This collection of four "focus flyers" developed by the Services for Children with Deaf-Blindness program at the University of Southern Mississippi provides practical guidelines for parents and teachers working with infants, children, and young adults who are deaf-blind. The first flyer is on communication interactions and is organized into an introductory section, a section on what the parent/teacher can do, and examples of how the parent/teacher can implement the guidelines. The second flyer, by Rebecca M. Wilson, is on receptive communication. After an introduction, sections are provided on critical reasons to send messages to individuals who are deaf-blind, rules to remember, ways to get the child to understand messages, receptive communication cues, and implementation guidelines. The third flyer, by Kathleen Stremel, is on expressive communication. It discusses reasons to communicate, the many forms of expressive communication, the progressive nature of communication development, ways parents and service providers can be more responsive, and suggestions for developing a "map" of the child's current and future expressive communication needs. The fourth flyer, also by Kathleen Stremel, is on communication intervention. It discusses how to select appropriate individualized target communication skills, how to use active teaching strategies, the importance of interaction during activities, and ways in which student outcomes can continuously be assessed. (Some flyer: contain references.) (DB)
Communication Interactions, Receptive Communication, Expressive Communication, and Communication Intervention

Focus Flyer; n2-5 Dec 1993-Jun94

Part of Appendix A to "Services for Children with Deaf-Blindness. Final Report", see EC 304 478
"Focusing on Quality Services to Infants, Children, and Young Adults who are Deaf-Blind"

**TOPIC: Communication Interactions**

This informational flyer and the next two flyers will provide information about communication. The series will include:

1. Communication Interactions (It takes you and your child)
2. Receptive Communication (How children understand your messages to them)
3. Expressive Communication (How children get their messages across to you)

**What is Communication?** Communication is the exchange of a message between two or more people. Everyone communicates in many different ways and for many different reasons. Children who are deaf-blind may never learn to talk. This does not mean they cannot communicate with you. This does not mean that they cannot understand what you are trying to communicate to them.

**AND**

**Why is communication important?** You teach children: to play, to learn about their world, to interact with you, to do daily tasks and to work.

You do this by communicating with them. Children learn that they can make changes in their world by communicating their wants and needs to you. Children must have a way to make choices in their lives.

**WHAT YOU CAN DO**

**FIRST,** you must give the child a reason to communicate. Children need to be involved in functional activities both at home and school. For younger children, activities may be eating, bathing, changing clothes and playing with sister. For older children, activities may be swimming, cooking and working. How many activities is your child or your student involved in?

---

**Questions for Parents and Teachers?**

1. How many different people interact with your child/your student in a day? ______
2. How many interactions occur in teaching an activity? ______
3. List the daily activities in which you interact with your child or your student.

<table>
<thead>
<tr>
<th>HOME</th>
<th>SCHOOL</th>
</tr>
</thead>
</table>

4. How many opportunities to communicate with you does the child have in different activities?

- [ ] Rare/None
- [ ] One-Two
- [ ] Two-Five
- [ ] Five-Ten
- [ ] Ten or more

---
SECOND, look at your child or student during functional activities. How is he/she communicating with you? For Example:

<table>
<thead>
<tr>
<th>Functional activity</th>
<th>Ways child may communicate to you</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eating</td>
<td>Child opens mouth for &quot;more.&quot;</td>
</tr>
<tr>
<td>Bathing</td>
<td>Child raises hand for &quot;out.&quot;</td>
</tr>
<tr>
<td>Dressing</td>
<td>Child touches yellow shirt.</td>
</tr>
</tbody>
</table>

THIRD, you must make sure that every child has both receptive and expressive communication objectives included in his/her Individual Education Plan (IEP). Parents and teachers should check on this.

FOURTH, make sure that every person who interacts with the child knows how he/she understands messages. Every person should also be aware of how the child communicates. STOP, WATCH THE CHILD AND READ THE MESSAGE/SIGNAL. Parents and teachers need to work together to:

- increase the opportunities the child has to communicate
- increase the different ways in which the child communicates
- increase the different reasons a child has to communicate
- increase the people, the things and activities that the child communicates about.

HOW YOU CAN DO THIS

1. Interact often with your child or your student. Give him/her a chance to understand what you are going to do before you do it. Give your child or your student a chance to make a choice, or to request "more."

2. Allow your child or your student to participate in activities as much as possible.

3. Make sure your child has a Name Sign. This may be the first initial of his/her name on his/her chest.

4. Make sure that you have a way to identify yourself to your child or your student, for example:
   - for sister, her long braids
   - for dad, his beard
   - for mom, her rings
   - for teacher, her short hair.

5. Give the child an opportunity to communicate with you.

6. DO NOT act on the child without letting him/her know what will happen or where he/she is being taken.

AN EXAMPLE OF A COMMUNICATION INTERACTION:

- Approach the child slowly, let him/her smell or sense your presence.
- Use the child's name sign, a "J" on the chest for Jason.
- Let him/her feel your identification cue, as in mom's ring.
- Let the child know you are going to the car by letting them take or feel a set of keys.
- Have the child open or close the car door.
- Let him/her buy something at the store.
- Help the child hand the money to the clerk if they can't do this by themselves.
- Let him/her know that the activity is finished, by putting the keys in a box or on a hook.
Post an example of an interaction for your student in your classroom; so that, everyone (peer buddies and all service providers) follow this.

REMEMBER! TEACHING IS AN ACTIVE PROCESS, NOT A PASSIVE CONDITION.
EVERYONE WHO COMMUNICATES WITH YOUR CHILD IS TEACHING SO, TEACH YOUR CHILD/STUDENT TO COMMUNICATE HELP YOUR CHILD/STUDENT WANT TO COMMUNICATE GIVE YOUR CHILD/STUDENT A REASON TO COMMUNICATE.

PROJECT ACTIVITIES

The Mississippi Statewide Project for Individuals who are Deaf and Blind feels strongly that every child can learn different ways to express their messages. Every child can learn to understand the ways we communicate to them. Our project can assist parents and teachers who have children/students on the Deaf/Blind Registry. We can:

- Send you written information
- Loan you videotapes
- Provide inservice training
- Provide follow-along technical assistance for those districts committed to making a change. We feel that it is critical that parents be involved.

If your district is interested in learning more about developing a communication system for an individual student or students with deaf/blindness, please contact us at 1-800-264-5135.

SPECIAL THANKS

The project is working with a number of school districts to host one or more inservice training sessions. These sessions will address the needs that were developed by the school district based on the Needs Assessment Surveys, which were returned to the project. We would like to thank the following schools for working with us to arrange specific inservice training activities:

- Copiah County Schools
- Mississippi School for the Blind
- Indianola Public Schools
- North Pike Separate Schools
- Lauderdale Public Schools
- Yazoo City Schools and Head Start

The project is continuing work with the Jackson Public School to develop videotapes and materials that show examples of:

- Model classrooms
- Transition
- Functional skills curriculum
- Job training

We wish to thank the following persons for working with us in these efforts:

- Nancy Batson, Program Developer
- Jeanette McGee, Program Coordinator Middle School
- Diane Brady, Program Coordinator Secondary School
- Kim Sweatt, Technical Assistance Consultant in Functional Skills - Total Task
If you would like to have a topic or area discussed in our focus flyer or if you would like to be placed on our mailing list or know of someone who might benefit from our flyers, please fill out and return the form below.

Name: __________________________ 
School District/Agency: __________________________
Address: __________________________
City: __________________________ County: __________________________

TOPIC/AREA: __________________________

Please place the following persons on your mailing list.

Name: __________________________ 
School District/Agency: __________________________
Address: __________________________
City: __________________________ County: __________________________

Name: __________________________ 
School District/Agency: __________________________
Address: __________________________
City: __________________________ County: __________________________

MAIL TO:

Mississippi Services for Individuals who are Deaf-Blind 
University of Southern Mississippi 
Department of Special Education 
Box 5115 
Hattiesburg, MS 39406-5115
TOPIC: Receptive Communication

- Rebecca M. Wilson -

WHAT IS RECEPTIVE COMMUNICATION? Communication requires a person to send a message and another person to receive or understand the message. Receptive communication is the process of receiving and understanding a message. It is often difficult to determine how a child who is deaf-blind receives communication. We must pay close attention to the way we send our message to a child and/or student who is deaf-blind or multidisabled.

The purpose of this flyer is to:

- Describe the reasons for communicating with a child/student who is deaf-blind.
- Provide suggestions about alternative ways for the student who is deaf-blind to receive information.
- Encourage parents, teachers, speech pathologists and other support personnel to ask questions to determine the child/student's unique receptive communication needs.

WHAT ARE THE CRITICAL REASONS TO SEND MESSAGES TO INDIVIDUALS WHO ARE DEAF-BLIND?

Think about living in a world where you cannot see or hear what is going on around you. Listed below are rules to remember when interacting with an individual who is deaf-blind.

- Let the child know that you are present - You might touch his hand or shoulder.
- Identify yourself - perhaps using your ring, watch, perfume, or hair.
- Always let the child know what is about to happen. NEVER act on the child - For example, touch his hand before giving a bite of food.
- Let the child know where he is going - For instance, give him a set of keys to indicate "going for a ride".
- Let the child know when an activity is finished - Use a gesture/sign for "all gone" or "finished" or let him help put the objects away.

It is very difficult for an individual who is deaf-blind to understand how he should respond to a person's communication. This is especially true when the child/student has a limited understanding of speech cues. For example, when a child is given a gesture or sign "eat", is it a command or is it a question? Maybe the teacher is teaching the child a new vocabulary word and wants the child to imitate the sign. The following suggestions may help the child/student understand what you want his response to be.

- If you would like for the child to answer - keep your hands in contact with the child and wait.
- If you are giving the child a command - tap twice on the child's shoulder.
- If you are giving the child a comment or reinforcer - rub the child's shoulder.
- If you would like for the child to imitate - tap twice on the child's hand.

Remember you may be sending a message that is not received. It is up to you to find a way for the child to receive your message, then you must expand the child's understanding to higher forms.
HOW CAN WE GET CHILDREN WHO ARE DEAF-BLIND TO UNDERSTAND OUR MESSAGE(S)?

The communication map below may assist you in determining the current ways that your child/student receives messages sent to him. The map will also guide you as you focus on future ways to send your messages to the child/student. Cues in the first segment are simplistic in their form. They are usually concrete and given to the child through touch or in close proximity to the child's body. As you move across the map, the cues become more abstract. As noted by the arrows, all cues are given with speech. This enhances the possibilities of the child to receive additional information through sound and other expressions. Brief explanations with examples of each type of cue follow the map.

**COMMUNICATION MAP**

**RECEPTIVE COMMUNICATION CUES**

**EXPLANATION**

**Natural Context Cues** - are occurrences that happen frequently during an activity or routine that send a message to the child.

An alarm clock ringing
Running water in a tub
Putting a bib on a child
Undoing a strap on a wheelchair

Think about routines that you do everyday with the child. Look closely to see if he is showing signs of anticipation of the natural context cues that are occurring. For example: opening his mouth when seeing the bottle or wiggling when the water is running.

**Movement Cues or Tactile Gestures** - are motions given that actually move the child through a pattern that is related to an activity.

Moving the child's hand to mouth to eat
Moving the child's arm up and down to play the drum
Swinging the child's leg to kick the ball
**Touch Cues** - are signals used to get a simple message across to a child with little vision or hearing. The cue is given by touching the child’s body in the area that is related to the message.

- Touching the child’s lip to indicate open your mouth for food/drink
- Touching the child’s shoulder to let them know someone is there
- Pulling on the child’s waistband to indicate time to change diaper

**Object Cues** - are real objects, miniature objects or associated objects that allow the child who has difficulty understanding speech to gain more information.

- Spoon - time to eat
- Floaties - time to swim
- Keys - time to go

Real objects are easier to recognize because they are actually used in an activity (diaper, coke can, keys, etc.). Miniature objects can be doll size representations of a real object. However, vision abilities must be taken into account. The most difficult to understand may be the associated objects or part-whole objects that stand for something (clock for time, wheel for play truck, etc).

Start by using just a few object cues that will represent activities that occur very frequently or that the child really enjoys. Before the activity occurs give the child the object cue. Be Consistent!! After many times see if the child is anticipating the activity by getting excited, smiling, or smacking his lips indicating an understanding of the activity. Then you may begin to add more cues. Be sure that the school and home are using the same cues and that everyone is presenting them in the same way. Always consider the child’s vision when deciding what object cues to use. The size, texture, and color may make a difference.

**Gesture Cues** - are body expressions that people use everyday to communicate. A child must have some vision to see the gesture.

- Waving good-bye
- Holding out a cup for more drink
- Shaking his head for yes/no

**Pictures Cues/Line Drawings/Other Tangible Symbols** - may be used to receive messages if the child has adequate vision to discriminate pictures or simple line drawings.

The child must understand that a picture stands for an object, person, or activity. Also, the child’s visual skills must be considered when determining the size of a picture or the need to use line drawings. There are many other tangible symbol systems that can be utilized (Picsyms, Blissymbols, textured symbols, raised thermofax, etc).

**Visual and Tactile Signs** - are symbols expressed through manual signs that are based upon movement, placement, configuration, and directionality.

Due to the type and extent of the vision impairment, signing may need to be within close range of the child’s face or directly in front of their visual field or to one side. For a child who has limited or no vision, gestures and signs must be in contact with their bodies. For a child, who is totally blind, but cognitively able to understand the symbolic nature of sign language and finger spelling, the tactile modality may be used. Signing and/or finger spelling is received by having the receiver place his hands over the hands of the person sending the message in order to feel the sign.

**Speech** - is always used when communicating to the child. Even if a child does not hear the spoken word, he may receive information from your facial gestures and expressions when you are speaking. Consult with a speech pathologist when developing a speech/language/communication program.

**Written Words/Braille** - are used by individuals who have the skills to understand symbolic written/brailed language. There are many types of electronic equipment that provide braille output. Consult with the vision specialists or other resources used by individuals who are blind.

**HOW CAN WE DO THIS?**

1. Consider the hearing and vision abilities and disabilities of the child.
2. A communication system will not be effective if it is developed without the child’s use of prescribed adaptations. If the child can benefit from glasses, hearing aids, or other adaptive equipment, they should be used at all times.

**Q**
- Is the child totally deaf?
- Does the child have some usable hearing?
If the child has an impairment, alternative forms of receptive communication may include: touch, object, sign or other cues. These alternate forms also depend on the child's vision, motor, and cognitive abilities.

**Q** Is the child totally blind?
**Does the child have some usable vision?**

Vision is the major source of information to any individual. Look for alternative ways to provide information, such as touch and object cues, large print/pictures/line drawings, braille, and speech. Perhaps the pictures need to be black and white line drawings (without color or background) and/or held closer to the eyes than usual.

Consider the motor abilities and disabilities of the child.

**Q** What is the best position for the child to use his vision, hearing, and/or touch efficiently?

The answers to such questions require the input of more than one person. Parents and various professionals must work together for the child to function efficiently. It is important for the child with motor disabilities to be able to receive information; therefore, parents and professionals should think of the best way to provide this information. If touch cues are used, remember to find the parts of the body that will receive the messages most effectively (touching the child's back may set off a reflex. Try touching his shoulder). Let us suppose a child is blind in his right eye, and the physical therapist is working on grasping with the right hand. The speech pathologist has also recommended the use of object cues for receptive communication, and the mom would like a way to let the child know he is going for a ride in the car.

**PROBLEM:** Since the vision is reduced on the right side, the child may lose information when he grasps the keys with his right hand.

**SOLUTION:** The physical therapist recommends the child be in a good seating position (with appropriate support) and train the child to turn his head to the right to increase his vision capacity by using his left eye.

Consider the cognitive abilities and disabilities of the child.

**Q** Does the child show interest in and recognize people, objects, or activities?

Look for an indication the child is paying attention to what is going on around him. For example, the child may be looking or reaching for toys, smiling at people, and/or fussing when hungry. Also look how the child reacts to certain people, objects, and activities. For example, he smiles when dad comes home from work, gets excited when it is time to eat and/or cries when taken into the bathroom for bath time. This information will be helpful in planning routines to increase the child's communication.

**Q** Does the child understand that a picture, line drawing, word, or sign represents a person, object, or activity?

To use cues that are "symbolic" such as pictures, line drawings, word, and/or signs, the child must be able to associate a meaning to the symbol. Remember, symbolic cues (picture of a tub, etc.) are much more difficult than environmental cues such as running water in tub to indicate bathtub.

References:


Expressive Communication

-Kathleen Stremel-

WHAT IS EXPRESSIVE COMMUNICATION? Expressive Communication involves sending a message to another person(s) for the purpose of: (a) making something happen, or (b) stopping something that is happening. Children and youth who are deaf-blind may communicate with others in many different ways. It is important that parents, siblings, and service providers be responsive to the communication expressed by the child/student who is deaf-blind, and that they provide opportunities for expressive communication to occur.

The purpose of this flyer is to:

- Discuss the reasons or uses of expressive communication.
- Discuss the many forms that may be used for expressive communication.
- Discuss the progressive nature of communication development.
- Encourage parents and service providers to be more responsive to their child's current forms of communication.
- Encourage parents and service providers to develop a "Map" of their child's current and future expressive communication needs.

Throughout this flyer, the name Lee will be used as an example to represent any infant, child, or young adult who is deaf-blind. Think of Lee as your child or the student in your classroom.

WHY DO CHILDREN/STUDENTS COMMUNICATE? (REASONS TO COMMUNICATE)

The primary reason that everyone communicates is to get an outcome. What will happen if parents and service providers do not expect Lee to communicate, and they do everything for him? Lee may learn that: (a) "I don't need to do a thing and I get fed, dressed, and rocked, and/or (b) "Nothing I do gets me anything or anywhere...so...I'll just stop trying to communicate." What are the early reasons for Lee to communicate?

First, Protest or Rejection is used to get another person to stop! Even if Lee doesn't talk, his message may mean:
- "Don't touch me!"
- "I don't like that!"
- "Stop doing that!"

Second, Attention is used to get people to attend. Lee's message may mean:
- "Mama."
- "Hey, here I am...look at me!"

Third, Requesting Continuation is used to get more of an activity or get more of an object. Lee's message may mean:
- "I want another bite."
- "More bouncing, please."
- "I want to play ball some more."
Fourth, Requesting or Making a Choice is used to express wants, needs, and preferences. Lee's message may mean:
- "I want chocolate milk." (not more food)
- "I'd like a hamburger." (not a drink)
- "I need a break from my work."

Later, other reasons to communicate may be needed. These reasons may include:
Greetings and Social Comments, such as "Hi," "Bye" and "Thank you."
Offering, such as "Would you like some?" or "Here, have some of mine."
Comments, such as "Mine," "This is good," or "The table is dirty."
Reply, such as "Okay" or "Later."
Remember: The messages, provided as examples above, may be expressed in many different ways other than speech or signs.

HOW DO CHILDREN/STUDENTS COMMUNICATE? (WAYS TO COMMUNICATE)

Initially, Lee's mom and dad "read" his cries and movements as having meaning even though Lee did not purposefully communicate his needs to anyone. People began to respond to Lee's movements and facial gestures as communication. Then, Lee began to understand that his movements made certain things happen...he was beginning to have some control over his world. Later, Lee's mom, dad and teacher got together to figure out how Lee could communicate with more people and in new ways. The Expressive Communication Map presented below can be used as a guide for three purposes:

1. To determine the ways in which your child is able to communicate with you right now (Current),
2. To determine the way or ways in which your child can be taught to communicate during the next year (IEP Objectives), and
3. To determine the ways that your child might be able to communicate in the future (Visionary Planning).

As you look at the map you will notice that, initially, the "ways" to communicate are simple and concrete. As you move across the map you will see that the ways to communicate become more difficult. Lee is able to use a number of different ways to communicate the same message. When Lee does this, he is showing more "purposeful" communication behavior.
Service providers and parents should discuss:
- How many different ways the student is communicating currently,
- The new ways that could be taught during the year, and
- Possible ways that may be taught in the next five years.

You may use the color-coding that is shown, or you may make up your own. Parents should be given a copy and a copy should be placed with the child's records. Too often, the child's communication system is not planned or maintained during periods of transition. When that occurs, valuable time may be wasted by: (a) changing the child's program when the current one is working, (b) trying things that didn't work in the past, or (c) teaching something that the child already knows. The explanations and examples of the different forms or ways in which your child may communicate are listed below.

EXPRESSIVE COMMUNICATION FORMS (WAYS TO COMMUNICATE)

EXPLANATION

Facial Expressions - These early forms may not be purposeful communication, but simply reactions. Lee's reactions may indicate pleasure or displeasure.

Vocalizations - Early vocalizations may indicate pleasure or discomfort/distress. Parents may notice that when Lee is uncomfortable or not pleased, his vocalizations are louder, longer, and have different inflections than when he is happy.

Body Movement - Lee may use large body movements or more specific body movements to express his wants. Initially this may be used as a protest or to request more. At this point, Lee is demonstrating that he anticipates that an activity will continue. Purposeful communication will occur only if other people are responsive to Lee's specific movements.

Switch Activation (physical control) - Early assistive technology may include a switch that is connected to a tape recorder (for music), a fan, a vibration pillow, or lights. This is not a communication response, but this may be teaching Lee cause-and-effect. Hopefully, he will learn that if he makes a certain movement, he can have some control over his physical environment.

Switch Activation (social control) - If Lee is not able to get other people's attention by vocalizations, by physical touch, or going to them, he should be taught other ways of calling or getting people's attention. A switch may be hooked up to a tape recorder that has a loop tape with a recorded message, "Come here, please." A simple buzzer may also serve as a calling device to get people's attention.

Touch Person - Lee will need to learn that things in his environment don't just happen. Other people can control outcomes if he communicates to them. If Lee has the motor ability to touch another person to communicate, this is important to teach. In order to show that Lee has purposeful communication, he must look, turn to, or touch another person to purposefully communicate to that person. This can be done by eye gaze (if Lee has enough vision to do this). It can be done by moving one's body toward the other person or it can be done by touching the other person. Initially, Lee may only touch you if you place your hand 1/2 to 1 inch from his hand. Then, you can begin to move your hand away so that he has to extend his hand farther to touch you.

EXAMPLES

Opens mouth for more.
Turns head away.
Smiles or grimaces.
Cries to indicate discomfort.
Makes soft "u" sound when rocked.
Makes loud "a" sound when music goes off.
Makes gentle "wee" sound when swinging.
Moves body when person starts rocking him and stops.
Moves body back when person starts giving a back rub and stops.
Turns head away from disliked food.
Activates a buzzing device in a job placement to indicate, "Need help" or "Need more work."
Presses a switch with a red satin heart that is connected to a tape recorder that says, "Give me a hug."
Touches Mom's hand to get another bite.
Touches Dad's arm to get more tickling.
Pushes brother's face away to indicate, "Leave me alone."

Switches:
- Touches Big Yellow plate switch (AbleNet) to turn on fan.
- Touches vibration pillow (Toys for Special Children).
- Pulls strings on Pull Switch (AbleNet) to turn on bright lights.
Manipulate Person - Once Lee can touch a person, he may begin to take the person's hand and move it toward him or toward an object that he wants. We can help make this happen if we don't move our hands immediately when he touches us. In this way, Lee will have to work a little bit harder to make something happen (outcome).

Touch Object - We also want Lee to touch one (out of two or more) objects to request a choice. At first, do not provide him with two "good" choices. Use an object he dislikes (a cool washcloth) and one he likes (oatmeal with cinnamon). This gives Lee a reason to touch one object and not the other. Later, you can use two items, which he likes, to allow him to make choices. Lee may turn his cheek to touch the object if he does not have use of his arms or hands. He may move his hand only an inch to touch the chosen object. A physical or occupational therapist may help determine the best motor movement.

Extend Objects - Lee will be able to extend objects only if he has the motor ability. All children will not have this ability, and all objects cannot be extended. At first, Lee may extend the object only a short distance. Gradually, he will learn to extend the object farther. At first, Lee may extend objects to you to get something in return (Remember...outcomes).

Simple Gestures - Simple gestures should be taught before manual signs (if Lee has the motor ability). You and I use gestures to communicate every day. Lee will still use simple gestures even though he may learn other complex ways to communicate.

Pointing - Children without disabilities begin to point to people and objects before they learn to say their first words. Often, their first words may be paired with pointing. We all point on occasion to communicate something to somebody (especially in quiet places, like church). Of course, Lee's ability to point will depend on how well he is able to see and how well he can use his fine motor skills. Many children who are deaf-blind will not be able to use pointing as a way to communicate. This form will have to be omitted. However, if Lee has enough vision to see large objects or large pictures and has good motor skills, we want to teach him to point as a way to communicate.

Two/Three Choice Communication Systems - Once Lee is able to make a choice from two objects, we want to increase the number of choices. He may do this by pushing a switch on a Three-Choice-Light/Buzzer device (Toys for Special Children) to express his choice of the three items or he may push one of several switches that activate different messages on a tape recorder. If Lee is not able to make simple choices with objects, a more expensive communication system will probably not work either. Remember, no system is magic.

Complex Gestures - Once Lee is able to use a few simple gestures, then more gestures may be taught. Think of gestures that we may use instead of talking.
Miniature Objects - Lee has learned to associate object cues with people and activities in his receptive communication program (see Focus Flyer #3). He is now able to use small objects that are associated with an activity as a way to express his wants and needs. Now he can communicate about more things in his environment.

Pictures and Line Drawings - Lee may have enough vision (when he wears his glasses) to see picture symbols (black drawings/Mayer-Johnson) even though he can't identify photographs. Line drawings are less expensive than miniature objects and take less time to find. If Lee can see and understand these, we can use these as we increase his vocabulary. Lee's vocabulary can be gradually increased.

Symbolic Communication - Manual signs, written words, systems with braille, and speech words are true symbols. They are abstract systems. Lee must understand that there is a 1 to 1 relationship between the symbol and the object/person/activity. The symbol being used "stands for" or "refers to" the real thing. This is a very difficult task for some children. If Lee has the cognitive abilities, he may be able to use an electronic system with speech output. His symbol system may be large keyboard letters or a brailled keyboard, depending on his vision, motor and cognitive skills.

HOW DO WE DETERMINE THE MOST EFFECTIVE & EFFICIENT EXPRESSIVE COMMUNICATION SYSTEM? (MAKING DECISIONS AS A TEAM)

Parents and service providers need to consider the child's/student's vision, hearing, motor, and cognitive skills. They must also consider his age and with whom he will be communicating. It is important to remember that communication development is progressive... (a) from easy to hard, (b) from limited ways to many ways, (c) from few wants and needs to many, (d) from a few reasons to many reasons, and (e) with few people to many people.

Consider the hearing and vision abilities and disabilities of the child.

Determine your child's strongest sensory mode when making decisions about possible systems.

When was the onset of the vision or hearing loss?

Does your child have the ability to hear (with hearing aids) and imitate some sounds?

Can your child see shadows or color?

Does your child see objects well enough to reach out for them?

Consider the motor abilities and disabilities of the child.

Is your child ambulatory?

Does he have full range of motion of his arms and hands or is movement limited?

If he can't move his arms and legs, can he move his face from side to side?

Can he grasp objects?
Continued from page 5

**CONSIDER**

Q Does he have the motor ability to extend his arm or point?
Does he have a tray on his wheelchair to attach objects, switches, or electronic devices?

Consider the cognitive abilities and disabilities of the child.

Q Does your child seem to learn things quickly?
Does he indicate that he knows where he is going and what is about to happen?
Is he motivated to do things?
Does your child try things again and again when he is learning new things?
Does he smile when he has accomplished a task?

Your child will not have to learn each form or way that was presented above. You will need to consider his vision, hearing, motor, and cognitive abilities and disabilities in order to: (a) strengthen current communication, (b) develop new ways to communicate, and (c) plan for more efficient ways for your child to communicate in the future.

Remember...Very few children and students who are deaf-blind will learn to communicate from their environment without ACTIVE TEACHING. Everyone must be responsive, consistent, and provide many different opportunities for the child to communicate. The next flyer will discuss how we can use caregiving routines and functional activities to increase both receptive and expressive communication. Strategies for teaching communication will also be discussed.

References:


Resources:

AbleNet, Inc. 1081 Tenth Avenue, S. E., Minneapolis, MN 55414-1312; 800-322-0956.


Prentke Romich, 1022 Heyl Road, Wooster Heights, OH 44691.

TOPIC: COMMUNICATION INTERVENTION

-Kathleen Stremel-

Previous Focus Flyers 3 & 4 discussed the receptive and expressive communication skills that can be taught to children and students. This focus flyer will discuss strategies to teach communication skills.

NOTE: The primary audience for this flyer is teachers and speech/language pathologists. Parents and teachers should be working on the same communication skills in the home, school and community.

WHAT IS COMMUNICATION INTERVENTION? Communication Intervention is the process of actively teaching the student to use his communication (a) more frequently, (b) more effectively and (c) to expand his communication skills across time. Students who are deaf-blind will need even more intense communication intervention than other students with disabilities. Remember, if a student is not frequently using his current communication skills and is not learning new communication skills, we are not actively teaching. In our opinion, each student who is deaf-blind should have at least 1-3 receptive and expressive objectives on his IEP.

The purpose of this flyer is to:

- Discuss how to select appropriate, individualized communication skills to target.
- Discuss how to use active teaching strategies.
- Discuss the importance of interaction during activities.
- Discuss ways in which student outcomes can continuously be assessed.

HOW TO DETERMINE WHAT TO SELECT FOR INTERVENTION

There are different types of assessments (Halle, 1993) that can be used to determine: (1) the specific forms and functions that the student understands and uses expressively and (2) the specific forms, functions and content that can be taught during the school year. Direct observation assessments should be utilized in the school and community. An important part of the assessment should include specific questions to parents.

The following are examples of some questions that you and parents can answer by observing the student across different activities. The answers to these questions will determine appropriate receptive and expressive objectives for an individual student. Examples will be used with the name "Lee" as the student.

Questions to help determine Receptive Communication Objectives:

- Does Lee understand that a person is there to interact with him?
  - If not, (a) touch him or use a name cue, (b) increase the interactions that he has with you and others and (c) consistently provide his name cue. Make sure that he enjoys the interaction.

EXAMPLES

Lee gives "Hi fives," greets others, plays ball in the gym with others and interacts with peers.
Does Lee know who is communicating with him?
- If not, make sure that everyone has a "name cue or sign" that they use when they approach him.

Does Lee understand the way (form) you are communicating to him (speech, manual signs, pictures, objects, gestures, touch cues etc.) or does he require physical prompting to complete a simple action (stand up, sit down, give, and/or take)?
- If not, begin with natural cues that are part of activities that occur frequently; then use touch and object cues with these so that they begin to become meaningful.

Does Lee have many concepts/words (signs, gestures and pictures) that he understands?
- If not, increase the words to be understood before teaching different forms. If Lee knows the gestures for up, finished, and bye, teach him more gestures before using signs.

Should Lee be learning new forms of receptive communication?
- Once Lee understands at least 5-10 words in one form, begin to pair a higher form with those words.

Does Lee know the purpose or function of your communication?
- If not, use different tactile cues.

What new vocabulary or concepts (words, signs, pictures and/or gestures) need to be taught for Lee to more fully participate in a routine or functional activity that is on his IEP?
- Add new vocabulary that is part of an activity that you are teaching.

Questions to help determine Expressive Communication Objectives:

Does Lee use his current forms of communication frequently or infrequently? How often does he make choices or let you know what he wants?
- If infrequently, you need to provide many more opportunities for him to communicate.

Are frequent opportunities to communicate provided in the environment?
- If not, analyze functional activities to determine how more opportunities could be added.

Examples:

- Teacher lets Lee feel her big watch.
- Up - touch hands or arm, Lunch - a spoon or meal ticket and Gym - a whistle or ball.
- Gestures: give me, search, put down, come, eat and want.
- Tactile signs may be paired with the objects for a student with no vision; manual signs or line drawings may be used for students with some vision.
- Are you giving him directions, asking questions, making comments and/or using models for him to imitate?
- Leave your hand extended for a question and rub Lee's arm for a comment.
- Brushing teeth - toothpaste, toothbrush, water, cup, and wipe your mouth.
- Allow Lee to choose leisure activities, what he wants to eat, if he wants another bite and if he wants you to move his wheelchair.
- During mealtime have Lee request what he wants in the lunch line. If he cannot get it himself, have him request a napkin, indicate that he wants more milk, request to throw paper in trash and put away his milk tray.
NOTE: If teachers have difficulty using natural situations for teaching communication, direct instruction should be used so that many opportunities can be available for the student to learn the new skill.

- Does Lee initiate communication in any form?
  - If rarely, use motivating routines or activities that occur frequently and begin to fade your prompts so that Lee begins to anticipate what will happen next. Think what you are doing for Lee.

- Does Lee communicate to a number of persons (parents, siblings, teachers, service providers and peers)?
  - If not, teach peers how to communicate with him. Make sure that all persons who interact with him provide opportunities for him to communicate.

- Should Lee's form of communication be expanded to include a new form?
  - If Lee is frequently using his current form of communication to communicate about many different things, a new (more difficult) form should be taught.

- Can Lee use at least four different communication functions (protest, request more, get attention and make choices)?
  - If not, teach early functions using communication forms that he is already using.
  - If Lee can, teach him new functions such as offering and commenting.

- Can Lee use the same concepts or words across different activities?
  - If not, make sure that many of his concepts are used in different activities.
  - If he can, teach new concepts such as make, get and put away.

- Can Lee communicate about something in each of the activities included on his IEP?
  - If not, first teach concepts/words that provide him a choice.
  - If he can, include new words that may be used as comments, such as good, clean and dirty.

- REMEMBER - even though there are no prerequisite skills, begin the student's intervention at his current level of communication and begin the communication process from there, always moving ahead and asking questions. Assessment is an ongoing process of asking questions and getting information to make decisions. Set the student up to succeed, not fail.

HOW TO DETERMINE WHAT TEACHING STRATEGIES TO USE

You have to determine what strategies might be the most powerful to increase the communication objectives that have
been agreed upon by the parents, teacher and service providers. In general, communication is based on Joint Activity and Joint Attention. This means that the student will be more likely to communicate if he is engaged in an activity with someone, or if he and you are attending to the same person, object or event. There are many strategies that can be used to teach communication. The following are some examples.

1. If the student does not receive at least 50-100 opportunities in a day to communicate across the different activities, use direct instruction to teach. Use the following sequence to develop the intervention.
   - Divide the student's response into small, sequential steps. For example, if the target response is to touch a person to request "more," the following steps may be used:
     - Use a receptive touch cue to ask, "Want more?"
     - Touch your hand to the student's hand; after repeated times of touching your hand to the student's hand, leave your hand 1/2 - 1 inch from his.
     - Gradually move your hand farther away.
   - Make sure that the objects/activities are motivating and reinforcing.
   - Make sure that the reinforcer is directly related to the communicative response.

2. Provide a specific prompt (1 time) and WAIT approximately 5 seconds for a response. For students who have motor impairments, the "wait time" may have to be longer with the prompt being repeated. Use the least intrusive prompt to get the student to respond. For example, if a slight touch will prompt the student to respond, do not use a complete physical assist. The following sequence represents levels of prompts from least intrusive to most intrusive.
   - Student initiates the targeted response when the object/activity is not present.
   - Student initiates the targeted response when the object/activity is present.
   - Student responds when an indirect prompt is given.
   - Student responds to a direct prompt; this may be a question presented verbally, by manual or tactile sign, by gesture, or by touch.
   - Student responds to a gesture prompt or touch prompt.
   - Student will imitate or will repeat a model that is provided.
   - Student responds only if the activity occurs frequently and has begun.
   - Student needs partial physical assistance to respond, or the teacher needs to move his/her hand or the object to the student's hand/face.
   - Student needs full physical assistance to respond.

   **NOTE:** If the student needs full physical assistance to communicate, the communication response may be too difficult for him at this time...remember... go from easy to hard.

Determine the level of prompt (what you must do to get the student to respond). Once the student is responding consistently at that level, then use the prompt at the next higher level. If the student does not respond within 5
seconds, then use the prompt that controls his response. In this way you are giving him a chance to respond at a higher level, but if he needs more help to make the response, you can provide the level of assistance that is necessary so that he is successful.

3. Determine what you do for the student that is "free." Do you move his wheelchair without him requesting? Do you help him in any way? Do you get objects and put them away? The student should either (a) be doing these things for himself through partial participation or (b) communicating a request for you to do them or help him. Make sure that you give the student a reason to communicate.

4. Use another peer in the intervention or you participate in the activity with the student so that there will be (a) turn taking, (b) more to communicate about and (c) different reasons to communicate. Teach a peer buddy how to give the student choices or how to have the student request "more."

5. Use routine activities that are age-appropriate and functional. These activities contain a number of steps that become familiar to the student. At some point, stop the sequence and wait so that the student has another reason to communicate.

6. Expand the student's communication. If he has sufficient vision and is extending objects to communicate, you might sign the name of the object or show him a picture/line drawing. In this way you are showing him that a concept can be expressed in different ways, and you are also giving him a model.

HOW TO USE FUNCTIONAL ACTIVITIES TO INCREASE COMMUNICATION?

If the student is not receiving frequent opportunities (at least 50-100) to communicate during a school day, he probably will not learn a new communication skill and he may decrease his communication with others. Even if you are using direct instruction to teach new forms, functions or content, the student must learn to communicate to many different persons, at many different times and in many different places. Therefore, it is also important that you include the target communication skills in as many functional activities as possible. The following example shows how to use communication in many different ways in an activity (going to a community store). Remember, the forms of communication provided below are only examples, not the rule.

- Teacher and student prepare to go to the store by reviewing the shopping list.
- Student requests help if needed to get to the bus.
- Student requests help to get on the bus or makes comment that the bus has arrived.
- Student comments that he has his money.
- Teacher points out objects of interest along the way.
- Student comments that you have arrived at the store.
- Student indicates that he needs a basket or cart.
- Student indicates the parts of the store where the items are located.
- Student makes choices of items to get.
- Student pays the cashier.
- Student receives the change.
- Student indicates "thank you" and "goodbye."
- You comment on the student's purchase.
- Student indicates where the bus is parked.
- Student indicates objects of interest on return.
- Student shows a peer what he bought.
- Student indicates what he will do with the objects.
- Student indicates the next activity.

There are many opportunities to communicate with the student across all activities. However, as teachers, we often use only one or two of these opportunities. Remember, stretch activities and make them rich with opportunities to communicate. Also, teach peer buddies how to communicate to the student and how to provide frequent opportunities for communication. Often, the students are more motivated to interact with a typical peer, but the peers do not know how to communicate to the student or how to provide opportunities for communication. It is the responsibility of the teacher, speech/language pathologist or teaching assistant to teach the peers.

HOW TO ASSESS IF THE STUDENT IS PROGRESSING

The receptive and expressive communication samples (Exhibits A and B) are attached. These are 10 minute observational assessments that the teacher or speech/language pathologist can use for a number of different purposes.

- Use the observational samples initially as part of the assessment to assist in determining appropriate IEP objectives. For example, if the student currently uses objects to communicate, but does so very infrequently, you would first want to increase the frequency of his current form of communication. If another student communicates frequently, but only to protest (only one function), you would want to teach him to get your attention and to request (new functions using forms he already uses if possible). If you observe a student for 10 minutes and there is no communication, that tells you about people in the environment. They are not teaching nor are they expecting the student to communicate.

- Use the samples to determine if the student is using the targeted communication skill and if he is ready to move on to learn (a) a new form, (b) a new function, (c) to communicate about more things or (d) to communicate to peers.

- Use a number of observational samples across time (one-two times a month) to show parents that the student is meeting his IEP objectives and is making progress in the area of communication.

Observe the student when someone else is interacting with him. If the student makes a communication response, indicate with a (/) the form (extending object) and the function (requesting more). Indicate if the behavior was a response, an initiation or if it was modelled. Write down under content the word; such as, drink or cracker. If the student uses two forms concurrently such as, gesturing and vocalizing, mark both on the same line. The more familiar you are with the student and his forms of communication, the easier it will be to use the sample. Teachers may request that the speech/language pathologist take several samples each month.

Reference

# Expressive Communication Sample (10 Minute)

<table>
<thead>
<tr>
<th>Name</th>
<th>Observer</th>
<th>Ratio-Adults/Students</th>
<th>NOTES</th>
</tr>
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<tbody>
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<table>
<thead>
<tr>
<th>Date</th>
<th>Domain</th>
<th>Setting and Activity</th>
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<tbody>
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<table>
<thead>
<tr>
<th>Level II &amp; III</th>
<th>Level IV</th>
<th>Level V</th>
<th>Level VI</th>
<th>Level VII</th>
<th>Level VIII</th>
<th>Type of Support</th>
<th>Function</th>
<th>Int</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Movement/</td>
<td>Point</td>
<td>Gesture</td>
<td>Yes/No</td>
<td>Object Representation</td>
<td>Pictures</td>
<td>One Word (object present)</td>
<td>Physical Assist</td>
<td>Init</td>
<td>Other</td>
</tr>
<tr>
<td>Vocalization/Gaze</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>One Word (object not present)</td>
<td>Gesture/Sign</td>
<td>Init</td>
<td>Other</td>
</tr>
<tr>
<td>Manipulate Person</td>
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<td></td>
<td></td>
<td>2 &amp; Utterances</td>
<td>Response</td>
<td>Init</td>
<td>Other</td>
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<tr>
<td>Extends Object</td>
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<td></td>
<td></td>
<td>Init</td>
<td>Request More</td>
<td>Proc</td>
<td>Other</td>
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<td>Request Attention</td>
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<td></td>
<td>Request Objectification</td>
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</tbody>
</table>

Int = Interacter
PD = Peer with Disability
TP = Typical Peer

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