

Calendar Systems: A Developmental Approach For Young Children With Sensory Impairments

Increasing Meaningful Connections with People, Environment and Experience

Expanding Calendar Systems

The child increasingly:

- uses a calendar box system as a daily schedule, gradually increasing the number of boxes. Child should be able to touch entire series of boxes with outstretched arms.
- · uses it to preview and review the dav.
- participates in deciding the order of activities and helps to place objects in the appropriate box according to time and sequence.
- recognizes changes in routine.
- uses a calendar box as a mutually understood topic to talk about things that happened in the past and that will happen in the future.
- demonstrates an understanding of the location of activities through his/her home and school.

Calendar systems can be adapted into journals, memory books, wall posters, wallets or vertical strips of objects and pictures. The communication cue which begins as a concrete object, can progress to more abstract forms of communication: natural gestures, parts of objects, drawings, 3-D models, written, spoken or finger-spelled words.

"The quality of life is not determined by having three signs or more; it's determined by the quality of connection a child has to people, environment and meaningful experience." Jan van Dijk

For More Information

If you are a Wisconsin parent or professional who would like more information on designing an appropriate calendar system to increase meaningful connections, contact:

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Phone the National Information Clearing House on Children Who Are Deaf-Blind (D-B LINK) at (800) 438-9376 for written information about the van Dijk curricular approach or check their website: http://www.tr.wou.edu/dblink

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Target Behavior #1

Your child bonds to you. Bonding is the most essential condition to build upon. Having bonded with you, your child will begin to develop interest in people (you and significant caregivers) and objects (breast, bottle) as an extension of themselves. S/he begins to associate you with feeding, nurturing and basic care.

How you handle your child and the movements you share such as cuddling, rocking, swinging, and carrying (co-active movement) will communicate to your child on a non-verbal level. You and your baby will develop a "recognition" of each other through touch, movement, smell, vision and hearing.

Strategies to help your child bond with and recognize you:

- If your child doesn't show recognition or expression in his/her face and eyes, watch your child's hands. Studies show that many blind and deafblind children register and express emotions through hand movements. (Fraiberg).
- For children with low vision, try to enhance the physical features of your face by: wearing bright lipstick, using eyeliner, eye shadow or darkening your eyebrows. Dads can grow a mustache.
- Use personal identifiers that are tactile, especially for children with no
 vision, and that are colorful for children with low vision, such as: bracelets
 of specific textures; a colorful bandana around your neck, a hat, glasses,
 tinkle-bell necklace, a shiny bow-tie, or a colorful ring. Call your child's
 attention to objects so s/he knows who is approaching and interacting.



Brenna's Mom is helping her link touch and sound together to make her voice more meaningful. This is known as the voice-face event and facilitates recognition and bonding using non-visual strategies. (Cutter)

• Infant massage, when given in a consistent, *predictable* routine is a *wonderful* strategy. It gives all the benefits typically identified with massage such as increased respiration, circulation, and relaxation. It also promotes bonding. For sensory impaired children it promotes body awareness, body mapping, and teaches a child the world is a safe and nurturing place to be. Only "safe" worlds will encourage movement and exploration. Use the same essential oil made for each massage given so your child learns to link the smell of the oil with the massage itself.

Target Behavior #2



Brenna tactilely recognizes her bottle only in the context of being fed. Eventually, she will anticipate feeding when she sees it before the activity begins.

Your child recognizes objects used within the context of a daily routine or activity. At first, children only recognize an object when they are interacting with it. Calling attention through vision, hearing, touching, smelling and tasting to objects used consistently during daily routines will help your child make meaningful connections.

Strategies to help your child anticipate routines and recognize objects within a routine:

- During this stage, use consistent objects in daily activity routines such as: same kind of bottle for feeding, same soap-smell for bathing, same bassinet or crib for sleeping, same (smell-texture) blanket for swaddling.
- Use predictable verbal and touch cues before moving your child from one position to another. This will help him/her *predict or anticipate* what is about to happen. Example: after gently indicating your presence by making eye contact or using a personal identifier, touch your child on both shoulders (touch cue) while saying, "I'm going to pick you up. Here we go, 1..2..3!" Wait a second or two (wait time) then slide your hands into position for lifting.



Target Behavior #3

Your child perceives an object and then *anticipates* the activity that will take place in a specific location. During this stage, your child is likely to begin using vision, hearing or tactile cues to reach for an object that is in contact with his/her body. When s/he has learned to reach on-body, s/he will begin to reach off-body for objects. The objects and people previously recognized only in the context of the activity will now begin to be recognized right before or after using them. Children will also begin to associate a location in the house as a place where something specific happens. The child learns that object cues represent activities that have a beginning and that have an end and take place is a specific location. This is a foundation of "orientation."

Photo: Ambrosia is learning to use object cues as a symbol for an activity. Mom uses hand-under-hand to encourage her reach.

Strategies to help your child link an object to a specific location and activity:

- Use hand-under-hand rather than hand-over-hand to encourage or invite your baby to look at objects. Research shows that some children will develop a sensitivity or "tactile defensiveness" because their hands were overly manipulated by others.
- A child begins to perceive and recognize objects that are already a part of familiar routines. Previous experience with an object as part of an activity is the prerequisite for using that object to represent that activity. As "object cues", a diaper represents "time to change your diaper"; a bottle represents "time to eat" and a bar of soap represents "time for a bath". At first the object cue is presented very close to the beginning of the activity. So, the diaper is offered while standing next to the changing table. There are only a few seconds between perceiving the object cue and the beginning of the activity. At the end of the activity, use voice and/or hand signals to indicate "all done".
- Use consistent locations for daily activities.

As adults, we rely on our calendars to keep us organized, remind us what activities or events have passed and which are yet to happen. A shared calendar helps a family communicate to one another about where everyone is, what they are doing, what they need to prepare for (preview) and what has already happened. In short, calendar systems are used to give order and representation to activities, places and people with whom we interact. They function as a road map of things to come and a diary of past events for our every day lives.

Children who are blind and have additional disabilities and children who are deafblind often struggle with understanding the organization of their lives. They often cannot *anticipate* when changes are going to occur and have no way to communicate about it. Living moment to moment without a preview system can be very stressful. Calendar systems can help. They are designed to communicate activities and events to a child in a systematic way. There are many names for these systems depending on how they are constructed and what they are meant to communicate. "Calendar Box", "Anticipation Calendar", and "Sequence Box" are examples.

This brochure is intended help you build a communication-calendar system with your child about the activities that make up his/her world. It is broken down into target behaviors and ideas for helping your child develop them. The behaviors are sequential in development, building on one another from one stage to the next. Calendar systems can begin simple and progress to more complexity based on the needs of the child. It all begins with the parent-child relationship as the foundation.

The information in this brochure about calendar systems is inspired by several resources. Foremost, is the work of Dr. Jan van Dijk, the Grandfather of calendar systems. Together with his colleagues from the Netherlands, he developed a curriculum using calendar systems to help deafblind children develop social relationships, interaction and communication skills and the ability to anticipate certain events. His work is world renown.

Barbara Miles, in her book <u>Remarkable Conversations</u>, which she co-authored, describes the development of language and social interaction using real vignettes of children with whom she has worked. The reader is able to experience through the child's sensory systems when reading the vignettes and learns what it is to *respect* the whole child. Teaching strategies that facilitate specific development are clearly described.

Joe Cutter's book, <u>Independent Movement and Travel in Blind Children</u>, underscores the significance of non-visual skills related to the early development of movement in infants.

"Early interactions, most notably between mother and infant, provide the foundation for language. From the perspective of an infant, the arms of the parents form his world." B. Miles

Target Behavior #4

Using object cues to recognize activities and events that take place in a specific location, the child will use a simple calendar box to sequence one-two events in a left to right order. This is the stage in which your child will start moving through space on his/her own steam. S/he may be rolling, crawling or walking. Non-ambulatory children may be carried or pushed in a stroller or wheelchair system. A calendar box can be put within arm's reach. Some children may be using a powered wheelchair with switches. By whatever means your child is moving through space, it is now time to use his/her own movement capabilities to organize his/her space-world. The next step is to increase the time and distance between the object cue and the activity.

Strategies to help your child learn to use a simple calendar box system:

• One, two and eventually, three boxes (shoe boxes or plastic boxes) are used to house an established object that is the cue for an activity. When the activity is about to take place, help the child to look in the first box for the object cue. Talk to your child about what s/he is looking at and what it means. Help the child to carry the object cue to the location and complete the activity. For example, place a spoon in the calendar box. When your child takes it out, you might say, "I see it is time to eat! Let's take it to the highchair" (consistent location). If carrying or pushing the child, "Here we go, 1..2..3..." If child is moving on his/her own, or walking with you hand in hand, you can say, "let's go" or "ready to go".



Example of simple calendar box system with two object cues representing feeding and book time and a separate, "finished" box.

- After the activity, the child brings the object cue back to the location of the calendar box and puts it in a separate "finished" box. You can make this box look different from the activity boxes. Have a conversation about the activity that just happened and indicate that you are now, "all done" or "finished".
- Then ask your child, "What's next?" and help him/her reach into the next box.
- The way in which the calendar box is physically approached and perceived should be consistent. It is a routine within a routine. Teach the routine while using the calendar box in a meaningful way.
- Understanding the layout of boxes from left to right reinforces the way we approach reading print and Braille. It also helps the child begin to understand the spatial relationships between objects.