

BIG, BOLD, BRIGHT-LIGHT

- Does your child stare at overhead lights?
- Is your child more attracted to objects that are illuminated (e.g., toys, mirrors, windows)?
- If it is too bright, does your child close or rub their eyes?

Light is necessary for people to see (Brown, 1990). Think about lights that attract our attention: traffic lights, fire truck lights, the kitchen stove indicator when the stove is warm, stars in the night sky... As it turns out, light is used to give us clues about our environment because it captivates our visual attention. When children have a visual impairment, lights can be used to help develop visual skills because it is easy to see light. Sometimes too much light is problematic due to the reflection of light creating glare or light sensitivity. An example is restaurant menus that are made more durable with plastic sheet covers: when overhead lighting is directly above the table and menu, the light-producing glare makes it difficult to read the menu. It is always important to consider the light in the surrounding environment to help facilitate a child's learning when they have a visual impairment.

Lola is an 18-month-old girl with visual diagnoses of optic atrophy. Her mother, Elaine, reports that Lola always likes to look at lights when they are at home. At the grocery store, Lola enjoys looking at ceiling lights. Elaine says it is difficult to get Lola to look at toys or books because she prefers to stare through the windows in the house. After gathering information about their home and daily routines, the early intervention teacher of the visually impaired and Elaine identify ideas which will help Lola look at objects. Together, they agree that light is too distracting for Lola. Elaine will start using dim floor lamps in the corner of the living room, making sure Lola is facing away from the lamp and windows, and having the window curtains pulled closed. Since light is so motivating for Lola to look at, Elaine and the teacher discuss the need to shine light on objects they want her to look at by using Elaine's phone flashlight from behind Lola's head. They also discuss shining a light on Lola's high chair tray before the start of each meal time. Elaine is hoping to help direct Lola's visual attention to objects she uses and sees each day.

Big, Bold, and Bright Light Strategies in Daily Routines

If light is not present, it is difficult for anyone to see. For children, toys or surroundings with illuminated or reflective surfaces can **activate the visual system and attract visual attention** in daily routines. Some general strategies to draw a child's visual interest include:

- When working on visual attention, move from light sources, to indirect light illumination, to reflective toys and environments.
- Notice the color and types of light sources that your child attends.
- If these sources are quiet, it will help the child to rely on visual attention, not the sounds.

Brown, A. M. (1990). Development of visual sensitivity to light and color-vision in human infants – A critical review. *Vision Research*, 30(8), 1159–1188. https://doi.org/10.1016/0042-6989(90)90173-I

^{**}Flashing lights should not be used with children who are at risk of seizures (photogenic epilepsy)

<u>Play/Floor Time</u>
Turn off overhead lights
Cover windows with shades, curtains, or blinds
Utilize a directed lamp that can focus on specific toys
Encourage tummy-time so children are not on their backs directly under bright ceiling lights
Create a tent-like structure to block out light and visual clutter (drape a dark sheet,
build a fort with a blanket, or save big boxes)
Use hand-held flashlight (flashlight or cellphone) to illuminate another object behind child to
shine on visual target
Utilize objects that reflect light (mylar materials, unbreakable mirrors)
<u>Dressing/Diapering</u>
Turn off overhead lights
Turn on indirect lamp that is near the diapering station (soft bulb)
Use table lamp with flexible neck to turn the light toward caregiver's face
Caregiver wears glow in the dark or sparkling scarf, shirt, or apron
Have the child choose from glow in the dark or sparkly clothes
<u>Meal Time</u>
Position child so they are facing away from windows and/or lamps
Utilize a floor lamp that is positioned behind child's eating space, spotlighting tray
Present materials on backlit surfaces (tablet or lightbox)
Use flashlight to look at bottle, cup, or g-tube pouch
Use glow in the dark cups, bowls or utensils
Illuminate McDonald's McFlurry spoon with penlight in the end
Finger lights taped to spoon
<u>Lap Time</u>
Use hand-held flashlight (flashlight on cellphone) to illuminate books or toys
Utilize objects that reflect light (mylar materials)
Illuminate caregiver's face so child can easily focus on it
Tape object to a slanted board to reduce overhead glare (cookbook stand or clipboard)
Sit in front of a mirror securely fastened to the wall.
<u>Time Outdoors</u>
Encourage child to wear wide-brimmed hats to reduce glare from overhead lights
Encourage child to wear glasses with tinted lenses
Position child so they are not on their backs directly under bright sunlight
Visit outdoor light displays (e.g. zoo lights, fireworks, holiday displays)
Supervise play with glow sticks or glitter bottles
Bed Time
Use lava lamp or an aquarium in child's room
Flashlight and shadow play before bed
Use glow in the dark wall stickers
Nursery light projectors