" from the Paths to Literacy Project.

Touch Cues

- Avoid startling
- Touch cues before acting on child's body
- Examples
 - Slight lift with key phrase before lifting child
 - Touch area of body and also any accessible apparatus, such as tubing-before feeding or medical procedure
- Important to use consistent phrases
- Some also use "object cues" to mean receptive opportunities with object representations

Learning Through Hands

- The hands are eyes for the child with significant visual impairment
- Appreciate parts to whole exploration-the demands of it.
- Important to provide sufficient time to explore through touch, paired with linguistic input
- See works by Barbara Miles

Tactile Sign Language

- IPCP planning for receptive and expressive sign
- Touch cue before signing with child
- Modeling
- Shaping of child's hands
- Sign approximations shaped to conventional signs

Reviewing Findings: Literacy

- An expanded view of literacy (that goes beyond traditional reading and writing) is required to address the needs of students who are deafblind and prelinguistic.

EMERGING

- Daily schedules/anticipation shelves, integrated story boxes, experience stories, home/school journals, and choice-making as literacy lessons.
- Provide a literacy rich environment with hands on experiences to conceptually ground the literacy experiences. EMERGING



Description of Slide Drawing: Literacy

- The drawing on the slide shows an adult's hands and a child's hands coactively exploring a teddy bear. The child's hands are on top of the adult's hands, demonstrating hand under hand exploration technique.

Literacy Rich Environments

- Explaining the reasons for your own literacy-shopping lists, computer literacy-Remember impact of reduced incidental and observational learning-Why do we engage in literacy?
- Sufficient literacy materials across environments-kept in predictable place, known to child
- Different types of literacy
- Shared readings
- See Paths to Literacy
- See works by McKenzie

Classic Literacy Lessons in the Field of Deafblindness

- Story Boxes
- Experience Stories/Books
- Daily schedule and calendar system
- Journals that address DISTANCING
- Authentic choicemaking

Story Boxes

- Collection of objects used along with either a commercially produced book or a personalized memory book. Can also be used alone when retelling a shared experience
- Best if objects of collected with child.
- Best if personalized memory book is made with child
- Importance of salience

Video Explanation: Story Box

- In this video a teacher uses a commercially produced book along with a teddy bear to dress. She incorporates a variety of communication forms with this young child.

Insert Video: Story Box

Experience Stories/Books (1 of 2)

- Stories or books that are highly personalized-based on a lived experience
- Example
- Honor principle of SALIENCY
- Create these books with child
- Label in print and braille
- Use consistent language

Experience Books, cont. (2 of 2)

- These personalized books will trigger memories.
- Sharing in environments other than where the experience occurred will support distancing.
- Child increasingly assuming more responsible for writing
- Think about key vocabulary and be consistent in use
- Store them where the child may locate them

Video Explanation: Experience Book

- A young boy (9 years old) shares an experience book with his teacher who is visually impaired. Note the use of braille, print (to ensure consistent naming by sighted adults), and objects.

Insert Video: Experience Book

Daily Schedules/Anticipation Shelves

- Importance to emotional security, bringing order to a disorder
- From Now and Then boards to more complex
- Left to right, sequence, and concept of “finished/all done”
- Need for specific routine for this lesson
- Each trip to the daily schedule is a literacy lesson
- Don't rush!
- Careful transitions from anticipation shelf to book

Video Explanation: Orientation to an Anticipation Shelf Schedule

In this video the teacher carefully orients this young child who is deafblind to the first few activities of her day. Note her thoughtful instructional pacing and her responsiveness.

Insert Video: Orientation to an Anticipation Shelf

Interactive School-Home Journals

- What is it?
- More powerful than traditional note home or recorded messages from home to school
- Including multiple forms
- Providing for action
- Builds DISTANCING-sharing about school when at home and vice versa

Video Explanation: School-Home Journal

- Review of school-home journal (mother and child)
- Journal created at school
- Pairs object representation, braille, and an auditory message that is meaningful to the child (unlike a note home to the mother)
- Supports DISTANCING and MEMORY

Insert Video: Interactive School-Home Journal

Authentic Choice-Making

- Choice-making is a literacy lesson
- Options must be grounded in real experiences-knowing the options
- Knowing the representations for the options
- Taking care with number of options presented and for how long and where in visual field
- Be consistent with receptive vocabulary
- Considering the child's selection response
- Child "gets" what is selected, possible new opportunity if error

Additional EBPs related to Communication (1 of 2)

- Excerpts from area of assessment
 - Not just using formal assessment instruments
 - Conduct functional vision assessment, functional hearing assessment, and learning media assessment for each student
 - Conduct assessments on the visual, auditory, and tactile characteristics of each environment in which a student engages or may engage in to: (a) determine potential impact on student, (b) support communication planning, and (c) plan appropriate adaptations and accommodations (Ferrell, Bruce, & Luckner, 2014, pp. 206-207)

Additional EBPs related to Communication (2 of 2)

- Excerpts from Placement/Inclusion/Service Delivery/Administration
 - Paraprofessionals with specialized preparation or interveners are crucial to the success of children who are deafblind.
 - Adults must create opportunities for reciprocal interactions between students who are deafblind and their peers and offer direct instruction about how to interact (Ferrell, Bruce, & Luckner, 2014, p. 216)
 - Every educational team should have a member with expertise in deafblindness

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