



Assessment of students with visual impairments and multiple disabilities including deaf- blindness

TVI Consortium
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What is the purpose of the assessment?

- To qualify for special services
- To document acquisition of skills
- To evaluate progress
- To evaluate the effectiveness of educational program

Psychological Evaluation

- **Process of gathering information to help us understand who a person is**
- **Important for determining educational goals**
- **Should identify strengths as well as needs**
- **Should consider how vision and hearing losses affect learning style, social behaviors and communication skills**
- **Should document progress**
- **Should suggest interventions to support further growth**

Mar 2010

How can we assess the skills and abilities usually considered in psychological evaluations with these children?

- **Intelligence and cognition**
 - General knowledge, reasoning, visual-motor coordination, classification, problem solving, perceptual organization
 - Standardized tests – Bayley Scales of Infant Development, Kaufman Assessment Battery, Stanford-Binet Intelligence Scale, Wechsler Scales
- **Sensorimotor development**
 - Exploration and manipulation of objects in environment, response to visual tactile and auditory events, coordination of motor actions
 - Bayley-III, HELP, Insite checklist
- **Communication and Language**
 - Mode of communication, vocabulary, comprehension, social interaction
 - Children’s Communication Checklist, Rossetti Infant-Toddler Language Scale
- **Academic achievement**
 - Reading, arithmetic, spelling, concept development
 - Brigance, Basic School Skills, Woodcock-Johnson, Diagnostic Achievement Battery
- **Personality, behavioral and emotional functioning**
 - Sense of identity, motivation, feelings and attitudes
 - Children’s Apperception Test, Human Figure-Drawing , Personality Inventory for Children
- **Social and adaptive abilities**
 - Basic life skills- self-care, mobility, play, chores, interpersonal relationships
 - Vineland Adaptive Behavior Scales, developmental Profile

Assessment Approaches

- **Psychometric**- formal tests yielding quantitative scores: IQ, mental age, percentile ranking or grade level (Wechsler, Stanford-Binet)
- **Developmental**- interview/checklists focusing on interactions with objects and people, most appropriate for infants, young children. Results typical age range, stage of development (Bayley, Callier, Insite)
- **Functional** – Rating scales and checklists look at basic life skills: self-care, social interaction, work skills. May give rating score, but qualitative description and environmental factors are key
- **Behavioral** – frequency and intensity of behaviors analyzed to help design intervention plan

Mar, 2010

Are these assessments meaningful for these students?

“Traditional or formal testing of children who are deafblind or have multiple disabilities is not likely to give you much more information than confirmation that the child doesn’t perform well on standardized tests”

Rowland, Chen, Mar, Stillman

2009

“While state and local regulations may require that standardized measures be administered, they are unlikely to provide information useful in program planning or in predicting outcomes for children who are deafblind or who have multiple disabilities.”

Rowland, Chen, Mar, Stillman

2009

Though standardized testing often doesn't provide helpful or meaningful information, we can still try to answer these questions:

- What procedures best support learning for this child?
- What strategies or materials promote attention or motivation for this child?
- How are instructions best communicated to the child?
- What factors contribute to problem behaviors?
- To what degree does the student understand and take part in various work and self-care routines?
- What assistive devices would enhance classroom performance?
- Is the student able to associate meaning to any symbols/signs/words?
- What procedures can enhance social interest and interaction?

Mar, 2010

Assessing Communication and Learning in Young Children Who are Deafblind or Who Have Multiple Disabilities

- Edited by Charity Rowland - 2009
- Write up of a 5-year study funded by OSEP
- Deborah Chen, Harvey Mar, Charity Rowland, Robert Stillman, the National Family Association for the Deaf-Blind
- www.designtolearn.com/uploaded/pdf/DeafBlindAssessmentGuide.pdf

Tips from the Assessment Guide

- **Begin the process with a list of questions that reflect the critical issues expressed by family and school team**
 - These will be different for each child, but should consider those mentioned by Dr. Mar from previous slide
 - [Some examples from page 15 of the guide](#)
- **Select appropriate instruments**
 - If standardized measures are required, keep in mind that scores cannot be considered valid for predicting outcomes for these children
 - [Considerations for selecting found on page 9 of the guide](#)
- **Get family input through interview**
- **Conduct informal observations in multiple settings**
- **Conduct structured observations to see differences when supports are provided or removed**



Expressive Communication

Does he make needs and wants known?

**Is his expressive behavior intentional-
directed toward a goal?**

How frequently does he communicate?

What specific messages does he express?

**Under what circumstances is he most
communicative?**

**Does he need prompting or support to
communicate clearly/consistently?**

Hearing

**Is he able to perceive speech,
vocalizations and environmental sounds?**

**Would he benefit from hearing aids,
amplification or noise reduction devices?**

Receptive Communication

**What types of communication does she
understand?**

Who communicates effectively with her?

**Are there particular activities in which
she is most likely to respond?**

Vision

**Is she able to perceive, discriminate
between, understand visually-based
symbols for communication?**

**What accommodations are needed to
help her perceive visually-based
communication (position, illumination,
spacing, size, color)**

Social Interaction

Does she enjoy interacting with adults? When, what conditions?
Does she enjoy interacting with peers? When, what conditions?

Motor Skills

Does he have the fine motor skills needed to use gestures or manual signs or activate communication devices?

What accommodations would allow access to communication systems?

Preferences

What people, things activities does she prefer, dislike?

Where and when is she at her best?

To what extent does she tolerate direct assistance (HOH or HUH)

Temperament

Is he easily excited or passive and quiet?

Does he show sustained attention or lose interest quickly?

Does he accept or reject changes in routines, people, materials?



Considerations for Selecting An Assessment Instrument

- **Do the items describe behaviors a child with vision and hearing losses and/or motor impairments could be expected to show?**
- **Are there sufficient items at the early developmental levels to clearly identify a child's current skills and measure small steps of progress?**
- **Are there items appropriate to the child's chronological age, or only behaviors one would expect to see in infants and toddlers?**
- **Do the results provide information helpful for program planning, or are they primarily numerical scores?**
- **Are the results in a format that can be easily communicated to parents?**



Instruments Used to Assess Children who are Deafblind

- **From the Rowland, Mar, Chen, Stillwell study**
 - 12 instruments commonly used to assess children who are deafblind that are highly recommended by professionals
 - Focus on children in the age range of 2-8 years
 - Are readily available for purchase or download
 - Do not require extensive special training
 - Overview on page 42 of the guide
- **From Lilli Nielsen**
 - Functional Schemes Assessment
- **From APH**
 - Reach for the Stars

For students with symbolic skills

- Carolina Curriculum
- Hawaii Early Learning Profile
- Infused Skills
- Oregon Project
- Vineland

Carolina Curriculum

- www.brookespublishing.com/resource-center/screening-and-assessment/the-Carolina-curriculum/
- Infant Toddler and Preschool versions
- Not designed for deafblind
- 5 domains: Communication, Cognition, Social, Fine Motor, Gross Motor
- Possible modifications for children with vision, hearing, motor impairments are suggested for each section, but many items require vision/hearing
- Best suited for students at the mild end of the DD range
- Each assessment item is associated with an intervention strategy or activity

Hawaii Early Learning Profile

- www.vort.com/HELP-0-3-years-Hawaii_Early-Learning-Profile
- Evaluate 6 domains: Cognition, Language, Gross Motor, Fine Motor, Social-Emotional and Self-Help
- Each item links to intervention suggestions in the HELP curricula
- Most items require intact visual and auditory abilities
- Comprehensive at early language levels

Infused Skills Assessment

- www.tsbvi.edu/andouts/oct06/infused-skills-assessment.pdf
- Assessment areas: Social Communicative Interactions, Emotional Development, Senses/Motor Skills, Basic Concepts, Representation & Cognition
- Designed for use with children who are deafblind and children with significant cognitive impairments
- Manual is comprehensive but lengthy
- Complex scoring process

Oregon Project \$160 complete set

www.soesd.k12.or.us/Page.asp?NavID=215

- Comprehensive developmental scale developed for children with visual impairment
- Domains include: cognitive, language, compensatory, vision, self-help, social, fine motor, gross motor
- Relatively few items in preverbal and early verbal stages.
- Not easily translated into intervention goals
- Not appropriate for children with more than a moderate hearing loss
- Skills Inventory on-line: www.therashare.net/files/Oregon-checklist.pdf

Vineland Adaptive Behavior Scales

www.pearsonclinical.com/psychology/products/100000668/vineland-adaptive-behavior-scales-second-edition-vineland-ii-vineland-ii.html

- Comprehensive assessment of age-related adaptive behaviors in domains: Communication, Daily Living Skills, Socialization, Motor Skills
- Many items require relatively intact auditory and/or visual abilities and few items at earliest developmental levels
- Designed to provide information applicable to intervention planning, but no clear translation into educational planning
- Complicated to administer and score, requiring training and experience

For students with pre-symbolic skills

- Callier-Azusa (G and H)
- Communication Matrix
- Dimensions of Communication
- Home Talk
- INSITE
- School/Home Inventory of Problem Solving Skills

Callier Azusa “G”

www.callier.utdallas.edu/calliercenter/evaluation-and-treatment/azusa-scale \$20

- Comprehensive developmental scale designed to help classroom teachers plan programs and measure progress
- Designed for children who are deafblind
- Comprehensive at earlier developmental levels
- Small skill increments
- Last updated in 1978
- Tied to the work of Jan van Dijk
- Areas: Motor development, Perceptual abilities, Daily Living Skills, Language Development, Socialization

Callier-Azusa Scale “H”

www.callier.utdallas.edu/calliercenter/evaluation-and-treatment/azusa-scale \$20

- Designed to assess communication abilities of children who are deafblind
- Revised in 1985
- Assessment based on observations and prior knowledge of the child
- Highly detailed at lower developmental levels
- Emphasis on movement makes it less useful with children with severe physical-motor impairments
- Heavily tied to the van Dijk model of intervention

Communication Matrix

www.communicationmatrix.org free on-line
version

- Assesses expressive communication
- For persons functioning at the earliest stages of development – communicative messages typically developing 0-2 years
- Uses direct observation and interview with parents and teachers
- Designed for use with deaf-blind
- Comprehensive at lower developmental levels
- Judgments of intentionality communication can be difficult

Dimensions of Communication

<http://documents.nationaldb.org/products/dimensions-of-communication.pdf>

- Designed for persons with multiple disabilities including deafblindness
- Two parts: Developing a Communication Profile and Designing an Intervention Plan
- Uses observation, interview, and structured interaction
- 6 Dimensions: Symbol Use – Intent – Complexity - Social Action - Vocabulary Use – Comprehension
- Scored on 5-point scale with examples at each level

HomeTalk

<https://nationaldb.org/library/page/789>

- **Assessment tool designed for use by parents and service providers who are deafblind and have other disabilities. The purpose is to get parents more actively involved in their child's educational plan**
- **Provides a picture of skills, interests, personality of the child and family routines**
- **4 parts-**
 - **Information about the home, health, hearing and vision, communication**
 - **Interests, talents, habits, routines, behaviors, special needs**
 - **Rates child in Social interaction, Problem solving, Exploring the environment, and Discovery and Learning**
 - **Parent-Professional worksheet to identify educational goals and activities**

INSITE Developmental Checklist

available from HOPE, Inc- \$10 manual

<http://hopepubl.com/proddetail.php?prod=404>

- Comprehensive developmental scale published in 1989
- Covers gross motor, fine motor, self-help, cognition, social, emotional, communication, vision, auditory, and tactile development
- Available in 0-2 and 0-6 versions
- Developed for children with multiple disabilities and sensory impairments
- Provides many items at early developmental levels

School/Home Inventory of Problem Solving Skills
www.designtolearn.com/school-inventory-problem-solving-skills-sipss \$14 hard copy \$7.50
downloadable PDF

- Observational instrument designed to assess cognitive skills related to object use in children who are deaf-blind or have severe and multiple disabilities
- Not for children with verbal skills who could use other tools, nor for children with such profound physical limitations they have little ability to act on objects
- Basic Skills with Objects, Ways to Gain Access to Objects and Ways to Use Objects
- Best used to determine types of activities appropriate for a child based on object interaction skills – to make sure opportunities are provided to practice and build on those skills

I. Basic Skills with Objects

Skills, General Description and Examples

A. Approaches Desired Objects

Actively decreases distance between self and desired object that is out of reach by bringing self closer to object or bringing object closer to self.

- Moves close to desired object.
- Reaches for desired object.
- Object is on a towel and out of reach, child pulls towel to get object.
- Hears radio, moves closer to it.
- Smells food, moves toward source.



Activities in which the child uses this skill

B. Avoids Objects

Actively increases distance between self and undesirable object/person.

- Places barrier between self and object.
- Pushes away object.
- Puts object away.
- Moves away from object.
- Covers eyes or turns head to avoid object.
- Covers ears when hears loud sound.



Activities in which the child uses this skill

Please check the ONE statement that best describes the child's skill.

A **Mastered:** The child can do at least three of these examples or something similar OR demonstrates one example with at least three different sets of materials. Usually performs this skill independently when given the opportunity.

B **Mastered with Limitations:** Clearly understands what needs to be done, but physical limitations prevent the child from doing this independently. However, with some physical assistance or adaptation, s/he can do at least three of these examples or something similar OR demonstrates one example with at least three different sets of materials.

C **Emerging:** The child is just beginning to understand what needs to be done, but only demonstrates this skill under very limited circumstances. S/he can do at least one of the examples or something similar, but only with one or two sets of materials and may be inconsistent.

D **Not Present:** The child doesn't seem to understand what needs to be done and doesn't attempt to perform this skill.

A **Mastered:** The child can do at least three of these examples or something similar OR demonstrates one example with at least three different sets of materials. Usually performs this skill independently when given the opportunity.

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D **Not Present:** The child doesn't seem to understand what needs to be done and doesn't attempt to perform this skill.

School Inventory of Problem Solving Skills (SIPSS)

Child's Name _____ Today's Date _____ Date of Birth _____ Age _____ Completed By _____

Scoring: Mastered = 2 Mastered with Limitations = 2 Emerging = 1 Not Present = 0

Please place the score from each item on the lines below. Add the numbers in each column to find the subtotal and divide by the number indicated to get the percent for each category. Then calculate the total.

Skill Summary

I. Basic Skills

- ___ A. Approaches
- ___ B. Avoids
- ___ C. Holds
- ___ D. Releases
- ___ E. Picks Up
- ___ F. Simple Action
- ___ G. Explores
- ___ H. Holds Two Objects
- ___ I. Transfers

II. Ways to Gain Access

- ___ A. Makes Detours
- ___ B. Removes Barriers
- ___ C. Over/Under Barriers
- ___ D. Locates
- ___ E. Simple Search
- ___ F. Complex Search
- ___ G. Takes Out
- ___ H. Opens Simple Containers
- ___ I. Opens Complex Containers
- ___ J. Uses Simple Tools
- ___ K. Uses Complex Tools

III. Ways to Use Objects

- ___ A. Functional Use
- ___ B. Orients
- ___ C. Puts In
- ___ D. Turns On/Off
- ___ E. Operates Complex Objects
- ___ F. Adjusts Planes
- ___ G. Uses One Object to act on Another-Simple
- ___ H. Uses One Object to act on Another-Complex
- ___ I. Matches by Manipulation
- ___ J. Matches to Perceptual Features
- ___ K. Puts Together
- ___ L. Constructs / Assembles
- ___ M. Uses Containers

Subtotal				TOTAL
Percent	___ / 18 = %	___ / 22 = %	___ / 26 = %	___ / 66 = %

The Functional Schemes Assessment available from Lilliworks- www.lilliworks.org \$84

A tool for assessing the developmental levels of a learner who, irrespective of age and/or handicap(s), has developed to a level between birth and 48 months.

Users are encouraged to add items to each subsection of things a child can do if nothing on the list illustrates the capacity a particular child demonstrates. For teachers working with visually impaired children who have multiple disabilities.

Used in conjunction with the FIELA curriculum to make sure activities are at the appropriate level

Many items are tied to having Lilli's equipment

Translation sometimes makes it hard to figure out what they mean

Each
section
begins with
milestones
that guide
where you
should start
the
assessment

Social Perception Milestones

0-3 months: Smiles and waves arms when seeing or hearing familiar people

3-6 months: Enjoys having an adult play with him/her

6-9 months: Makes contact with adults

9-12 months: Anxious when trusted provider is not present

12-15 months: Shows interest in other learners

15-18 months: Moves close to another learner, observes intensively

18-24 months: Protests if his/her activity is disrupted

24-30 months: Steals the toy another learner is playing with

30-36 months: Plays parallel to other learners

36-42 months: Invites the adult to play rough-and-tumble

42-28 months: Helps with laying the table

Each domain also has a set of items that impact learning which occur irrespective of level

Social Perception		Irrespective of level of development						
No.	Function	Yes	No	Don't know	Was able to	Learning has begun	Performed in favourable conditions	Performs spontaneously
N001 K	Characterized as friendly towards known persons							
N002 K	Characterized as friendly towards anyone							
N003 K	Is especially attached to one person							
N004 K	Is afraid of being separated from parents							
N005 K	Characterized as eager to make contact							
N006 K	Characterized as making contact but ready to retreat quickly							
N007 K	Characterized as clinging							
N008 K	Characterized as abnormally attention-demanding							
N009 K	Characterized as naturally attention-demanding							
N010 K	Sleeps during daytime If yes, when _____							
N011 K	How many hours does the learner sleep during nights ____							
N012 K	Resists teaching							
N013 K	Is familiar with cause of routine							
N014 K	Insists on doing something by himself during mealtime							
N015 K	Insists on doing things by himself in other situations							
N016 K								

FIELA Curriculum

by Lilli Nielsen - 1997

Flexible

Individual

Enriched

Level

Appropriate

720 Learning
Environments

- For each developmental level, General Comments and Learning Environments
- 3-6 Months-
 - Scratching surfaces
 - Playing with fingers
 - Pushing objects
 - Grasping and letting go
 - Grasping and keeping
 - Mouthing fingers and objects

Learning Environments at 3-6 months

- Lying on back in net swing hanging in front of Essef Board attached to the wall. Kicking the board
- Lying prone with inflated balloons containing 2 beans suspended to encourage head lift
- Lying on back on Resonance Board with a vibrating object in the hand and objects for making and comparing sounds within reach
- In prone position over a Support Bench- a tray of water under hands. Banging and splashing the water

Reach for the Stars

available from APH www.aph.org \$25

- A guidebook to help families and educational teams work together to create educational plans
- A tool to help service providers understand a family's desires and expectations for their child's future
- Includes
 - Assessment process for gathering information to guide programming decisions
 - Scope and Sequence – maps to identify universal, targeted and intensive instruction and plan where and how to work on identified priority skills
 - Activities and Instruction- guiding thoughts and questions to help the team create activity routines for instruction
 - Performance Monitoring- helps the team establish a goal attainment scale unique for the child

Assessment: Person-Centered Planning Maps

MY GIFTS AND CONTRIBUTIONS TO THE WORLD

Guiding Thoughts or Questions

- Think of words that best describe your child.
- Describe your child's personality.
- Describe your child's temperament.
- How does your child respond to being with other people?
- How do other people respond to being with your child?
- What have you learned from your child?
- How is the world better because of your child?

IMAGES FOR MY FUTURE

Guiding Thoughts and Questions

Who Will I Spend My Time With?

- Think about the people who you would like to have enter your child's life.
- Think about all of the people who are important to your child now.

Where Will I Spend My Time?

- Where are the places that your child spends time now that he/she really likes?
- Would you like to see your child spend more time in the community?
- Are there places in your community where your child does not go now, but you would like to see him/her spend time there?

What Will I Spend My Time Doing?

- What does your child like to do now?
- How do other members of the family spend their time?
- Are there things that other members of the family do that you would like to see your child enjoy?
- What would you like for a school day to look like?
- What is important for your child to learn?

WHAT DOES AND DOES NOT WORK FOR ME

Guiding Thoughts and Questions

What works?

- What calms your child?
- What pleases your child?
- What does your child enjoy doing?
- What are some of your child's favorites?
- What makes your child smile?
- What do you do to get your child's attention?
- What do you do to help your child stay on task for a longer period of time?
- Can you think of something that your child just can't get enough of?

What doesn't work?

- What upsets your child?
- What makes your child mad?
- What irritates your child?
- What are some things that your child absolutely does not like?
- What does your child avoid?
- What types of things distract your child?
- What frightens your child?

ALL ABOUT ME

Guiding Thoughts and Questions

- Focus on the developmental areas that are the most important at this time.
- We suggest that you start with no more than three developmental areas.
- Gross motor, fine motor, oral motor, receptive & expressive communication, Social emotional, Cognitive, Adaptive, Self help skills, Vision, Auditory, Tactile, Vestibular, Proprioception, Olfactory & Gustatory
- Describe current abilities and what type assistance, if any, is needed
- Team agrees on skills that are critical for the child to learn and what supports are necessary

Example of All About Me Map

Expressive Communication

Currently

I can express one word at a time
Independently

If you will:

Pair object with sign

In the Future

I want to be able to express two
words phrases With assistance

So I need you to:

Present ASL sign with verbal

Provide 10-second wait time

Give me 2 chances to do it myself

Provide hand-under-hand
assistance if needed

Component 2- Scope and Sequence

Skills I want and Need to Learn

Common Skills:

- Things I can learn from other children
- Not identified on the IEP

Target Skills

- Skills I continue to need some extra support
- Adaptations and adjustments needed to assist learning

Priority Skills

- Skills I can learn with lots of support and intentional, intensive instruction

Skills Abby Wants and Needs to Learn

Priority Skills

- Wash my hands doing all steps
- Express myself in two word phrases
- Initiate interaction to let someone know I need help

Target Skills

- Give someone my attention when they need it
- Increase receptive language (nouns)

Common Skills

- Use objects the way I am supposed to

Educational Plan

- Describes the priority skills and the adaptations and instructional strategies needed
 - What I will learn
 - Where and When I will learn the skill
 - Adaptations and instructional strategies
 - People who need to be on the team to support me in this skill

Abby's Education Plan For School

I Will Learn to Wash My Hands

Where and When I Will Learn the Skill

- Centers - After I finish finger painting
- Lunch - Before I eat
- Playground - After I play in the sand and dirt

Adaptations and Instructional Strategies

- Verbal + Sign Directions
- 5 second time delay after I am prompted
- Hand under hand assistance

These people will need to be on my team to support me to learn this skill.

- Classroom teacher
- Intervener
- Occupational therapist

Some other cool things to look at:

- *Psychological Evaluation of Children who are Deaf-Blind: An Overview with Recommendations for Practice.* Harvey Mar, 2010
<http://documents.nationaldb.org/products/eval.pdf>
- *What Does “Follow the Child” Mean?* David Brown, 2014
<http://files.cadbs.org/200002255-952a79623e/reSources%20Brown%202014.pdf>
- *Authentic Assessment* National Consortium on Deaf-Blindness 2010
<http://Documents.nationaldb.org/products/AuthAssessment.pdf>