Disclaimer

Disclaimer:

- We recognize that there are many terms and labels used to describe disability and impairment, and that language continues to evolve.
- Describing various populations can be challenging given the range of terminology and perspectives.
- Our intent in this presentation is to focus on the individual child—their strengths, needs, and experiences—rather than defining them by a diagnosis.
- We aim to foster a perspective that emphasizes respect, inclusion, and support, rather than assumptions or negative perceptions of "impairment".

Children with Extensive Support Needs - Identification
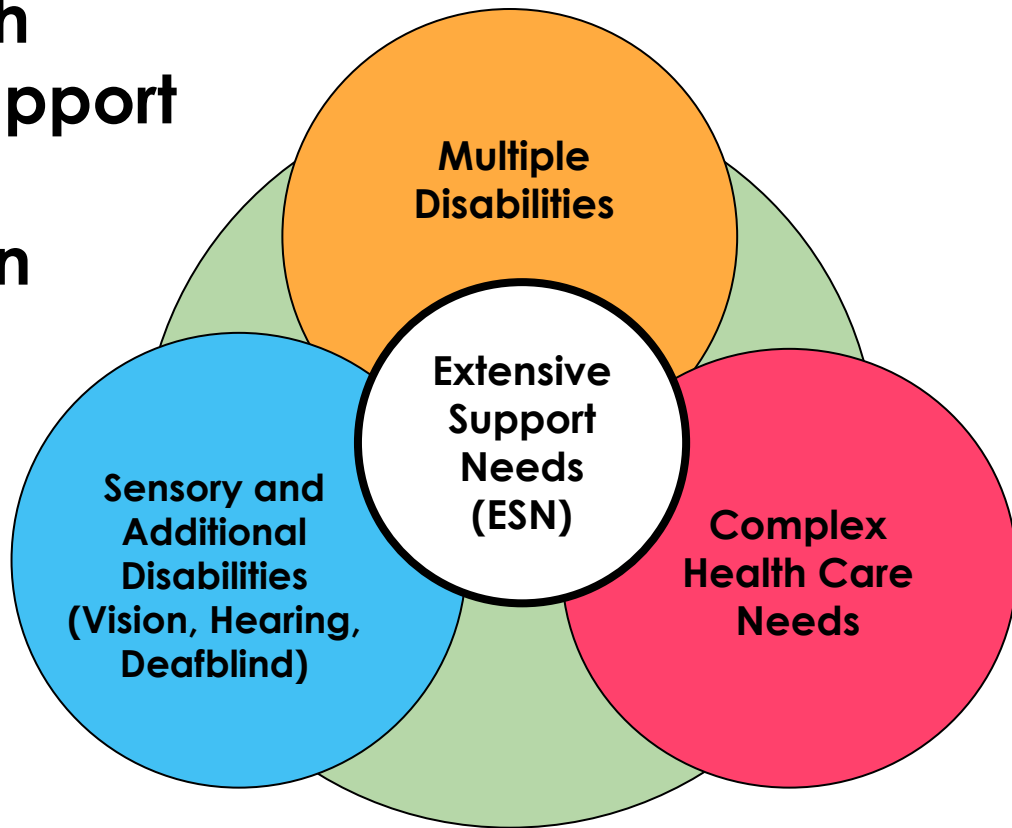
Impact of Extensive Support Needs (ESN)

Impact of Extensive Support Needs (ESN)

Varies Based On:

- Age Of Onset
- Age Of Identification
- Access To Services/Learning History
- Degree And Type Of Vision & Hearing Conditions
- Additional Disabilities (Cognitive, Motor, Health)
- Progressive Conditions

Impact of ESN on Learning

- **Sensory Information** may be absent, inconsistent, unreliable or limited (Vision, Hearing, Tactile)
- **Impact on Learning**
  - Communication & Joint Attention
  - Social/Emotional Behavior
  - Concept Development
  - Spatial Relationships
  - Motor planning
- **Need for Direct Instruction**
  - Part To Whole
  - Beginning, Middle, End
  - Real Experiences and Real Objects
- **Additional Disabilities** may impact the ability to seek or respond to information (vision, hearing, touch)

The Range of Sensory Conditions in Deafblind Learners

The Range of Sensory Abilities & Conditions

	Classification of Vision					
	Normal 20/12–20/40	**Near Normal** 20/40–20/60	**Low Vision** 20/70– 20/160 or field loss <20 degrees	**Legally Blind** 20/200 or less or field loss <20 degrees	**Light Perception or No LP**	***Cortical or Cerebral Vision Impairment (CVI)**
Normal -10 to 15 dB						
Slight 16 to 25 dB						
Mild 26 to 40 dB						*
Moderate-Severe 41 to 70 dB						*
Severe 71 to 90 dB						*
Profound 91 dB or greater						*
****Auditory Neuropathy**		*	*	*	*	*
*****Central Auditory Processing Disorder**		*	*	*	*	*

Classification of Hearing (row axis label)

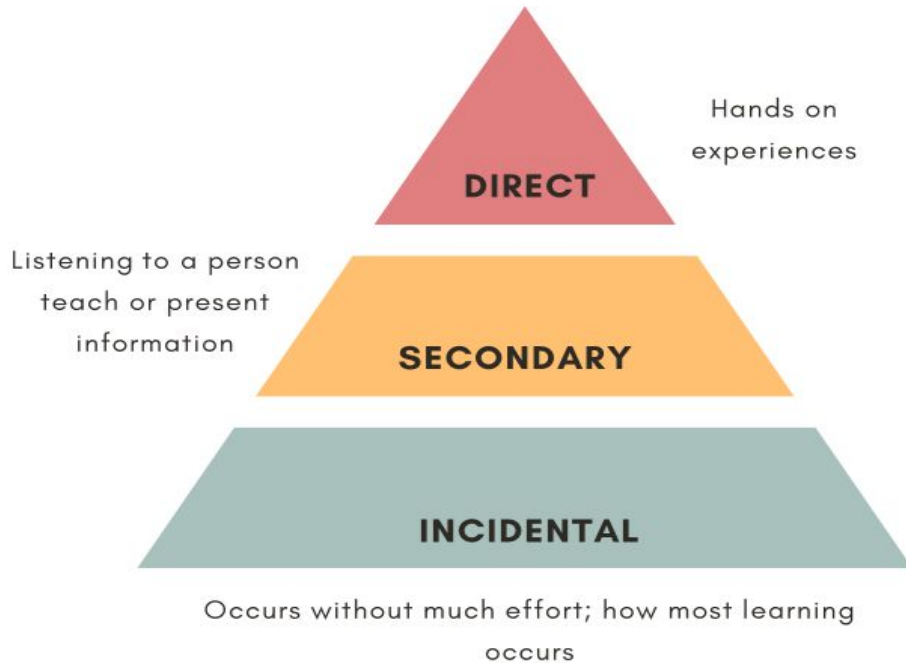*Condition Impacting the Perception and Understanding of Visual Information
**Condition Impacting the Transmission of Auditory Information to the Brain
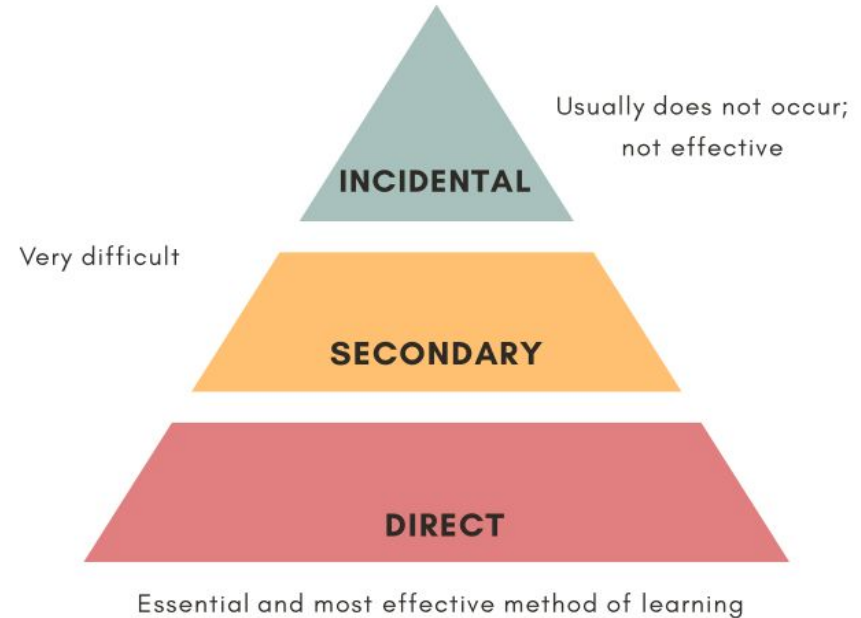***Condition Impacting the Processing of Auditory Information

Corn, A. & Erin, J. (Eds.) (2010). Foundations of Low Vision: Clinical and Functional Perspectives, 2nd Edition. American Foundation for the Blind Press. Retrieved from http://www.cdc.gov/ncbddd/hearingloss/ehdi-data2012.html

Importance of Direct Teaching for Learners with ESN
(Including Deafblindness)

Typical Learning

DIRECT — Hands on experiences

SECONDARY — Listening to a person teach or present information

INCIDENTAL — Occurs without much effort; how most learning occurs

Deafblind Learning

INCIDENTAL — Usually does not occur; not effective

SECONDARY — Very difficult

DIRECT — Essential and most effective method of learning

High Quality Practices and Instructional Considerations for Deafblind Learners

1. Thorough Assessment for Sensory Access & Communication
2. Building Trusting Relationships
3. Building Consistency & Predictability
4. Instructional Plan & Activity/Routines Card

NEC High Quality Practices Checklist

High Quality Practices Checklist
for Deafblind Learners

Thorough Assessment for Sensory Access and Communication

Optimal Sensory Environments for Learning (Sensory Bubble)
- ☐ NEC Sensory Bubble Graphics
- ☐ NEC Sensory Bubble Table

Communication Assessment
- ☐ Communication Matrix
- ☐ Communication Matrix Planning Tool

Communication Profile & Communication Dictionary
- ☐ Holistic Communication Profile
- ☐ Communication Dictionary

Building Trusting Relationships

Identify Yourself (Personal Identifiers)
- ☐ Personal Identifiers
- ☐ Using voice, touch to identify yourself
- ☐ Approach child from side

Hand Under Hand
- ☐ Instructor's hands placed UNDER student's hands
- ☐ Used for supporting joint attention and communication
- ☐ Child learns to follow the adult's hand

Joint Attention
- ☐ Critical for supporting language development, social interaction, and learning
- ☐ Consider physical proximity, tactile cues, nonverbal communication, changes in expression or biobehavioral states

Wait Time & Pace
- ☐ Slow down pace of interactions and instruction
- ☐ Pause within routines
- ☐ Wait for indications of understanding or anticipation

Building Consistency & Predictability

Environmental Arrangements
- ☐ Encourage exploration to navigate and interact with surroundings with minimal support
- ☐ Support Communication: Provide clear and consistent cues for interaction
- ☐ Reduce Anxiety: Predictable setups help learners feel secure and confident

Consistent Activities & Routines
- ☐ Clear beginning and ending
- ☐ Meaningful to student
- ☐ Sequential
- ☐ Repetitious

Responding to Likes & Dislikes
- ☐ Preference Assessment
- ☐ Determine student Likes/Dislikes to support communication, understanding, choices and activities

Offering Choices
- ☐ Offer options to encourage student control over their environment
- ☐ Embed within activities and routines

Instructional Plan, Activity/Routine Card

Team Collaboration for Instructional Plan(s)
- ☐ Team Collaboration, Sensory Access & Communication Needs (Sensory Bubble, Profile, Dictionary)
- ☐ Create effective Instructional Plan(s) Linked to Gen Ed Curriculum
- ☐ Activity/Routines Card

Select Meaningful Activities
- ☐ Identify key activities
- ☐ Child Guided
- ☐ Based on learner's interests and daily routines

Identify Step and Sequence
- ☐ Break activities into smaller steps, ensuring each step is clear and accessible
- ☐ Include hands- on experiences, opportunities for making choices

Create Predictable Structure
- ☐ Establish a consistent routine to foster security and anticipation
- ☐ Provide ongoing coaching and feedback for lead staff

4 High Quality Practices: Effective strategies or methods that achieve learning outcomes (based on evidence)

(1) Thorough Assessment for Sensory Access and Communication	(2) Building Trusting Relationships	(3) Building Consistency & Predictability	(4) Instructional Plan, Activity/Routine Card

(1) Thorough Assessment for Sensory Access and Communication

❏ Optimal Sensory Environments for Learning (Sensory Bubble)

❏ Communication Assessment (Communication Matrix)

❏ Holistic Communication Profile

❏ Communication Dictionary

(2) Building Trusting Relationships

❏ Identify Yourself (Personal Identifiers)

❏ Hand Under Hand

❏ Joint Attention

❏ Wait Time & Pace

(3) Building Consistency & Predictability

❏ Environmental Arrangements

❏ Consistent Activities & Routines

❏ Responding to Likes & Dislikes

❏ Offering Choices

(4) Instructional Plan, Activity/Routine Card

❏ Team Collaboration for Instructional Plan

❏ Select Meaningful Activities

❏ Identify Step and Sequence

❏ Create Predictable Structure

High Quality Practice #1: Thorough Assessment for Sensory Access and Communication

Determining Optimal Sensory Environment & Supports	Communication Assessment	Communication Profile	Communication Dictionary

- ❏ NEC Sensory Bubble Graphics
- ❏ NEC Sensory Bubble Table

- ❏ Communication Matrix
- ❏ Communication Matrix Planning Tool

- ❏ Holistic Communication Profile

- ❏ Communication Dictionary
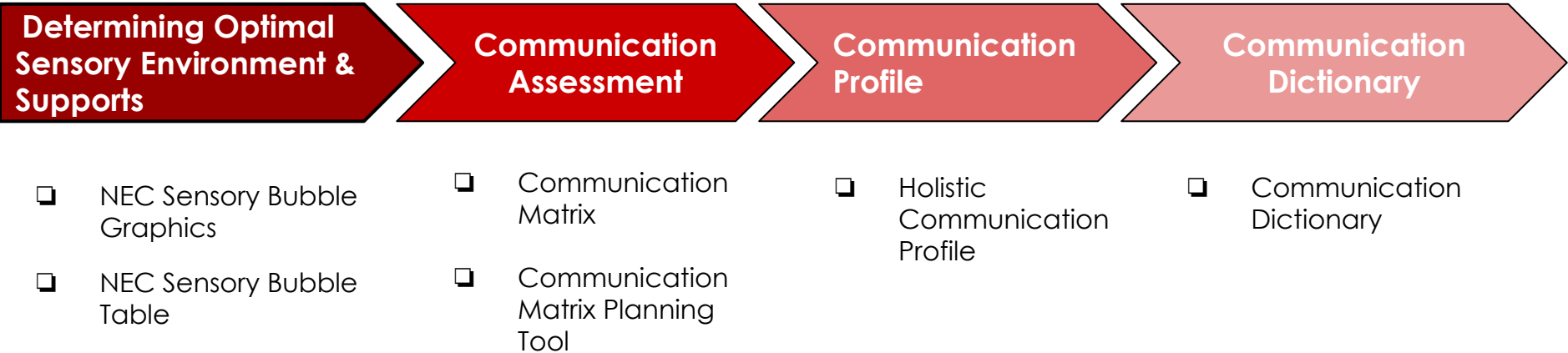
The NEC Sensory Bubble & Table: Facilitating an Optimal Sensory Environment for Learning

Factors to Consider When Determining the Range or Size of the Sensory Bubble

- Type and degree of vision and hearing loss

- Use and quality of the technology

- Complexity of visual environment (lighting, visual clutter, contrast, number of people)

- Complexity of auditory environment (room acoustics and room noise - Sound to Noise Ratio - SNR)

- Time of day, child's health, and level of fatigue

Understanding the Sensory Bubble

- The adult should be positioned within the child's Sensory Bubble to ensure they can see, hear, learn, and understand effectively.

- If an adult or peer is outside the bubble, the child's ability to see, hear, learn, and understand may be limited.

- The Sensory Bubble helps explain why a child may sometimes appear to see and hear, while at other times they do not.

Case Example - Mac

Student Profile

Age: 6, enrolled in general ed 1st grade classroom w/para support

Etiology: Genetic disorder causing vision/hearing differences, delays in speech, motor skills, issues with growth/feeding (g-tube), complex health needs

Vision: Visual acuity 20/60, Retinal dystrophy, functional vision changes over the past year incl. increased nightblindness, likely to lose more vision. Reads print, being introduced to braille instruction

Hearing: Mild bilateral hearing loss (hearing aids, FM system), receptive/expressive in spoken English
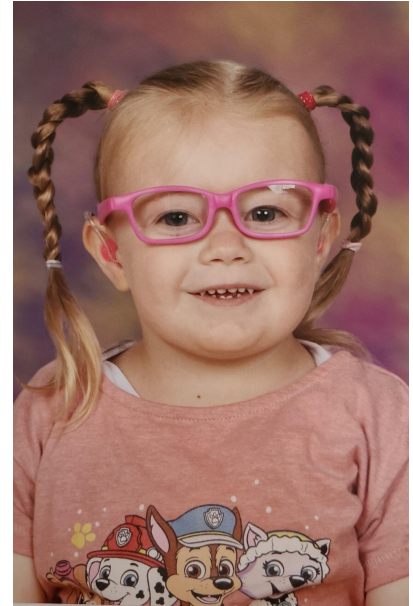
Central

Left

Right

Within 3 ft
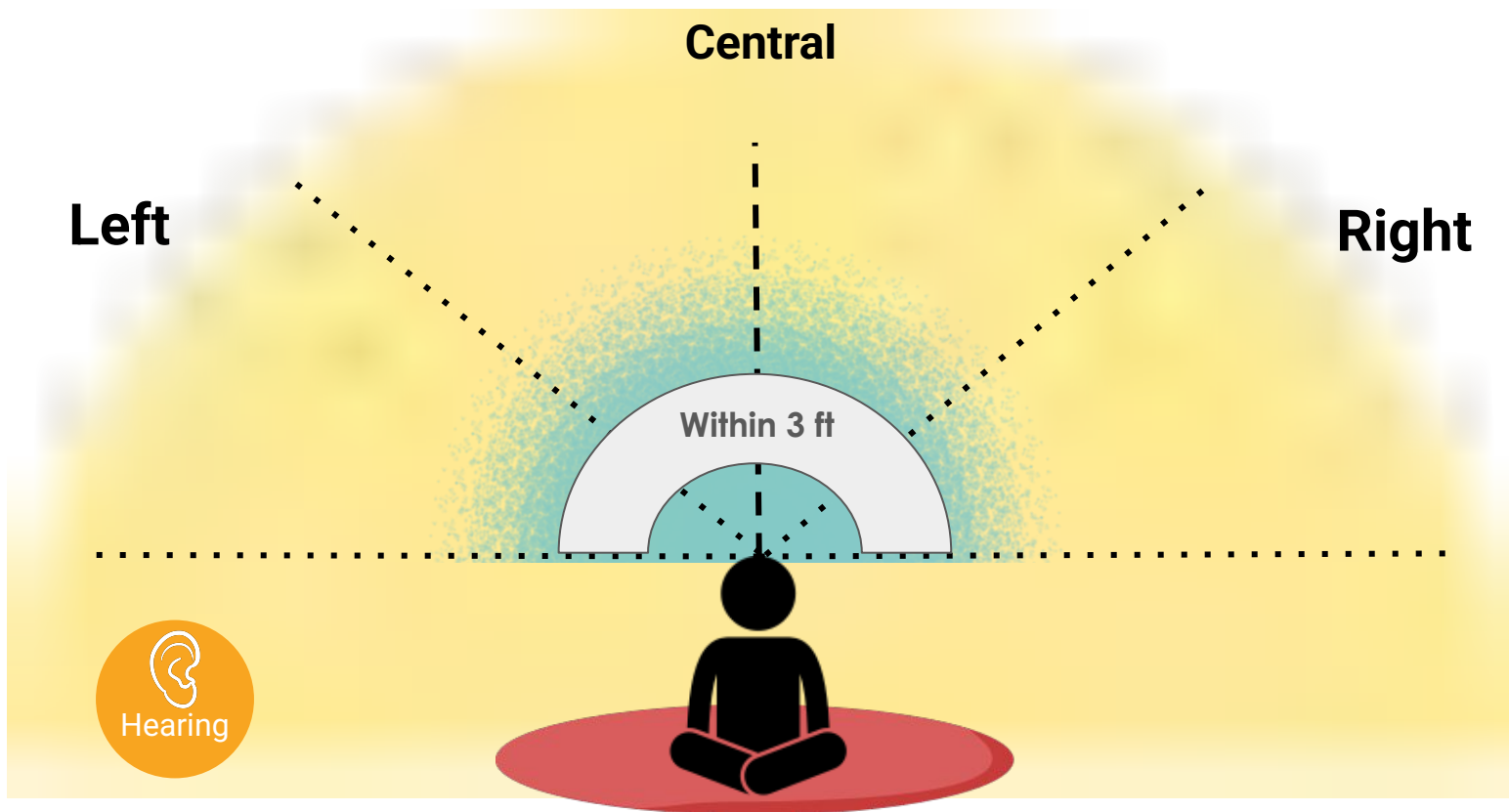
Hearing

The **Listening Bubble** refers to the area around the child where speech is sufficiently clear for comprehension. Its size depends primarily on degree of hearing loss and whether hearing technology adequately compensates to access normal acoustic environments.

Left

Central

Right

Touch

NEC
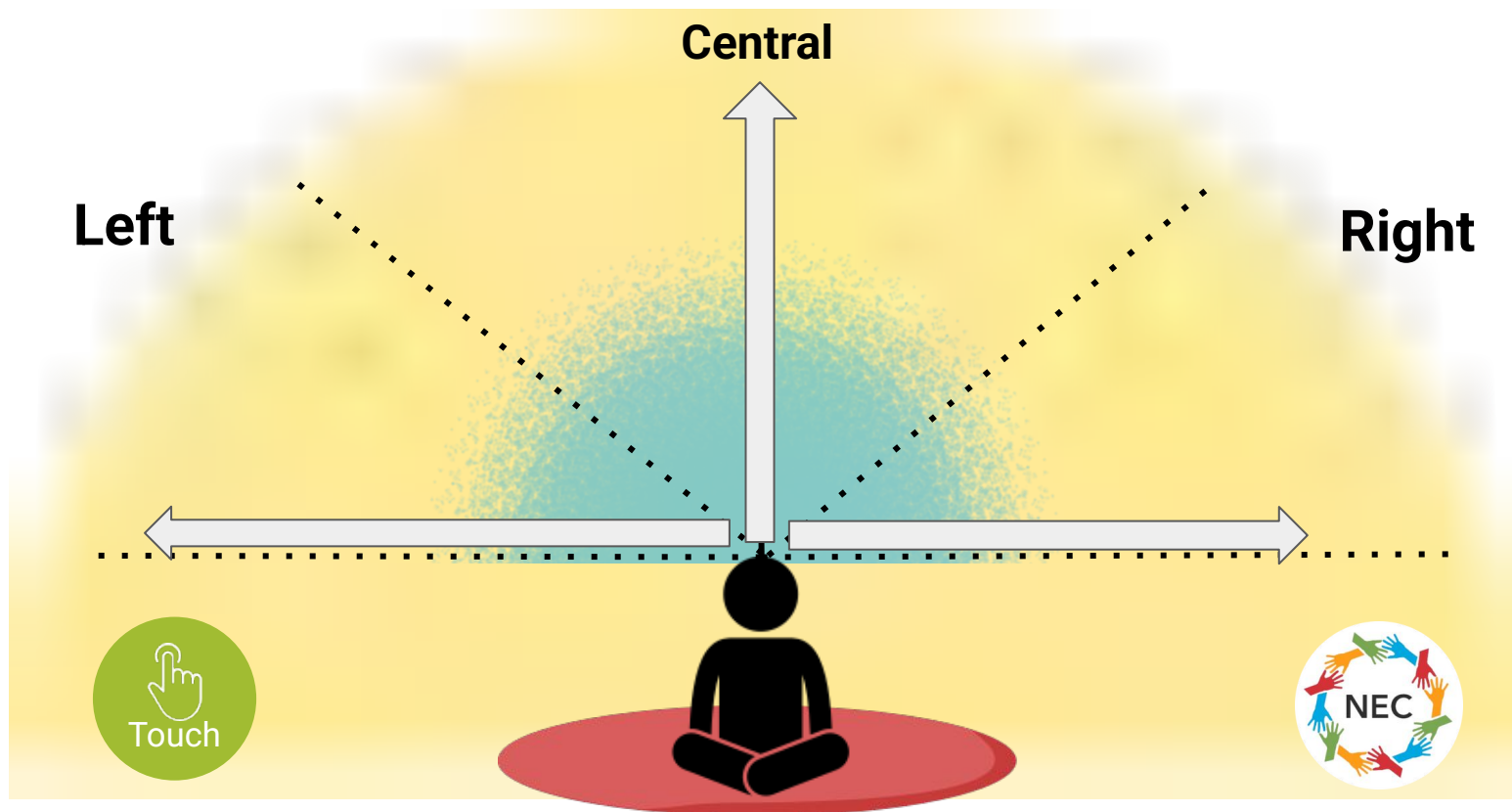
Student is able to physically move towards objects/people in her environment

NEC Sensory Bubble Table

The NEC Sensory Bubble Table

NEAR Vision	Refer to Vision Graphic	Equipment/Devices	Considerations & Strategies (examples)
NEAR Vision: within 1 to 3 feet ☐ 1:1 Instruction ☐ Social Interactions ☐ Small Group ☐ Large Group	**NEAR Vision:** On the Vision Graphic - place a ***N** for the best location <u>and</u> within the best visual field ☐ Central ☐ Slightly Off Central ☐ Left ☐ Right ☐ Upper Visual Field ☐ Lower Visual Fields	**Equipment & Devices** ☐ Glasses ☐ Visual Aids ☐ Lighting ☐ Low Vision Aids (magnifiers, Jupiter, monocular) ☐ Computer - Screen ☐ Software - visual scanning/tracking	**Accommodations/Adaptations** ☐ Consider best location/visual field (i.e., central, slightly off central) ☐ Rate of presentation (i.e., sign language, slower movement of materials/people to support visual pursuit/attention) ☐ Location/position of AAC devices (low tech and high tech) ☐ Hand-Under-Hand ☐ Additional Wait Time: ___ sec ☐ *Considering visual field ☐ Enlarged Print or Symbols ☐ Contrast ☐ Color Preference ☐ Need for Additional Lighting ☐ Lighting control (eg. back to windows) ☐ Reduced Complexity of Visual Array ☐ Reduced Complexity of Sensory Environment (extraneous input) ☐ Movement to support initial visual attention ☐ Familiar images ☐ Need for Slanted Surface ☐ Individual Sample ☐ Preferential seating ☐ Tactile Cues - Onbody Cues ☐ Protactile/Haptics

Additional NEAR VISION Considerations:

Communication Assessment Tool: Communication Matrix

Communication Matrix for Parents and Professionals

Handbook: Online Communication Matrix
(www.communicationmatrix.org)

Why Use the Communication Matrix

- Expressive communication assessment for full range of communicators (reflexive behaviors to formal language)
- Assesses the reasons that people communicate and the behaviors they use to communicate
- Families, teachers, and service providers collaborate to gather information
- Available FREE online!

Communication Matrix Levels

- Level 1: Pre-intentional Behavior
- Level II: Intentional Behavior
- Level III: Pre-symbolic, Unconventional communication *(Marks beginning of intentional communication)*
- Level IV: Pre-symbolic, Conventional Communication
- Level V: Concrete Tangible "Symbols" (representations)
- Level VI: Abstract Symbols
- Level VII: Language

These levels are inclusive of children & adults. (Rowland & Schweigert, 2000)

Communication Profile & Dictionary

Holistic Communication Profile (Dr. Susan Bruce)

Communication Dictionary

EXPRESSIVE COMMUNICATION CHART				
PHASE 3: Identifying EXPRESSIVE COMMUNICATION: Determine how the child uses different modes of expressive communication by identifying their expressive communication behaviors and signals.				
Communication Behaviors/Signals: What does the child do?	Meaning?	How Do We Respond??	Activity/Setting	Notes

High Quality Practice #2:
Building Trusting Relationships

Identify Yourself

- ❏ Personal Identifiers
- ❏ Using voice, touch to identify yourself
- ❏ Approach child from side

Hand-Under-Hand

- ❏ Instructor's hands placed UNDER student's hands
- ❏ Used for supporting joint attention and communication
- ❏ Child learns to follow the adult's hand

Joint Attention

- ❏ Critical for supporting language development, social interaction, and learning
- ❏ Consider physical proximity, tactile cues, nonverbal communication, changes in expression or biobehavioral states

Wait Time & Pace

- ❏ Slow down pace of interactions and instruction
- ❏ Pause within routines
- ❏ Wait for indications of understanding or anticipation

High Quality Practice #3:
Building Consistency & Predictability

Environmental Arrangements	Consistent Activities & Routines	Responding to Likes/Dislikes	Offering Choices

Environmental Arrangements

- ❏ Encourage exploration to navigate and interact with surroundings
- ❏ Support Communication: Provide clear and consistent cues for interaction
- ❏ Reduce Anxiety: Predictable setups help learners feel secure and confident

Consistent Activities & Routines

- ❏ Clear beginning and ending
- ❏ Meaningful to student
- ❏ Sequential
- ❏ Repetitious

Responding to Likes/Dislikes

- ❏ Preference Assessment
- ❏ Determine student Likes/Dislikes to support communication, understanding, choices and activities

Offering Choices

- ❏ Offer options to encourage student control over their environment
- ❏ Embed within activities and routines.

High Quality Practice #4: Instructional Plan & Activity/Routine Card

Team Collaboration for Instructional Plan(s)	Select Meaningful Activities	Identify Step & Sequence	Create a Predictable Structure

Team Collaboration for Instructional Plan(s)
- ❑ Team Collaboration, Sensory Access & Communication Needs (Sensory Bubble, Profile, Dictionary)
- ❑ Create effective Instructional Plan(s) Linked to Gen Ed Curriculum
- ❑ Activity/Routines Card

Select Meaningful Activities
- ❑ Identify key activities
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- ❑ Based on learner's interests and daily routines

Identify Step & Sequence
- ❑ Break activities into smaller steps, ensuring each step is clear and accessible
- ❑ Include hands-on experiences, opportunities for making choices

Create a Predictable Structure
- ❑ Establish a consistent routine to foster security and anticipation
- ❑ Provide ongoing coaching and feedback for lead staff

Creating an Effective Instruction Plan

1. Complete **Communication Assessment** (Comm Matrix)

2. Complete a **Holistic Communication Profile** (synthesis of assessment findings, strategies, pictures/videos) and **Communication Dictionary**

3. Develop an Instruction Plan(s): Organize information and locate in notebook/digital file (consider the Communication Matrix Planning Tool as an additional resource)

4. Condense into Activity/Routine Card (offers a bridge between home and school)

Bringing It All Together: Instruction Plan Template

[Template]()

From Planning to Instruction - Team Collaboration Process

Child's Name:

Dates/Period Covered:

Identify DOMAIN AREA	Communication (Receptive, Expressive)	Motor (Fine Motor, Gross Motor, Oral Motor)	Social Emotional	ADLs/Life Skills	Sensory (Vision, Auditory, Touch)	Academics (Math, Science, History)	Literacy (Reading, Writing)	Transition/ Self-Determination (Making Choices, Self-Advocacy, Work Skills).
	☐	☐	☐	☐	☐	☐	☐	☐

Learning Strand:

IEP/IFSP Objective (Target Skill):

Team Meetings to Address Areas for Assessment: Vision Hearing Communication Tactile/Physical Motor	Sensory – Vision ▼	Sensory - Hearing	Communication - Receptive	Communication - Expressive	Tactile/Physical Support
	Near Distance Visual Fields Visual Attention Visual Pursuit Visual Discrimination CVI Characteristics Vision Aids	Alerting Localizing Discriminating Sounds Identifying Sounds Repeating Sounds Spoken Language Repeating Spoken Language ALDs Comments - Team/Speciality Provider:	Touch Cue/Gesture Visual Cue Tangible Symbol Vocalization Sign Speech AAC Device Comments - Team/Speciality Provider:	Body Movements (reach) Visual Cue (look/orient) Tangible Symbol (touch/hold) Sign (sign gesture) Vocalization/Speech AAC Device Comments - Team/Speciality Provider:	Full Touch Cue/Gesture Shoulder Elbow Forearm Hand Partial or Full Assist Tactile modeling Positioning Comments - Team/Speciality Provider:
	Comments - Team/Speciality Provider:	Comments - Team/Speciality Provider:	Comments - Team/Speciality Provider:	Comments - Team/Speciality Provider:	Comments - Team/Speciality Provider:

Intervention Plan

WHEN - Routine/Activity:

WITH WHAT - Materials:

STEPS - Activity/Routine: EXAMPLE: "Initiating Routine" (1) Gain the Student's Attention - Establish Joint Attention (describe); (2) Introduce the Topic/Activity (describe); (3) Provide Direction or Make Request in Format Student Understands (describe); (4) Provide "Wait Time" for Student to respond/request (describe)

STEPS - Activity/Routine:	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date
1										
2										
3.										

Case Example

Student Profile: Age 11 - 6th Grade, Blind, Moderate HL, Seizures, Nonverbal, Ambulates with Support

Team Members: Parents, Sped, 3 GE Teachers, TVI, TOD, SLP, SLP-A, O&M, 2 LNAs, OT, PT, DB Consultant, I-Team Ed. Consultant, I-Team AAC Consultant, I-Team Family Resources Consultant, District LEA (20)

Impetus for Change: Significant increase in self-injury led to need for in-depth assessment and collaboration

OLMC Intervention Plan

Child's Name: Oliver

Dates/Period Covered: March 2024

DOMAIN AREA	Communication (Receptive, Expressive)	Motor (Fine Motor, Gross Motor, Oral Motor)	Social/Emotional	ADLs/Life Skills	Sensory (Vision, Auditory, Touch)	Academics (Math, Science, History)	Literacy (Reading, Writing)	Transition/ Self-Determination (Making Choices, Self-Advocacy, Work Skills).
	☑	☑	☑	☑	☑	☑	☑	☑

Common Core Standard Standard:	Speech and Language - EESL. 6.5: Select from an array of appropriate auditory, visual or tactual display to accompany a presentation

IEP/IFSP Objective (Target Skill): Building Vocabulary to Support Choice Making

Environmental Considerations	Sensory – Vision	Sensory - Hearing	Communication - Receptive	Communication - Expressive	Tactile/Physical Support
*Learning spaces defined by an identifier cue (e.g., sign, object, photo, tactile symbol) *Learning space arranged to maximize hearing and vision *Materials consistently positioned in the learning space *Materials organized and readily accessible to child *Opportunities for learning in natural environments to support skill transfer (e.g., bathroom, kitchen area) *Entrances to learning spaces marked with identifier cues	Near Distance Visual Fields Visual Attention Visual Pursuit Visual Discrimination CVI Characteristics Vision Aids **Comments -** **Team/Speciality Provider:**	Alerting Localizing Discriminating Sounds Identifying Sounds Repeating Sounds Spoken Language Repeating Spoken Language ALDs **Comments -** **Team/Speciality Provider:**	Touch Cue/Gesture Visual Cue Tangible Symbol Vocalization Sign Speech AAC Device **Comments -** **Team/Speciality Provider:**	Body Movements (reach) Visual Cue (look/orient) Tangible Symbol (touch/hold) Sign (sign gesture) Vocalization/Speech AAC Device **Comments -** **Team/Speciality Provider:**	Full Touch Cue/Gesture Shoulder Elbow Forearm Hand Partial or Full Assist Tactile modeling Positioning **Comments -** **Team/Speciality Provider:**

WHEN - Routine/Activity: Before and After Each Scheduled Activity

WITH WHAT - Materials: Arrival (sensory room); Morning Meeting (classroom; choice -   ); Allied Arts - PE/ART (separate rooms; choice -   ); Bathroom (tactile symbol; choice -   ); Rest Time (choice -   ; Recess (choice -   ); Bathroom (tactile symbol; choice -   ; Lunch (symbol?); Math (classroom); Humanities (class); Dismissal (packs up/home; place cross body bag on shelf next to calendar boxes)

BEFORE - STEPS in Activity/Routine	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date
(1) **Gain the Student's Attention - Joint Attention:** (a) Place your hands under O's hands to start the interaction (wait for him to alert); (b) Present your personal identifier into O's hands and state yuour name and Sign/verbal greeting										
(2) **Introduce the Topic/Activity:** (a) Sign/Verbal - label activity: *"Time for us to check today's schedule"* ; (b) Direct O to schedule location using human guide); (c) provide HUH to put cross-body bag on.										
(3) **Steps :** Follow these steps for each activity on the schedule: (a) Directs O's hands to each object in the schedule and provide sign/verbal label for each; (b) Then, go back to the 1st item, coactively take the object out of the schedule container, Sign/label activity *"**Now** it's time for _____"; (c) Encourage O to hold/explore the tactile features of the item; (d) Wait 3-5 seconds for O to respond/grasp and explore item; (e) Coactively place item in cross body bag - Sign/label "Put in"; (f) Travel to the activity										
(4) (a) Travel back to the calendar system Provide HUH guidance and say/sign "____ is all done", (b) Using HUH, encourage Ollie to imitate sign/gesture (c) Encourage O to place the object in the " all done bucket"; (d) Move to the next scheduled activity/object in the calendar system										
POSSIBLE STUDENT RESPONSES: Consider accuracy, latency, and degree of independence										

Activity/Routine Card

Activity/Routine Card Template

Purpose: The Activity/Routine Care is intended to simplify instructional components for easy reference in the home or classroom

Considerations
- Degree of sensory loss (vision, hearing, tactile/motor)
- Level of physical assistance needs
- Communication (objects, pictures, tactile cues, switch/signal device)
- Response time

Materials
Object symbols, felt board

Steps
1. Establish joint attention with OLMC through the use of a touch cue. Touch cues should begin with a tap on OLMC's elbow, slowly bringing your hand down his arm until your hand is underneath OLMC's hand.

2. Establish the topic. Let OLMC know that he will be making a choice by introducing it with the object symbol for "choice making" paired with sign/spoken language by saying, "Time to make a choice".

3. Bring your hand to his elbow and bring your hand under his hand. Introduce each choice on the felt board through tactile touch and sign/spoken language.

4. Wait for OLMC to respond after each choice. Repeat steps two and three until the child has been introduced to all of his choices.

5. Prompt OLMC to make a choice by using a touch cue to guide him toward the felt board.

Response
Correct Child Response:
OLMC responds to the choice by reaching for the or touching the object symbol for the activity he wants.

After Correct Child Response:
Give OLMC sign/verbal reinforcement such as "good job" and move on to the activity.

Resources for Your Teams/Programs

- NEC High Quality Practices Checklist
- NEC Sensory Bubble Graphics
- NEC Sensory Bubble Table
- [Communication Matrix](#)
- [Communication Matrix Planning Tool](#)
- Holistic Communication Profile (Dr. Susan Bruce)
- Communication Dictionary
- NEC Intervention Plan Template
- NEC Activity and Routine Card

SCAN ME

Thank You!

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