

Functional Vision Assessment (FVA) for a Child Aged Birth to 3 years old

- The Functional Vision Assessment (FVA) is intended to determine how a child uses their vision through:
 - Interviews with parents and caretakers
 - Observations in daily routines and in various settings, both familiar and unfamiliar
 - The use of both formal and informal assessment strategies
 - Complete review of medical and ophthalmologic records, including visual diagnosis and medications which can affect vision
- The **overall goal** of the FVA for a child under the age of 3 is to provide information to the parents/caregivers of the child's specific visual condition and on how the child uses their vision. Often a vision condition is diagnosed by a doctor, yet explained and understood through the TVI.
- Another goal of the FVA is to begin consultation with other service providers to assist in the child/family's services to be truly multi-disciplinary so everyone on the Early Intervention team understands the child's visual impairment and how it may impact all areas of development.
- The assessment procedure should follow the philosophy of family-centered practices including routine-based interview and within the child's natural environment, including use of familiar toys and objects.
- The FVA report will describe medical background and diagnosis along with the findings of the assessment.
- The first FVA serves as a baseline for visual development, use of other sensory modalities baseline, and the basis for all other FVA as the child grows.
- The FVA assesses visual functioning in the following categories:
 - Ocular functions
 - Visual skills
 - Visual acuity
- It may also include:
 - The CVI Range to assess individual CVI characteristics
 - Individual Sensory Learning Profiles to assess the use of sensory modalities (Learning Media Assessment)
 - Visual Developmental Sequence to determine a baseline for visual development, as appropriate per individual child.
 - Other assessment tools can be used as needed such as Vision Section of The Oregon Project and others.

Timeline:

- The FVA should be completed within the **first 30 days** a child is receiving specific vision services.
- Updates should be completed for each IFSP 6 month review.
- A second full evaluation should also be completed at transition, which focuses on the preschool educational environment, if more than 1 year after the initial.
- If desired, use "Basic B-3 FVA Report Template" as a guide for the final report and create an evaluation guide based on your own evaluation style for use during the evaluation process with the family. Report template is available in word format to individualize per child and family.

Important Components:

**This is not an exhaustive list, only a guide, and actual components of evaluation/report should be individualized per child and family.*

1. Parent and/or Caregiver Interview

- Type of visual impairment
- Onset of visual impairment
- Any additional disabilities
- Medical/medication information
- Visual skills observed and needed for daily routine(s)
- ECC area needs/strengths including pre-literacy, use of all sensory modalities, and daily living skills according to parent observations
- Questions parents have they would like answered and other concerns regarding use of vision

2. Teacher and/or Service Provider Interview (s) (if appropriate)

- ECC area strengths/needs including pre-literacy, use of all sensory modalities, and daily living skills according to teacher/service provider observations.
- Visual behaviors in natural environment and/or classroom.
- Other developmental area strength/needs.

3. Review of Records

- Comprehensive review of records addresses:
 - Eye health reports
 - Clinical low vision evaluation (if available)
 - Other medical information (Neurology, endocrinology, NICU release, etc.)
- Summarize this information to assist family and service provide in understanding and interpret how it may impact overall development specific to visual diagnosis.

4. Child Observations

- Routine-based observations in the natural environment.
- Final report should include a description of the setting the assessment occurred.
 - Lighting
 - Physical arrangement of natural environment(s)
 - Visual clutter
- General observations of visual behaviors during conversation with family and others present. (Ocular functions, visual skills, and visual acuity, as well individual CVI characteristic)
- Learning styles through use of observation and indication of what sensory modality used. (Part of Individual Sensory Learning Profile).

5. Ocular Functions

- **Appearance of eyes**
Note redness, discharge, malformations
- **Pupillary response**

- When flashlight is shown briefly into eyes, note pupils' response
- **Muscle imbalance**
When flashlight is shown on bridge of nose, note eye alignment
- **Atypical head movements**
Associated with vision, such as head tilt or shaking
- **Fixation**
Ability to visually attend to an object, note duration and eye alignment
- **Convergence**
When an object is brought close, note convergence and distance
- **Blink Reflexes**
To both touch and threat
- **Assess behavioral abnormalities (i.e., light gazing, eye pressing).**
- **Light sensitivity**
Ability to adjust to different lighting conditions

6. Visual Skills

- **Shift of gaze**
Ability to shift gaze from one object to another
- **Tracking**
Ability to track moving object (both fast and slow) across visual field noting characteristics of eye movements, head movements, extinguishing, and relocation.
- **Scanning**
Ability to locate desired person/object, such as person/toy in room or picture on a book.
- **Peripheral vision**
When child becomes aware of object as it moves into their visual field from behind in all quadrants.
- **Visual motor behaviors**
Over or under reach, look and reach behaviors, batting and grabbing toys, etc.
- **Depth perception**
 - Mobility observation.
 - Picks up objects and places in container.
 - Catches a ball.
 - Kicks a ball.
 - Pours from containers.
- **Color Discrimination/perception**
Ability to distinguish and match colors (as age appropriate)
- **Contrast sensitivity**
Lowest level of contrast at which able to detect detail

7. Acuity & Discrimination

Measurement of the eye's ability to distinguish object details and shape.

- Note the method of obtaining acuity measurement such as a forced preferential looking test (Teller or Lea Grating Acuity) and symbol identification (Snellen, Lighthouse, or Lea Symbols).
- Assessment of functional acuity involves observation and informal testing of:

- near (within arm's reach)
- intermediate (3 to 6 feet)
- distance (beyond 6 feet).
- If functional distant measures are assessed using familiar objects in the natural environment and address the following areas:
 - Distance.
 - Color.
 - Contrast
 - Size.

8. The CVI Range

When appropriate, the assessment should address each individual CVI characteristic with a summary or description of each according to specific behaviors of the child.

- Color
- Movement
- Latency
- Visual Fields
- Complexity
- Light Gazing/Non-Purposeful Gaze
- Distance Viewing
- Visual Reflexive Responses
- Visual Novelty
- Visual Motor

Method 1 addresses visual functioning and characteristics together.

Method 2 addresses characteristics individually.

9. Learning Media Assessment

Depending on the age of the child, differing assessment procedures should be used. However assessment of sensory channels should be conducted to address how child is assessing sensory information from the environment. This is especially important when vision is limited and child is learning through touch, sounds, and smells.

- Observations of sensory channels to determine primary and secondary modalities
- Individual Sensory Learning Profile
- Age appropriate literacy assessment (pre-literacy skills and opportunities for multi-media experiences)

10. Summary of Assessment Results

One paragraph to summarize assessment findings including use of vision and other sensory channels.

11. Recommendations

Should be in 3 sections

- 1) Follow up educational and/or medical assessments including service recommendations
 - 2) Recommended IFSP goals and areas of focus
 - 3) Environmental accommodations and intervention strategies
- Goals and Outcomes on IFSP should be family centered and be based on family/child routines.
 - Goals can be specific to visual skills or goals focused on another developmental area can have a vision component, depending on priorities and concerns on the family.
 - Measurable IFSP goals assessed have the 7 required areas:
 - Conditions
 - Time.
 - Situation.
 - Materials.
 - Behavior.
 - Criterion.
 - Family and child participation
 - Environmental accommodations or intervention strategies are data-driven (linked to assessment results and observations) as part of the Individual Family Services Plan (IFSP).
 - Strategies for intervention and environment and materials adaptations should as a part of natural routines in the family's daily life and easily embedded into routine activities.
 - Recommendations should be written in language that family and other service providers understand and can implement easily into routines of child and family.