

DOCUMENT RESUME

ED 328 006

EC 233 218

TITLE Play Activities and Emergent Language: Intervention Procedures for Young Children with Deaf-Blindness.

INSTITUTION Oregon State System of Higher Education, Monmouth. Teaching Research Div.

SPONS AGENCY Office of Special Education and Rehabilitative Services (ED), Washington, DC.

REPORT NO 300-83-0237

PUB DATE 89

NOTE 36p.

PUB TYPE Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS \*Communication Skills; \*Deaf Blind; Early Childhood Education; \*Early Intervention; \*Hearing Impairments; Interpersonal Competence; \*Play; Severe Disabilities; Skill Development; \*Visual Impairments

ABSTRACT

This booklet presents a series of play activities and interventions to facilitate development of social and communicative skills in young children who have visual impairments, hearing impairments, or both. The more than 100 activities attempt to increase the early communication and language competencies of young children. An appendix provides an overview of the Early Communication Skills Curriculum developed at Central Wisconsin Center for Developmental Disabilities, with suggested modifications for deaf and/or blind children. (PB)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED328006

**PLAY ACTIVITIES AND EMERGENT LANGUAGE:  
INTERVENTION PROCEDURES FOR YOUNG  
CHILDREN WITH DEAF-BLINDNESS**

233218

**PLAY ACTIVITIES  
AND  
EMERGENT LANGUAGE**

## PREFACE

Perhaps no handicapping condition is as debilitating as the dual sensory impairment of deaf-blindness. All too often, young children with this type of condition have difficulty developing even rudimentary communication skills. This situation is further exacerbated by a relative absence of systematic research, assessment tools, and curricula expressly designed for persons with deaf-blindness. Fortunately, in recent years, the professional community has directed more attention to this population, and various research endeavors have been initiated to develop appropriate and useful materials.

One such effort is the Communication Skills Center for Young Children with Deaf-Blindness (CSC). This project was funded through a 5-year contract that was awarded in 1983 to the Teaching Research Division of the Oregon State System of Higher Education by the United States Office of Special Education and Rehabilitation. The overall goals of CSC were to develop, implement, evaluate, and disseminate communication interventions to increase the early communication and language competencies of young children (0 to 5 years) with deaf-blindness. Toward this end a multisite, consortium model was adopted. The CSC was administered through the Teaching Research Division and included as members the Portland, Oregon, Public Schools; University of Wisconsin-Madison, Waisman Center; St. Luke's Hospital, New York; and Utah State University, Exceptional Child Center. At each of these sites specific topics related to communication development in children with deaf-blindness were investigated.

The products in this volume represent portions of larger, programmatic investigations by the respective authors. Thus, each of these products will be integrated into either existing or emerging curricula. The interested reader is encouraged to contact those authors directly for further information on their work.

Michael Bullis, Ph.D.  
Project Director  
Communication Skills Center for  
Young Children with Deaf-Blindness

These products were developed under contract #300-83-0237, Office of Special Education and Rehabilitative Services, U.S. Department of Education. The statements and materials contained herein do not necessarily reflect the position or policy of that office.

Play Activities for Young Children  
With Sensory Impairments

By Joan Rich  
and  
Elizabeth Rich

With Rebecca R. Fewell  
Amy Schlater  
and  
Patricia F. Vadasy

Experimental Education Unit, WJ-10  
Child Development and Mental Retardation Center  
University of Washington  
Seattle, WA 98195

Prepared under contract #300-83-0237 from the Office of Special Education and Rehabilitative Services, Communication Skills Center for Young Children with Deaf-Blindness, Teaching Research Division, Oregon State System of Higher Education, Monmouth, OR 97361.

## Activities for Children who are Blind or Visually Impaired

### Reacting to sounds

When <child's/name> is awake, watch for <his/her> reactions to sounds that occur. When music or television is turned on, a door slams, or even when water is turned on, look at <child's/name> to see <his/her> reaction. If <child's/name> is active, <he/she> may quiet upon hearing the noise. If <he/she> is quiet, then <he/she> may increase <his/her> level of activity. Other reactions include startling, crying, or blinking.

### Reacting to blowing

While you're diapering <child's/name>, talk to <him/her> and sometimes lightly blow on <his/her> face. See what <he/she> does, then take your turn again.

### Cooing turns

When you are spending time holding and talking to <child's/name>, be sure to give <him/her> opportunities to respond to you. Talk for a minute, then stop to see if <he/she> will smile or "coo" back to you. Talk a bit more, then pause again. Take turns cooing and smiling with <him/her>.

### Animal sounds

Give <child's/name> a stuffed animal such as a bunny, bear, cow, dog, or cat and let <him/her> explore it. Say to <child's/name> "(animal) says (sound)." Repeat with other stuffed animals. Try putting animals in a bag. Show <child's/name> how to call each animal, using animal signs and sounds. When <he/she> makes an animal sound, help <him/her> take that animal out of the bag.

### Petting animals

Take <child's/name> to a petting zoo or a pet store. Let <child's/name> pet the animals and listen to the animal sounds. Encourage <him/her> to repeat the animal sounds.

### Singing animal sounds

Sing songs that incorporate animal sounds, like "Old MacDonald Had a Farm."

### Exploring sounds

Provide a variety of toys with sounds and vibrations. Encourage <child's/name> to listen and feel the toys.

### Using a toy

Help <child's/name> learn to use a toy in an appropriate manner. For example, show <him/her> how to use a scratch-n-sniff or textured book. Demonstrate how to push cars; love, rock, and feed dolls; and wind up a wind-up toy.

### Exploring textured see'n say toy

Add textures to a see 'n say toy to help illustrate the pictures. Encourage <child's/name> to feel the pictures and to pull the string to make the toy react.

### Dropping objects

Show <child's/name> how to drop an object into a container. Use a container such as an empty can, bucket, or shoebox that will make a noise when an object hits the bottom of the container. Help <child's/name> shake the container and listen to its sound. This activity may redirect the behavior of a child who throws toys excessively.

### Pairing familiar objects

Gather together a group of materials that can be paired such as a toothbrush and toothpaste, brush and comb. Encourage <child's/name> to explore all the objects. Tell <him/her> what each object is. Hold one object in your hand. Let <child's/name> feel it. Indicate that you would like the object that goes with it. Use as much physical direction as necessary to help <him/her> find the other object in the pair.

### Dressing self

During dressing, talk about what each item of clothing is and touch where it will go. Choose one item, such as a sock or a hat, and encourage <child's/name> to pull it off. (It helps if you select clothing that is simple and easy to put on and take off, as this will encourage the child's independence.) Encourage <child's/name> to participate as much as possible in dressing and undressing.

### Brushing hair

When you are brushing <child's/name>'s hair, encourage <him/her> to feel what you are doing. Make the experience as pleasurable as possible. Encourage <child's/name> to hold the brush and touch <his/her> hair with it.

### Washcloth peek-a-boo

Lay a clean washcloth lightly over <child's/name>'s face. Say or sign "Where is <child's/name>?" Pull it off quickly and exclaim, or sign <child's/name>." After <child's/name> is familiar with this game, help <him/her> remove the cloth. When <child's/name> pulls off the cloth, respond with a surprised voice and say "peek-a-boo." Vary the game by covering and uncovering your own face. Help <child's/name> feel your face covered and uncovered.

### Taking turns

Choose any toy that can be used for taking turns, like a ball or a wind-up toy. Encourage <child's/name> to take a turn, then you take a turn. Encourage <child's/name> to initiate the exchange and return the toy to you.

### Sharing a cookie

Share a snack (e.g., cookie, cracker) with <child's/name>. Let <child's/name> have a bite and then you take a bite. Give <child's/name> the snack and say or sign "bite" and open your mouth. Show <child's/name> with your hands and <his/hers> that your mouth is open. Take a bite. Then say "bite" and encourage <child's/name> to do so. Encourage <child's/name> to initiate the sharing of the snack.

### Sorting objects

Gather together a group of different kinds of objects (for example, blocks, buttons, and balls) and put them in a container. Provide opportunities and encourage <child's name> to explore the objects. Separate the objects into smaller groups of similar objects. Model the activity for <child's/name>, using as much physical direction as necessary. Then give the child opportunities to choose from the pile objects that go together.

### Same and different

Gather several common household items that are found in <child's/name>'s room such as balls, blocks, toys, cups, spoons, pillows, books, and shoes. Choose three items, two of which are exactly the same. Give <child's/name> one of a pair of like objects and talk about it as <he/she> touches it. Talk about its shape, color, texture, and function. Then hand <child's/name> the second object that is exactly the same and say "These are the same." Place one object in each hand and say, "See how they feel the same." Then give <child's/name> one that is different. Talk about its shape, color, texture, and function. Say, "These are not the same."

### Taking turns activating toys

Take turns with <child's/name> in activating certain toys, swaying to music, or shaking bells. Encourage the child to follow your lead. Then follow the child's lead.

### Bathing a doll

In the bath tub, during <child's/name>'s bath, demonstrate how to give a bath to a doll or a toy animal. Encourage <child's/name> to participate. Continue this activity periodically until <he/she> initiates the activity. You may then want to add to the routine by showing <child's/name> how to shampoo the doll or brush the doll's teeth.



### Tea party

Have a tea party for several people (adults or children) or several toys (dolls or animals). Tell <child's/name> who will be coming. When everyone has arrived, tell <child's/name> where everyone is seated. Encourage <child's/name> to explore. Mention how each person (toy) has a cup. Demonstrate how to give each guest something to drink. Encourage <child's/name> to pour. This activity may be easiest to do with empty cups with pretend tea. Try this outdoors on a warm day using water or another beverage.

### Performing series of actions

Throughout the day, notice whenever things occur in a series, and draw <child's/name>'s attention to pairs of objects. Talk about them, saying for example, "First shoes come off, then socks," or "First your coat goes on, then your hat." Find pairs of actions that <child's/name> can perform, such as stirring in a cup and then drinking from it, or shaking a small can of juice and then opening it and drinking it.

### Using toy in two ways

Provide a variety of toys that <child's/name> can use in two different ways. For example, a washcloth could be used to wipe a doll, or to serve as a blanket. A cup can be used to eat and drink from, or can be used as a doll hat. Talk about different ways to use the same thing. Demonstrate. Use as much physical direction as necessary.

### Locating sounds

Encourage <child's/name> to locate the sources of sounds by providing opportunities throughout the day for <him/her> to listen to sounds. For example, shake a rattle, ring, or bell near the child's ear. Let the child touch the noisemaker to associate the sound with the object. Call <child's/name>'s attention to the sounds that <he/she> hears around the house, like the radio, refrigerator, doorbell, washing machine, or wind chime.

### Exploring textured toys

Provide a variety of textured toys. Give <child's/name> an opportunity to explore one of the toys. If the child needs encouragement, move the child's hands across the toy. Try other toys to find those that interest <child's/name>.

### Clapping hands

Help <child's/name> clap <his/her> hands together. Place an object, such as a wooden spoon or toy hammer, in <his/her> hand. Encourage child to tap a piece of furniture, a kitchen pot, or a body part with the object.

Listening to sounds

Encourage <child's/name> to listen and identify sounds. (Collect matched pairs of noisemakers, 2 bells, 2 rattles, etc.) Let <child's/name> listen to the sound and then help <him/her> identify what <he/she> heard. Help <child's/name> to listen and make the same sound.

Exploring sounds

Provide everyday objects that make noise, such as a kitchen timer, an egg beater, a blender. Let <child's/name> explore these objects visually and auditorily, as well as with <his/her> hands.

## Activities for Children who are Deaf or Hearing Impaired

### Tracking on changing table

When the child is lying on the changing table, try to make <him/her> follow your face. As <he/she> looks at you, slowly move your face from one side of <him/her> to the other. Encourage <child's/name> to follow you with <his/her> eyes and head by smiling or talking to <him/her>. Have your face as close as necessary to child's face.

### Tracking mobile

Hang a mobile or interesting toy over <child's/name>'s crib or bed. Touch it so it slowly moves back and forth. Encourage <child's/name> to follow the movements of the object.

### Following bulls-eye

There are certain toys on which young children will typically focus. Some children like to look at bright, shiny objects, Others like to look at pictures of other babies. A bulls-eye pattern is often a favorite. You can make a bulls-eye using black and white paper. Try several different things to find out what <he/she> likes to look at. When <he/she> is lying on <his/her> back with <his/her> head turned to one side, hold an interesting toy about 8 inches from <his/her> face. When <he/she> looks at the object, slowly move it so <he/she> must turn <his/her> head to midline (nose up, head straight) to watch object. Be sure to let <him/her> practice this from both sides. When <he/she> can follow the toy to midline, begin to move the toy across 180 degrees from side to side. Again, be sure to practice this from both sides.

### Tracking vibrating toy

It is easiest for children to watch toys if you start with their head in midline (nose up, head straight). Place <child's/name> on <his/her> back with head in midline. A bright toy that vibrates may keep <child's/name>'s attention. Shake the toy as you move it above <child's/name>'s head. The vibration, as well as the appearance and movements of the toy may help <child's/name> follow the toy. Slowly move the toy so <he/she> must turn <his/her> head to one side. Be sure to practice this to each side. When <child's/name> can do this, begin the activity with <his/her> head turned to the side. Slowly move the toy so <he/she> must bring <his/her> head to midline, and then to the other side to watch the toy. For a more difficult "tracking" activity, begin with <his/her> head in midline, shake the toy, and move it from <his/her> forehead to chest. For all of these activities, remember to keep the toy about 8 inches above <his/her> head, and encourage the child to track from one side to the other.

Circle tracking

While <child's/name> is on the changing table, take a few minutes to help <him/her> practice following visually a brightly colored toy in a circular path. Hold the toy about 8" from <his/her> face. When <child's/name> is watching the toy, slowly move it in a circle approximately 10" in diameter. If <child's/name> looks away, shake the toy and get <his/her> attention, then continue the movement. Practice a couple of times during any diapering time. Be sure that <child's/name> practices following in both a clockwise and counterclockwise direction.

Looking in the mirror

Place <child's/name> in front of a large mirror. Say or sign <his/her> name. (If you do not know <child's/name>'s sign, consult with the teacher.) Encourage <child's/name> to look at <him/her>self in the mirror.

Looking at balloons

Tie some balloons on string from the ceiling. Sign "see." Encourage <child's/name> to look at the balloons. Make the balloons move by touching them with a stick or your hand, or by blowing at them. Encourage <child's name> to watch their movement.

Dressing self

Sign "clothes" before dressing <child's/name>. Choose one item, such as a hat, and encourage <him/her> to pull it off. Repeat. (It helps if you purchase clothing that is simple and easy to put on and remove, as that will encourage independence.) Encourage <child's/name> to help you as much as possible in dressing and undressing. Sign the names of the pieces of clothing as you put them on and remove them.

Brushing hair

When you brush or comb your own hair, encourage <child's/name> to watch you. When you are brushing the child's hair, encourage the child to look at a mirror to see what you are doing. Sign "Comb hair." Make the experience as pleasurable as possible. Encourage <child's/name> to hold the brush and touch <his/her> hair with it.

Taking turns

Choose any toy that can be used for taking turns. For example, you can roll a large ball, smell a box of "smells" or wind up a toy. Encourage <child's/name> to take a turn, then you take a turn. Sign whatever is appropriate. Encourage <child's/name> to initiate the exchange.

Sharing a cookie

Share a snack (e.g., cookie, cracker) with <child's/name>. Let <child's/name> have a bite and then you take a bite. Next, give <child's/name> a snack and sign "eat" and open your mouth. Take your child's hands, if necessary, to show that your mouth is open. Take a bite. Then sign "eat" and encourage <child's/name> to take a bite. Repeat. Encourage <child's/name> to initiate sharing the snack.

Matching color cubes

This activity provides practice in matching. Play a game in which you have several objects, such as colored one-inch cubes, and <child's/name> has a similar group of objects. You pick up your red cube and put it in your hand. Ask <child's/name> to give you <his/her> red cube. Next, let <child's/name> pick a cube and you match it. If child is color blind use two objects, such as 2 shoes, 2 combs, 2 spoons.

Matching clothing - yours and mine

Gather together a group of items that belong to you and items that belong to <child's/name> (e.g., hats, gloves, bracelet, stuffed toy). Begin the activity by putting one of <child's/name>'s hats on your head. Encourage <child's/name> to laugh at you. Next, put <child's/name>'s hat near your child and your hat near you. Put on your hat and sign "Mine." Take your hat off and put it near you. Hand <child's/name> an object. Help <child's/name> place it next to the correct person. Continue with other objects. Encourage <child's/name> to copy the "mine" sign for <his/her> own possessions.

Same and different

Gather several common household items that are found in <child's/name>'s room such as balls, blocks, toys, cups, spoons, pillows, books, and shoes. Choose three items, two of which are exactly the same. Give <child's/name> one of the pair of like objects and talk about it as <child's/name> touches it. Draw attention to the shape, color, texture, and function. Then hand <child's/name> the second object that is exactly the same and sign "same." Place one object in each of the child's hands and sign "same." Then give <child's/name> the object that is different. Draw attention to its shape, color, texture, and function. Sign "not same."

Taking turns activating toys

Take turns with <child's/name> in activating certain toys. Look for toys that have strong visual appeal -- such as a pop-up box or other toys that have an interesting or surprising action. Encourage <child's/name> to follow your lead. Then take turns.

Tea party

Have a tea party for several people (adults or children) or several toys (dolls or animals). Sign "Drink." Show the child where everyone is going to sit and point out that everyone has a cup. Sign "cup." Demonstrate how to give each person something to drink. Encourage <child's/name> to pour. This activity may be easiest if you begin with empty cups with pretend tea. Try it outdoors on a warm day using water or another beverage.

Listening to booms

Expose <child's/name> to some very loud noise makers (e.g., bang pot lids together, turn on vacuum cleaner, ring loud bell or bicycle horn). Watch for <child's/name>'s reflexive reactions such as startling, crying, or blinking.

Looking at dolls

Choose a doll that <child's/name> prefers. Sign "baby." Encourage <child's/name> to look at the doll.

Exploring stuffed animals

Sign "animal name." Choose a stuffed animal (e.g., cat, dog, bunny, bear, cow) that <child's/name> prefers. Encourage <him/her> to look at the toy and your signing. Remember to make the animal noise.

Taking turns with toys

Choose a toy that you and <child's/name> can take turns playing with. For example you may roll a large ball, build a tower with blocks, put objects in a can, or smell different smells. Sign the desired action, then you take a turn. Wait and then encourage <child's/name> to imitate your action, taking a turn. Use physical assistance if necessary to help <child's/name> take a turn.

Performing a series of actions in play

While you are playing with <child's/name>, try to expand upon <his/her> play by looking at what <he/she> is already doing (e.g., drinking from cup) and adding another related action to it (e.g., stirring cup and then drinking). Other sequences you could build include brushing hair and then looking in the mirror; getting a book and then looking at it; feeding doll and then wiping doll's face.

Makes doll act on self

While playing with <child's/name>, encourage <him/her> to make a doll act on itself. For example, make the doll hold a brush and brush its hair, or make the doll drink from a cup or bottle.

Organizing items

Provide <child's/name> with one set of toys (e.g., a set of animals, people, cars, or furniture). Encourage <him/her> to group the toys in an organized manner. For example, show <him/her> how to arrange the animals in a line, or show <him/her> how to put the cars in a circle.

Organizing items

During the day, provide opportunities for <child's/name> to organize items. For example, encourage the child to set the table, help put <his/her> toys away, or sort laundry items with you.

Placing a doll in relationship to two objects

During play time, model and encourage <child's/name> to use a doll or action figure in appropriate relationship to two objects. For example, <child's/name> might put the doll on the bed and cover up the doll with a blanket, or put the doll in a chair at the table, or put the action figure in a vehicle and make it drive over a toy bridge or road made of books or blocks.

Substituting doll for self

While playing with <child's/name>, encourage <him/her> to substitute a doll or other figure for <him/her>self in play. For example, the child could hold the mirror for the doll or action figure to see itself, or the child could hold the telephone to the doll or the action figure's ear to listen.

Making relationship between two toys

Sign "play toys." Give <child's/name> two toys or objects that are related to each other, a truck and a trailer, a dump truck and things to fill it with, or a bottle and a doll. Demonstrate the appropriate use of two objects by signing, for example, "Baby eat." Then wait and see if <child's/name> will do the same. If necessary, help <child's/name> through the motions.

Smelling book

Sign "book." Demonstrate how to use a scratch-n-sniff or textured book. Allow the child to explore the book several ways - by touching, smelling, or turning its pages. Encourage appropriate use of the book.

Pushing truck

Sign "truck" or "drive." Demonstrate how to push the truck. Allow the child to explore the truck. Encourage the child to push the truck.

Vibrating toy

Sign "play" Demonstrate how a vibrating toy works. Choose a toy that the child can activate. If necessary, move the child's hands to activate toy.

## Activities for Children with Deaf-Blindness

### Making relationship between two toys

Sign "play toys." Give <child's/name> two toys or objects that are related to each other, a truck and a trailer, a dump truck and things to fill it with, or a bottle and a doll. Sign the activity, such as "Baby eat." Help <him/her> explore the two objects. Help <child's/name> through the motions of the activity. Provide opportunities for practice.

### Dressing self

Sign "clothes" before dressing <child's/name>. Choose one item, such as a hat, and encourage <child's/name> to pull it off. Repeat. (Try to purchase clothing that is simple and easy to put on and remove, as this will maximize independence.) Encourage <child's/name> to help as much as possible in dressing and undressing. Sign the names for the pieces of clothing as you put them on and remove them.

### Brushing hair

When you are brushing or combing <child's/name>'s hair, encourage <him/her> to feel what you are doing. Sign "Comb hair." Make the experience as pleasurable as possible. Encourage <child's/name> to hold the brush and touch <his/her> hair with it.

### Taking turns

Choose any toy or object that can be used for taking turns. Examples are rolling a large ball, smelling a box of "smells," or winding up vibrating toys. Encourage <child's/name> to take a turn, then you take a turn. Sign as appropriate. Encourage <child's/name> to initiate the exchange.

### Sharing a cookie

Share a snack (e.g., cookie, cracker) with <child's/name>. Let <child's/name> have a bite and then you take a bite. Give <child's/name> a snack and sign "eat" and open your mouth. Take your child's hands in your hands to show that your mouth is open. Take a bite. Then sign "eat" and encourage <child's/name> to take a bite. Repeat. Physically prompt these movements if necessary, but encourage <child's/name> to initiate sharing the snack.

### Sorting objects

Gather together a group of different kinds of objects (for example, blocks, buttons, and balls) and put them in a container. Sign the name of each object. Provide opportunities and encourage <child's name> to explore the objects. Separate the objects into smaller groups of similar objects. Model the activity for <child's/name>, using as much physical direction as necessary to help <him/her> choose objects that go together. Encourage <child's/name> to put similar objects into the same group.



Same and different

Gather several common household items that are found in <child's/name>'s room such as balls, blocks, toys, cups, spoons, pillows, books, and shoes. Choose three items, two of which are exactly the same. Give <child's/name> one of a pair of like objects and help <him/her> discover its shape and texture. Help <child's/name> understand its function by demonstrating it. Then hand <child's/name> the second object that is exactly the same and sign "same." Place one object in each hand and sign "same." Then give <child's/name> a different object. Draw attention to its shape, texture, and function. Sign "not same."

Tea party

Have a tea party for several people (adults or children) or several toys (dolls or animals). Sign "Drink." Encourage <child's/name> to feel who is there and help the child notice that everyone has a cup. Sign "cup." Demonstrate how to give each person something to drink. Encourage <child's/name> to pour. This activity may be easiest to do with empty cups with pretend tea. However, it will make more sense to <child's/name> if there is something in the cups. You may want to try it outdoors on a warm day using water or another beverage.

Exploring dolls

Choose a doll that <child's/name> prefers. Sign "baby." Encourage <him/her> to explore the doll.

Exploring stuffed animals

Sign "animal name." Choose a stuffed animal (e.g., cat, dog, bunny, bear, cow) that <child's/name> prefers. Encourage <him/her> to explore the toy. Remember to make the animal noise.

Performing a series of actions in play

While you are playing with <child's/name>, expand upon <his/her> play by looking at what <he/she> is already doing (e.g., drinking from a cup) and adding a related action (e.g., stirring cup and then drinking). Other sequences you can build up to include getting a textured book and feeling it, or picking up a doll and rocking it.

## Activities for Children who are Deaf or Deaf-Blind

### Touching, mouthing toys

Place <child's/name> on <his/her> back. Place a roly poly toy or dangle a toy or mobile to one side of <child's/name>, level with <his/her> chest. Help <child's/name> lie on <his/her> side. Hold <his/her> hip and slowly roll to one side. Help <him/her> bring upper arm over. Child should have a rounded back (not arched) with chin pointed down. Place your hand on child's upper leg and keep it slightly bent. Shake the toy and let <him/her> watch it. Watch for <him/her> to reach for the toy. If necessary, move <his/her> arm and help <him/her> reach for the toy. This is also a good position for child to play with or mouth <his/her> own hands, or to mouth a toy. Remember to let child play on both sides in this position. Watch for <him/her> to repeat movements that cause toy to make a noise, or to put <his/her> hands into <his/her> mouth. Help <him/her> repeat these movements.

### Exploring textured toys

Provide a variety of textured toys. Sign "play." Give the child an opportunity to explore one of the toys. If the child needs encouragement, move the child's hands across the toy. Try other toys. Repeat signing "play" when introducing a new toy.

### Bubble looking

Sign "see." Blow bubbles. Encourage <child's/name> to follow the bubbles with <his/her> eyes.

### Putting toys in bath

Sign "play - bath." Encourage <child's/name> to put the toys in the bath tub. Give as much assistance as needed. Decrease assistance as <child's/name> begins to play independently with the toys in the water.

### Putting clothing into drawer

Sign "clothing item name + in." Show <child's/name> how to put the item in the drawer. If you use a drawer full of socks rolled in balls, for example, you won't have to fold clothing items after the activity is finished.

### Associating objects

Help <child's/name> make associations. Select pairs of objects that <child's/name> frequently experiences being associated. Examples are: soap and towel, shoe and sock, and bowl and spoon. Encourage <him/her> to explore a single pair of objects. Sign the names of the objects. Demonstrate how the objects are used together and how they are used separately. For example, when you pair the soap and towel, be sure to smell the soap, rub the bar of soap on the cloth or on the body, feel its slickness when wet, and feel/observe bubbles when it is lathered. Soak the towel in water, wring it out, rub it on the soap or body, and hang it up.

Dropping objects

Show <child's/name> how to drop an object into a container. For example, <he/she> can feel the vibrations when <he/she> drops large metal screws into a hard plastic container. This activity may redirect the behavior of a child who throws toys excessively.

Putting pegs in board

Place a pegboard in front of <child's/name>. Provide pegs that fit the board, as well as other peg-like objects like a pencil, a hair roller, and pegs that are too small or too big for the board. Encourage <child's/name> to explore the different "pegs." Sign "in." Help <child's/name> discover that some of the objects fit and some don't.

Feeding a doll

Encourage <child's/name> to bring a doll or stuffed animal to the table at snacktime. Pull up a chair for the toy to sit on, or show <child's/name> how to share a chair with the toy. Sign "Baby eat" or "Feed baby." Make it easy for <child's/name> to "feed" the the toy without making a mess by using an empty doll cup or doll bottle, and by providing solid foods, like crackers, that aren't too messy. Show <child's/name> how to feed the toy, if necessary.

Bathing a doll

When you are giving <child's/name> a bath, show <him/her> how to wash a doll or a toy animal. Sign "Wash baby" or "Wash duck." Encourage <child's/name> to participate. Use as much physical direction as necessary. Continue this activity periodically until <child's/name> initiates the activity. You may then want to add shampooing and toothbrushing to the routine with the toy.

Performing series of actions

Throughout the day notice whenever things occur in a series, and draw <child's/name>'s attention to pairs of objects. For example, if you or <child's/name> remove shoes and socks, sign "Shoes off. Socks off." Or when you are at the table, sign "Bowl and spoon," or "Knife and fork." Find pairs of actions that <child's/name> can perform, such as stirring in a cup and then drinking from it. Show <child's/name> how to perform these actions in sequence.

Using toy in two ways

Provide a variety of toys that <child's/name> can use in two different ways. Many objects have multiple uses. For example, a washcloth could be used to wipe a doll, or to serve as a blanket. A cup can be used to drink from or as a doll hat. Sign about different ways to use the same thing. Demonstrate. Use as much physical direction as necessary.

Reacting to environmental sounds

Alert <child's/name> to environmental noises. If <he/she> responds on <his/her> own, label this sound for <child's/name>. Be sure to give <him/her> enough time to process the noise <he/she> heard. If possible, repeat the sound again. If <child's/name> does not respond, physically move <him/her> to the source of the sound. Sign "listen." Repeat the sound and label it.

Putting clothing into drawer

Let <child's/name> help put the laundry away in drawers. Open a drawer and sign "in." Model the action. Encourage <child's/name> to copy you. You may want to also sign the name of the clothing item (shirt, socks, pants).

Washcloth peek-a-boo

While playing in the bath, lay a washcloth over part of your face. Pull it off quickly, looking surprised and excited. Repeat, encouraging the child to pull the cloth off. Later, when <child's/name> understands how to pull the cloth off, place the washcloth over <child's/name>'s face. Sign "off" each time you play the game, and hug <child's/name> or show in some way how excited you are to see <him/her> each time.

## Activities for Children who are Blind, Deaf, or Deaf-Blind

### Mouthing toys

When you and <child's/name> are playing with a small toy, give <him/her> opportunities to explore the toy while <he/she> is holding it. Help <him/her> bring the toy to <his/her> mouth. Help <child's/name> practice this with both hands, with a variety of toys and in a variety of positions (e.g., on <his/her> back or side, in your lap, or in a chair).

### Grasping toys

Help <child's/name> practice grasping toys. Wooden spoons are about the right size for grasping. You might want to draw a happy face on the spoon and tie a ribbon on the neck of the spoon. Show the toy to the child, then place it in <his/her> hand. Help <him/her> hold the toy. When <he/she> let's go, place the toy back in <his/her> hand. Be sure to let child practice holding toys in each hand. Encourage child to bang or wave the toy.

### Splashing in tub

Fill the bathtub to a comfortable level. While child is taking a bath, encourage splashing. Splash child gently, but not on <his/her> face. Move child's hand to show <him/her> how to splash. Next time you might want to add bubbles to change the texture of the water.

### Splashing in water table

Encourage <child's/name> to make gentle splashing movement in the water table. Move child's hand to show <him/her> how to splash, if necessary. Bubbles may be added to vary texture.

### Squeeze toy

Sign "play." Place a soft, squeeze toy in child's hand. Help the child squeeze the toy. Encourage the child to squeeze. Continue to help, if necessary.

### Water play with toys

Give <child's/name> an opportunity to feel a variety of objects. A water table or a child's wading pool can be filled with sand, beans, balls, styrofoam packing material, rice, etc. The child can put <his/her> hands in the water table, or <his/her> whole body in the pool. Encourage child to move <his/her> hands or body in the materials.

Banging with objects

Sign "play." Help <child's/name> clap <his/her> hands together. Place an object, such as a wooden spoon or toy hammer, in <child's/name>'s hand. Encourage <child's/name> to tap a piece of furniture, a kitchen pot, or a body part with the object. Repeat the sign "play" every time a new object is introduced.

Exploring textured/smell book

Locate a book that is either a textured or a scratch-sniff book or both. Sign "book." Have <child's/name> feel the book in your hands as you sign "book." Help the child open the book. Experience whatever is on the page. <child's/name> may either close the book or turn a page. Repeat activity.

Clapping with magnets and velcro

Sign "play." Encourage <child's/name> to clap. Place in <child's/name>'s hands magnets or objects that have magnets placed in them. Guide <child's/name>'s hands so that the magnets will attract. Encourage <child's/name> to put the magnets together and pull them apart. A similar activity can be done using velcro which can be sewn onto two pieces of cloth.

Clapping pot lids

Sign "play." Encourage <child's/name> to clap <his/her> hands together. Place a similar object in each of <his/her> hands, such as pot lids, large blocks, cymbals. Move <child's/name>'s hands through the motions of bringing the objects together. Encourage <him/her> to continue.

Putting toys in box

Sign "in." Encourage the child to put the toys in the toy box. This can be done at clean up time or at bed time.

Filling kitchen drawer

Provide a kitchen drawer full of utensils that <child's/name> can safely empty and refill. Encourage <him/her> to take out the items and play with them. When <child's/name> is finished playing, encourage <him/her> to return the utensils to the drawer.

Bathing together

This activity will offer practice in turn taking and in learning the names of body parts. If you would enjoy taking a bath with <child's/name>, use that opportunity for some very early turn-taking. As you wash yourself and <child's/name>, encourage <him/her> to first wash you and then <him/her>self. You will need to direct most of the activity, but make it as pleasurable as possible. This is a good time to help <child's/name> learn about body parts. Instead of bathing together, you could wash a rubber doll or a bath toy when you are washing <child's/name>. Encourage <him/her> to participate in washing the toy and then <him/her>self.

Nesting

Give <child's/name> sets of cans, pots, and boxes that can be nested. Help <child's/name> select the objects that should be inserted next. Show <him/her> how to find the object that is the right size by feeling the size and shape of the objects. Sign "in."

Playing games in the tub

Take a bath with <child's/name> and take turns playing games in the water. Demonstrate how to do an action such as clapping hands in the water. Encourage <child's/name> to repeat the action. For example, you can take turns pouring water by first pouring some on <child's/name>'s chest, and then showing the child how to pour some on yours. Use as much physical direction as necessary.

Saying hello and bye

Whenever you and <child's/name> enter or leave a group of people, encourage <him/her> to greet at least two people. The child may use a sound, a gesture, or a touch to greet people.

Performing series of actions with toys

Provide a variety of toys that <child's/name> can use in a series of acts, such as putting a toy person in a car and giving it a ride, or putting a doll in a cradle and rocking it, or loading blocks on a truck and emptying the truck. Demonstrate the actions. Use as much physical direction as necessary. Sign "go" to initiate the action.

Organizing diverse group of objects

Provide a variety of toys that <child's/name> can organize in different ways. Encourage <him/her> to group the toys in categories, separating the dishes from the blocks, and the trucks from the books. Encourage <child's/name> to play with one category of toys at a time. Model again the signs for "same," "not same."

Using pairs of toys

Provide a variety of toys and objects that <child's/name> can use in pairs. Choose toys and objects that you and the child can use. For example, use a bottle and a cup to drink, a fork and spoon to eat, or a comb and a brush to fix the hair. Demonstrate how you can use both on yourself and with the child. Help <child's/name> perform the correct actions. Use as much physical direction as necessary. Model the signs for the objects used.

Associating sounds

Attach a noisemaker around <child's/name>'s wrist or ankle to encourage <him/her> to associate movement with sound. Try making a bracelet or anklet of bells, pieces of dried pasta strung together (they clatter when shaken), or use a small rattle. Jingle bells can also be tied to shoes.

Doing the Indian call

Cover your mouth with your hand and imitate the Indian call. Then put your hand on <child's/name>'s mouth. Then you do the call again. Then repeat using <child's/name>'s hand.

Feeling mouth

Take your hands and touch <child's/name>'s mouth. Sign "mouth." Take <child's/name>'s hand and help <him/her> touch your mouth. Sign "mouth." Repeat touching each other and signing.

Feeling face

Take your hand and touch <child's/name>'s face. Sign "face." Take <child's/name>'s hand and help <him/her> touch your face. Sign "face." Repeat touching each other and signing.

Using books and other toys

Help <child's/name> learn to use toys in an appropriate way. Sign "book.\*" Demonstrate opening the book and looking at, or touching the pictures. Sign "drive" or "car" and show the child how to push the car. Sign "baby" and demonstrate how to love, rock, and feed the baby doll. Use a foam ball. Sign "ball" then place <child's/name>'s hands on the ball. Throw or roll the ball. \*Use signs that resemble the way the real object looks or feels to help <child's/name> remember the sign.

Putting clothes into the washer and dryer

Let <child's/name> help put the laundry in the washer or dryer. As you put the clothing items in the machine, sign "in." Let <child's/name> feel the vibration of the machine after you turn it on.

Pairing familiar objects

Gather pairs of objects that are used together in some familiar action. Select functional pairs such as toothpaste and toothbrush, comb and brush, crayon and paper. Demonstrate the desired action with the paired objects. Sign the action to label the activity, such as "brush teeth," "color," etc. Encourage the child to imitate using both objects. Later, hold one object of the pair and indicate that you want the other related object. Use as much physical direction as necessary to help the child find the other object.



### Sorting silverware

Use a silverware divider for a visual and tactile cue to help sort objects. Help <child's/name> sort the spoons, forks, and knives into the appropriate places. Sign "spoon," "knife," "fork" as you put each object away.

### Repeating actions to two recipients

Provide <child's/name> with two sets of objects (e.g., two spoons, two pots and two lids, two brushes, two combs). While you are playing with <child's/name>, encourage <him/her> to repeat an action with both objects in each pair. For example, <child's/name> can use the spoon to feed <him/her>self, then use another spoon to feed the doll. <He/She> can put a lid on a pot, then put another lid on another pot.

### Providing categories

Provide a set of toys that are all of one kind (e.g., a set of plastic animals, a set of cars, a set of people, or a set of toy furniture). Encourage <child's/name> to set up the toys on the floor or on another flat surface.

Appendix to  
The Early Communication Skills Curriculum:  
Suggested Modifications for Use With Children With Deaf-Blindness

Introduction

The Early Communication Skills Curriculum (ECSC) is designed to facilitate the development of social and communicative skills in individuals who have severe/profound developmental delays (functioning below 12 to 15 months). It targets those cognitive and social/communicative skills thought to underlie the initial expression of intentional communicative behavior and first words (symbols).

The ECSC was developed at Central Wisconsin Center for Developmental Disabilities, 317 Knutson Drive, Madison, Wisconsin 53704, where a draft version can be obtained for the cost of reproduction by writing to Jan Lippert, M.S., Professional Services Specialist, Communication Developmental Department. Continued development of the ECSC is currently being carried out by the first and second authors. For more information, please write to: Pamela Mathy-Laikko, Meyer Children's Rehabilitation Institute, University of Nebraska Medical Center, 444 South 44th Street, Omaha, Nebraska 68154-3795.

The information presented in this document is based in part on research on the implementation of the ECSC with young children with deaf-blindness completed as part of the Early Communication Skills Center for Young Children with Deaf-Blindness project. For more information on this project and its products please contact Michael Bullis, Ph.D. at the address listed on the face sheet of this document.

## How to Use this Document

This document contains suggested modifications of the ECSC for implementation with individuals who not only have severe/profound developmental delays, but who also have dual sensory (hearing and vision) impairments. The suggested modifications described herein should be considered only as guidelines (examples) for modifying the ECSC for children with deaf-blindness. Please feel free to make additional modifications as necessary to adapt the ECSC to the individual children with whom you are implementing it.

This document is organized as follows. First, a brief description of the various components of the ECSC is presented. Next, the sections of the ECSC are reviewed and modifications for children with visual and auditory impairments are discussed.

The ECSC is designed to be implemented in two ways: 1) directly by a professional Speech/Language Clinician or Special Education Teacher or 2) by a para-professional (parent, or other caregiver) under the supervision of a professional. The preferred way is number two. This appendix assumes this implementation method.

## **Overview of the Early Communication Skills Curriculum**

### **Establishing Social Rapport: Program One**

The core of the ECSC is the Establishing Social Rapport Program. All subsequent programs are integrated within the guidelines for establishing rapport. The purpose of this program is to increase the child's awareness/responsiveness to his/her environment through interactions with the caregiver. This is accomplished by sensitizing the caregiver to any interactive and potentially interactive behaviors of the child. The caregiver is guided to note modality specific behaviors, e.g. specific responses to sounds, objects, and/or touch. In using the ECSC with children who have deaf-blindness it is suggested that the visual and auditory components of the curriculum not be omitted. It is difficult to test visual and auditory acuity in individuals with severe/profound developmental delays due to factors such as poor health and extremely low functioning levels, therefore designations of deaf-blindness may be based only on functional behavior. Continuing to examine responses to auditory and visual stimuli may serve to isolate any residual auditory/visual acuity or compensatory behaviors associated with auditory or visual stimulation.

Two assessment instruments serve to structure the caregiver in determining the child's responses to visual auditory, tactile, and social input. Following these assessments, social rapport training is implemented. In this training the caregiver learns to observe and contingently respond to child behaviors during face-to-face interactions with the child.

#### **1. Informant report**

The Informant Report is the vehicle by which the caregiver provides information about the child.

The specific nature of the questions are formulated to help sensitize the caregiver to the child's specific responses to a variety of auditory, visual, and tactile stimuli. In the case of the child with deaf-blindness, the caregiver will be able to specify any residual or compensatory behaviors in lieu of the sensory handicaps.

#### **2. Structured Observation Assessment**

This assessment instrument is a way in which both the caregiver and the examiner can watch what the child actually does in response to visual, auditory, tactile and social input, discuss behaviors observed, and agree upon a system of reliably tracking specific child behaviors.

Like the Informant Report, the Structured Observation Assessment requires caregivers to observe behaviors specific to vision, hearing, tactile and social input. The questions included in the Structured Observation Report can serve to document hearing and vision functioning

or lack thereof. They can also serve to sensitize the caregiver to specific behaviors the child is or is not exhibiting relative to the areas of hearing, vision, tacton, and general social awareness.

Collaboration with the supervisor (e.g. Speech-Language Pathologist, etc.) is another avenue by which the Structured Observation Assessment serves to reinforce caregiver sensitivity to the child's responses to his environment in all areas of sensory stimulation.

### 3. Caregiver Social Rapport Training

Behaviors specific to each child are selected based on information obtained from The Informant Report and Structured Observation Assessment. Examples of such behaviors are smile, frown, look and so forth. Behaviors are not chosen based on known/suspected sensory deficits. Instead, anything identified by both caregiver and supervisor as a specific, discrete behavior is considered for inclusion in the training phase.

After behaviors of the child are identified, the supervisor instructs the caregiver in two activities--first, counting and recording behaviors, and second, responding to the child using specific contingent behaviors such as imitation, elaboration, positive comment and touch.

The caregiver is instructed to interact with the child for 3-5 minute bouts, keeping the agreed upon (child) behaviors in mind. After an interaction bout is over, the caregiver records on a data sheet the type and frequency of the child behaviors that occurred.

In an interaction bout, the caregiver and supervisor count behaviors while the caregiver interacts with the child for 3-5 minutes. The number and type of behaviors observed by the caregiver and the supervisor are compared for purposes of reliability and training.

If there is a significant discrepancy between tallies of caregiver and supervisor, the behavior(s) in question are discussed in order to refine definitions and increase reliable observation and data gathering.

The supervisor monitors several interaction bouts between caregiver and child during a session. The caregiver is then instructed to pick a regular, daily time for social interaction with the child during which the same behaviors would be observed counted, and recorded. The supervisor meets with and observes the caregiver on a regular basis. The sessions are spent discussing the caregiver's daily interaction bouts with the child

and the data gathering as well as continued training and maintaining reliability in behavior counting. Any changes in the type and number of child behaviors are noted and discussed by caregiver and supervisor.

## Additional Program Packets of the Early Communication Skills Curriculum

The remainder of the ECSC consists of three program packets with assessment and training modules from each domain listed below:

1. **Perceptual Skills**
  - a. Localization
  - b. Follow and Find
  
2. **Motor Skills**
  - a. Grasp
  - b. Reach
  - c. Object Manipulation
  
3. **Social Skills**
  - a. Social Routines
  - b. Intentional communication
  - c. Vocal Motor Imitation

The introduction segment of each program packet outlines requirements specific to that program such as prerequisite behaviors and handicapping conditions that may impede the implementation of the program. Some suggestions for modifying the program packets for children with visual and auditory impairments have been included in the text of the ECSC. For example:

1. In the introduction to the Localization program (Perceptual Programs) it is suggested that children with visual impairment can attempt localization via the auditory or tactile modality (See page 37 of the ECSC).
  
2. In the introduction to the Follow and Find program (Perceptual Programs) it is suggested that visually impaired children can attempt to follow/find objects that make a noise or objects that are moved across the body for tactile 'following' (See page 47 of the ECSC)

## Suggested Modifications for Children with Deaf-Blindness

This section outlines directions for modifying the ECSC for children with known or suspected visual and auditory impairments. As indicated above, in many instances the ECSC already contains directions for making adaptations in these areas. In the process of using the ECSC with children as part of the Communication Skills Center project, additional modifications were made in some programs. A summary of the modifications of each program packet, Establishing Social Rapport, Perceptual, Motor and Social, is presented below.

### Establishing Social Rapport Program (Packet I)

This program was described in detail in the overview section (above). Because this program is designed to familiarize the caregiver with the child's mode of responding across the sensory domains (visual, auditory, tactile) and because it provides training for the caregiver in giving multimodal contingent input during interactions with the child, no further modifications are necessary. The reader is referred to the article in the research monograph titled: Evaluation of a Training Program to Enhance Social Interactions Between Children with Deaf-Blindness and Their Caregivers.

### Perceptual Skills Program (Packets II-III)

#### II. Localization Program Packet

Localization refers to an individual's ability to locate persons objects, and sound sources in his/her environment. The ability to localize is critical to the development of communication skills because it enables the child to demonstrate his/her attention to communication partners through head and body movements, eye contact and other orienting behaviors. For children with visual and/or auditory impairments the ECSC provides a program for teaching localization through the tactile modality (Tactile Localization Program, page 42). Since many children with visual and auditory impairments may have some residual skills in these areas, it is recommended that the additional programs in the Localization Packet be attempted. The following modifications were used with the children in the Communication Skills Center project.

#### Horizontal localization program (page 43)

- a. The goal of this program is for the child to move head, eye etc. toward a sound source or a person or object. The source of stimulation whether visual or auditory is to come from either side of the child and moves into his/her direct line of vision. It is expected that the child will move his/her eyes etc. in a horizontal direction to localize sound or object.



- b. With children suspected of deaf-blindness, a four step hierarchy based on responses to differentiated modality input was developed as a modification to the ECSC. The four steps are outlined below:
1. The first step consists of simultaneous input from tactile, visual, and auditory modalities. The caregiver comments (talks about) about a sound making object of interest and holds it up, while at the same time touching the child's shoulder, arm, head etc. on side that the object is presented.
  2. The second step omits tactile input; the caregiver simply verbalizes and shows the child an object gradually moving it into his/her line of vision.
  3. The third step consists of the same activity except the caregiver does not verbalize about the object and vision is the only input modality.
  4. The fourth step provides only auditory input.

#### Vertical Localization Program (page 45)

A hierarchy similar to the one suggested above can be implemented for Vertical as well as for Horizontal localization

- a. First, the caregiver should place her head above the child's head and call his/her name, touch his forehead or the top of his head. Slowly the caregiver moves his/her head into the child's line of sight while calling his/her name and touching his/her head.
- b. Next, the caregiver should do the same task without touching the child.
- c. Third, the caregiver should do the same task without touching or calling the child's name. If the child can localize at this level, he/she is able to continue with the Vertical Localization Program as written.

#### III. Follow-Find Program Packet

The Follow-Find Program addresses skills related to finding or following objects and persons. It progresses from the skill of following (tracking) moving objects to anticipation of object's or person's future location to following a communicative partner's line of regard. The first training program in this packet, Visual-Tactile Follow and Find, addresses children with sensory impairments. The following modifications expand on those already in the ECSC for this program and provide suggestions modifying the other programs in this packet.

### Visual-Tactile Follow and Find (page 55)

1. The visual tracking task of the Visual Tactile Follow and Find Program can be approached with the same hierarchy of caregiver behaviors as outlined for the localization programs.
  - a. First, the caregiver places herself in front of the child and touches the child. The caregiver also speaks to the child, calling his name and/or commenting on the ongoing action.
  - b. While continuing to speak, the caregiver moves to one side while moving the touch to the same side.
  - c. If the child tracks the movement the caregiver attempts the task again without the touch and continues with the Visual Tracking Training Program as written.
  - d. If the child does not track movement, the caregiver continues the task implementing suggestions listed in the Visual Tracking Training Program.

### Anticipatory Visual Search (page 57)

- a. A barrier is placed in front of the child. The caregiver positions herself in the child's visual field. Before placing herself behind the barrier, the caregiver should call the child's name and touch the child in order to get the child to localize to the caregiver. Then the caregiver slips behind the barrier coming out on the other side. The caregiver touches the child and calls his/her name from the new side of the barrier.
- b. If the child anticipates the caregiver emerging on the other side of the barrier the Anticipatory Search Program can be continued as written. If not, the caregiver should follow the suggestions outlined in the Program but continue to provide include touch cues as a part of the tasks.

## Line of Regard (page 59)

- a. When interacting with the child the caregiver should interrupt the interaction and shift attention to something else. It is expected the child will follow the caregiver's shift in attention and attend to the new object of interest. Individuals with deaf-blindness may need to have the caregiver touch them in a way that directs their attention to the new object such as touching the child with the new object to signal the shift in attention.
- b. If the child can follow the caregiver's line of regard the ECSC can be continued as written fading the tactile cues.
- c. If the child cannot follow the caregiver's line of regard the suggestions in the ECSC Line of Regard Program should be implemented.

## Motor Skills Programs (Packets IV-VI)

### IV. Grasp Program

Grasping objects is one way a child learns about and begins to exert control over his/her environment. Grasping is necessary for other motor behaviors that are used in early communicative interactions (e.g. showing, giving, taking objects). No modifications to this program are necessary children with sensory impairments.

### V. Reach Program

The reach program focuses on developing the child's skills of reaching for and moving objects (e.g., pushing away, bringing near). This program begins with training basic eye-hand coordination (i.e. batting objects) and reaching skills and progresses to training the use of one object as a tool to obtain another object.

Suggested modifications of this program for children with sensory impairments are detailed below.

Self initiated reach program (page 81)

A hierarchy of self initiated reach was developed as a modification of the curriculum for those children suspected of deaf-blindness. The hierarchy is outlined below:

1. First, the caregiver should note any indication that the child demonstrated interest in a visually presented object.
2. Second, the child is encouraged to deliberately direct hand/arm toward an object.
3. Third, physical contact is encouraged with the object.
4. Fourth, grasp of the object was encouraged.

#### VI. Object Manipulation

Object Manipulation is the means by which a child can acquire as well as demonstrate his/her knowledge about objects in his/her world. This program progresses from training simple actions on objects (e.g., moult, shake, wave) to training functional use of objects (cup-drink, comb-comb hair) and finally to rudimentary representational play with objects.

When implementing these programs with children with visual and auditory impairments remember that these children have fewer ways of exploring and learning about objects in the world. Given this, they may persist in what appears to be more primitive object schemes (e.g. mouthing) even when they are capable of more complex schemes (functional use, play).

#### Social Skills Programs (Packets VII-IX)

This section of the ECSC contains assessment and training programs on Social Routine, Intentional Communication and Vocal Motor Imitation. Some modifications specific to children with sensory impairments are contained in each packet. The primary considerations when modifying these programs for children with deaf-blindness is to provide multimodal input when interacting with the child. It is particularly important to provide consistent touch-cues as part of interacting with the child around daily routines. When implementing the intentional communication packet make sure to provide the child with alternative/augmentative forms of communication with appropriate (see the chapter on Augmentative Communication in the Literature Review and the Augmentative Communication Manual).