
ABSENCE OF VISUALLY GUIDED REACH

- **Does your child reach out and touch an object he is looking at?**
- **Does your child look away before batting at an object dangling above her?**

As children grow, visual batting and reaching behaviors typically result in the development of eye-hand coordination (McCarty et al., 2001). Many children with CVI have been observed to have an absence of a visually-guided reach, regardless of typical motor development. Frequently **they are not able to look and reach for an object at the same time**, caused by a lack of coordination between the brain's dorsal and ventral streams. With practice, families can help a child be able to both look and touch an object at the same time, greatly enhancing their play and sensory experiences, while also increasing their understanding of their world! Some children **are not able to reach toward an object at all**, and some may look, look away, reach and touch the object, and then maybe even look back at it to see it again. Children may be observed during repeated opportunities to find the object visually, turn her head or eyes away, and then reach out and touch it. If possible, refrain from talking to her during this exploration. **The look, look away, look again pattern** may take place several times before she physically reaches out for the object.

*Toby is a 4-months-old and his nanny, Brianne, reports that when he is lying on the floor with toys dangling from a toy bar above him, he does not actively reach up to touch the toys he is looking at. He will occasionally accidentally bat at and touch a toy and is often startled by having found it, but that he does not look to see what he has found. After gathering information about their home and daily routines, the early intervention teacher of the visually impaired and Brianne **come up with some ideas that might help him be able to use his vision and his hands together**. Toby has a favorite toy...a plush zebra with black and white stripes and wearing a red shirt. Although Toby doesn't always look at everything presented to him, **he will always look at his zebra toy**. As the zebra toy is motivating for Toby, Brianne decides to try removing all of his dangling toys and only hanging the zebra above him from his toy bar. Another strategy is to place a black towel over a bookshelf on Toby's right and over a toy bin on his left. With less visual clutter around him, it will be easier for him to only focus on looking at the zebra dangling a few inches above his chest. The TSVI-EI and Brianne also discuss being very quiet while giving Toby lots of time to look at his zebra toy, and at least 15 minutes in this environment every day would give him many opportunities to be motivated to reach toward it.*

When you want to work on this CVI characteristic, finding objects that are highly motivating to is key! Do they have a favorite color or toy? Do they love looking at toys that are lit up? The easier it is for your child to see an object, the more motivating it will be for them to reach out toward it. At first, they may **accidentally make the toy move**, but with practice they will realize that their movements are causing the toy to move and will be able to move it intentionally.

IDEA FOR ROUTINES:

Play/Floor Time:

- ___ Provide opportunities to bat at visual /tactual objects
- ___ Use a toy bar to dangle toys above the child using ribbon or plastic links
- ___ Have your child spend time in a *supervised Little Room* equipped with highly-motivating toys
- ___ Tie a solid-colored mylar balloon to your child's wrist. As she moves her arm, she will see the balloon move.
- ___ Allow your child to play with motivating toys in front of an unbreakable mirror

Dressing/Diapering:

- ___ Show clothing items or diapers individually to the child. Sometimes familiar items become motivating objects for infants to reach toward.
- ___ Place a low-hanging mobile above the changing table.
- ___ Add wall stickers or shapes in the child's favorite color to look at on the wall next to the changing area, and model touching them.

Meal Time:

- ___ Provide repeated opportunities to use the same type/color of bottle or sippy cup.
- ___ For child who may be eating independently, support finger feeling opportunities.
- ___ Ask your child to visually search for items before asking him to touch it.

Lap Time:

- ___ Provide your child with a variety of picture books, books with textures, auditory feedback, peek-a-boo flaps, etc. Use hand-under-hand techniques to guide the child's hand to help touch
- ___ Hold your child facing you, a few inches from your face. When reaching out, name the part clearly and slowly that is touched (mouth, nose, eyes, etc.).

Time Outdoors:

- ___ Introduce elements of nature to the child as you spend time outdoors.
- ___ Give your child plenty of wait time to explore the items with vision and touch.

Bed Time:

- ___ During bathtime give the child the opportunity to look at and then touch bath toys, wash cloths, the shampoo bottle, etc.
- ___ Sing songs with actions to encourage open hand touch.
- ___ Work backwards: have your child hold and object or toy that they are looking at and help to release their grasp. Ask if they can still look at the object without touching it and then work up to touch again.

McCarty, M. E., Clifton, R. K., Ashmead, D. H., Lee, P. & Goubet, N. (2001). How infants use vision for grasping objects. *Child Development*, 72, 973-984. www.doi.org/10.1111/1467-8624.00329