Assessments of infants and toddlers with visual impairments should include information about how children appear to learn, not just what they are able to do. In order for assessments to lead to developmentally appropriate and family-centered intervention, families and interventionists must understand how children learn most effectively. Interventionists can learn about children’s learning styles from observations and interviews.

Observe Children
- in familiar and unfamiliar activities,
- with familiar and unfamiliar toys and objects,
- in activities they have mastered,
- in challenging or new activities
- in individual and group activities,
- in indoor and outdoor activities,
- during adult-facilitated engagement,
- during independent engagement,
- in movement activities,
- in seated activities,
- in stimulating environments, and
- in quiet, nondistracting environments.

Consider the Following Factors and the Impact That Each May Have On Specific Aspects of Children’s Learning Styles:
- health concerns (e.g., ongoing medical conditions, surgery, illness),
- medications (e.g., type of medication, timing of medications),
- seizures,
- sleeping schedule,
- nutritional issues (e.g., adequacy of food and liquid intake, gastrointestinal [g]-tube), an
- physical comfort (e.g., teething, constipation, gas).

Interventionists should talk to families, caregivers, and other professionals about children’s learning styles at home and in a variety of settings (e.g., childcare, homes of relatives and friends, community locations). Families are often able to provide unique information about their children. Learning style can be identified by observing children’s interests, motivation, and preferences; dislikes; processing time; self-regulation; exploratory strategies; attention to activities; learning environments; response to routines, transitions, and response to learning
opportunities; generalization of skills; positioning and movement; and behaviors. The following
questions may be used to guide learning-style assessments.

**Interests, Motivation, and Preferences**

- What interests or motivates the child? What does the child like? For example, favorite
  people, activities, music, objects, and sensory characteristics of objects/activities
- What types of reinforcements are most effective for the child? For example, social
  praise, food, preferred toy, music, touch, and movement
- What are the child’s favorite activities? For example, snuggling on parent’s lap with a
  book, singing a song, playing frolic games, and playing with musical toys
- What are the child’s favorite objects?
- What is the best way to present an object to the child? For example, touch a body part
  with an object, provide a sound cue, or present an object in the child’s left visual
  quadrant
- How does the child respond to music, finger plays, and/or poems with a strong
  rhythm/beat? For example, the child tolerates tactile activities when they are paired
  with a song or poem with a beat
- Does the child have favorite songs? If so, what are they?
- What are the child’s favorite foods?
- What makes the child happy? For example, interactive play with grandfather, playing
  with shiny Mardi Gras beads with sister, and quiet time on Mom’s lap
- How does the child show that he or she enjoys an activity, interaction, movement, song,
  or object? For example, kicks feet, vocalizes, smiles or laughs, makes contented cooing
  sounds, listens or stills to show alertness, or keeps hands in close contact with toy
- Are there particular people with whom the child is most comfortable?

**Dislikes**

- What, if any, are the child’s least favorite activities?
- What activities, if any, does the child avoid?
- What objects, if any, does the child refuse to touch?
- What foods, textures, or temperatures, if any, does the child particularly dislike?
- What objects, activities, people, sounds, etc., if any, does the child fear?

**Processing Time**

- Describe the child’s processing time in various situations. Count in seconds the elapsed
  time from adult input/cue to the child response. How much time does the child need in
  order to respond
  - in familiar situations/activities?
  - in unfamiliar situations/activities?
  - given a verbal cue only?
  - given a visual sign and verbal cue?
  - given a tactile sign or physical prompt with a verbal cue?
- Is the child provided enough time to process and respond to the information?
Self-Regulation
- What strategies does the child use to calm him- or herself? For example, brings hand to mouth, pushes feet against side of crib or other firm surface, or closes eyes to reduce environmental stimulation
- How does the caregiver calm the child or support the child’s attempts to self-calm? For example, swaddling baby in a blanket, assisting child in bringing her hands to mouth, providing slow rhythmical rocking, applying firm pressure on shoulders, reducing noise in the room, and limiting handling and movement of the child
- What communication strategies, sensory strategies, or behavioral support strategies are effective in supporting the child’s attempts to self-regulate? Are there any interventions that have been implemented that did not work?
- What signals and cues does the child give to indicate
  - “I need a break or a change from this activity,”
  - “I can calm myself,” or
  - “I need help to calm myself”?
- Does the child become upset or get overly stimulated easily?
  - How do you know when the child is overly stimulated? For example, the child becomes irritable, falls asleep, closes eyes, or avoids visual input.
  - In what environments or contexts does the child become overstimulated? For example, in new places, during large family gatherings, at the mall, or in noisy places
  - When the child does become upset, can he or she be calmed easily?

Exploratory Strategies
- Describe how the child explores or recognizes familiar objects, places, and people.
- Describe how the child explores new objects, places, toys, and materials.
- What types of objects does the child examine? Consider
  - tactile qualities (e.g., texture, weight, vibration),
  - size and shape (e.g., a toy small enough to fit easily in a child’s hand, a shape that is easy to grasp),
  - visual characteristics (e.g., reflective, shiny, brightly colored), and
  - auditory qualities (e.g., musical, toy that makes a continuous sound, low-pitched sound).
- How is the child most effectively encouraged to explore?
  - Does the child initiate exploration independently?
  - How much and what type of adult assistance does the child need (e.g., providing adequate pause time, providing prompts to encourage the child to explore)?
- How does the child use various senses to explore (e.g., vision, touch, hearing, movement, mouthing)?
- Describe the child’s sense of curiosity. For example, when a sound is presented somewhere in the room, how does the child respond? If something is presented in a box, how does the child approach it?
• Does the child use particular compensatory strategies when exploring? For example, does the child look away when exploring with his or her hands; does the child put a hand up to look through the fingers when seeing something new?
• Describe how the child interacts with new people.

Attention to Activities
• How is the child’s attention best gained (e.g., through eye contact, signing/gestures, sound, spoken word, tactile cue, visual cue, a combination)?
• How is the child’s interest in an activity or interaction best maintained?
• If the child loses interest during an activity, how can attention be regained? How can the child be reengaged in the activity?
• Describe the child’s attention to activities based on
  o type of activity,
  o familiarity of the activity,
  o time of day,
  o environmental conditions (e.g., noise level, lighting),
  o sensory characteristics of the activity,
  o motor components (e.g., movement or stationary activity),
  o adult or peer involvement,
  o seizure activity, and
  o medication (e.g., timing, dosage, type). (Note: Children may be drowsy and less likely to be attentive for the first hour after some medications are administered).

Learning Environment
• Describe environments that facilitate the child’s active engagement in activities and interactions with people. For example, a quiet environment, controlled lighting, clearly organized space with a minimum of clutter
• Does the child become overly stimulated in particular environments? If so, what sensory aspects does the child find overly stimulating (e.g., visual, auditory, tactile, movement)?
• Is the child is easily distracted in particular environments? If so, what distracts the child (e.g., visual, auditory, tactile, movement)?
• Which aspects of the physical environment especially appeals to the child?

Response to Routines
• Does the child have consistent routines for daily activities such as eating, bathing, dressing, sleeping, and play?
• Does the child anticipate consistent daily routines?
• How does the child demonstrate anticipation of daily routines?
• How does the child respond to changes in routines? For example, a child may be comfortable with changes in her routine; she is used to eating while seated in her highchair at home but is also comfortable eating sitting on an adult’s lap at the home of a relative. Another child may become upset when her routine is disrupted. She is used to a bedtime routine of reading a story with her parents before falling asleep in her crib.
Although her parents keep the routine of reading a bedtime story when they visit grandparents’ house for the weekend, the child will not fall asleep in her port-a-crib, recognizing it is different from her crib at home. When the family returns home, it takes a full week for the child to get back to falling asleep on her own in her crib after just one night’s disruption in her bedtime routine.

**Transitions**
- Are transitions difficult for the child?
  - If so, describe the ways in which transitions are difficult.
- What strategies help the child transition smoothly from one activity to the next? For example, having a predictable sequence of daily activities, a verbal warning before a change in activity, a “finished box” in which to put materials from a completed activity, or a “transition song”

**Response To Learning Opportunities**
- How does the child respond to physical demonstrations, such as hand-under-hand demonstration?
- How does the child respond to touch cues?
- How does the child respond to visual cues or to visual demonstration and modeling?
- How does the child respond to pointing cues?
- How does the child respond to verbal directions?
- How does the child respond to gestural cues or sign directions?
- How does the child respond to object cues?
- How does the child respond to picture cues?
- How can adults most effectively communicate with the child?
- How does the child respond to emergent literacy experiences? For example, does the child have opportunities to share storybooks? How does the child respond? How does the child respond to pictures or tactile illustrations? How does the child respond to shared storybook reading?

**Generalization of Skills**
- Is the child able to generalize skills to new situations or to new objects? For example, if the child enjoys playing with a favorite drum at home, is he or she able to generalize when playing with a new drum at a neighbor’s house? Can he or she generalize the skill to play a xylophone with a stick or mallet?
- If possible, observe the child doing a familiar activity in a new place. This observation can provide information about generalization of skills, problem-solving strategies, and how the child approaches and learns in a new environment. For example, if the child has learned to wash his or her hands at the bathroom sink at home, how does he or she approach washing hands at a sink in the childcare center or in the bathroom at the local library?
Positioning/Movement

- What positions are most effective for specific activities for the child? For example, seated in adapted chair with tray and support under elbows to facilitate reaching for and manipulating toys on the tray, supported sitting in parent’s arms while listening to story and looking at clear pictures and feeling textures on the pages, supine with towel or pillow support under shoulders while reaching for objects hung from a floor mobile, or side-lying on right side to facilitate use of both hands.
- Are there any positions that should be avoided?
- Does the child learn effectively during movement activities? For example, the child learns movements of interactive movement games or finger plays; or the child most frequently and clearly communicates when involved in swinging or bouncing activities.
- Does the child learn effectively during stationary activities? For example, the child attends longer to an activity when seated in a chair with a tray.
- Does the child benefit from clearly defined play spaces? If so, describe. For example, play corner, toys attached to tray/easel/play space, chair and tray/table, or floor play area defined with blanket.
- Are there any positions or movement activities that the child avoids?

Challenging Behaviors

- Does the child have behaviors that interfere with interactions with people, exploration of objects, or participation in daily activities and routines?
  - Describe the behaviors.
  - How often does the behavior occur?
  - How long does the behavior last? (What is the duration?)
  - When does the behavior occur most frequently?
  - When is the behavior unlikely to occur?
  - What purpose does the behavior seem to serve for the child?
  - How do people respond to the behavior?
  - Are there any potential medical issues related to the behavior?

In Summary

- How does the child most effectively learn?
- How can adults best support and facilitate the child’s learning?
• What environmental conditions best support and facilitate the child’s learning?

This handout is from the Assessment of Infants and Toddlers with Visual Impairments Module. Session 3: Areas of Assessment.

Web link: http://www.fpg.unc.edu/~edin/index.htm