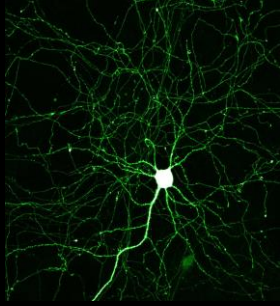


# Supporting Availability for Learning

Student-Centered Assessment & Intervention

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New York Deaf-Blind Collaborative

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## Outline

- Contexts
  - Low arousal and limited motor control
  - Behavior & availability
  - Topics of interest & availability
- Assessment
- Additional strategies

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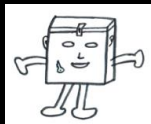
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## "The Box of DeafBlindness"



<https://www.youtube.com/watch?v=LTUgmCp4s4>



- What goes into your child's box of DB/multiple disabilities?
  - Understanding etiology and history
- What are your child's residual senses (windows)?
- What pulls him/her out (the key)?
- What makes him/her retreat?

Kimberly Lauger, 2012, from NCDB OHOA Intervener Module 2

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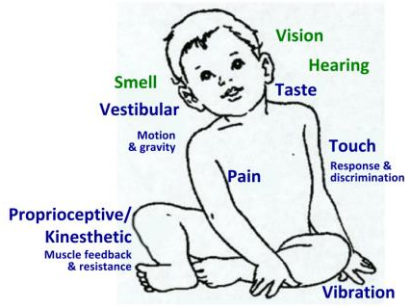
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### Distance Senses



### Near Senses

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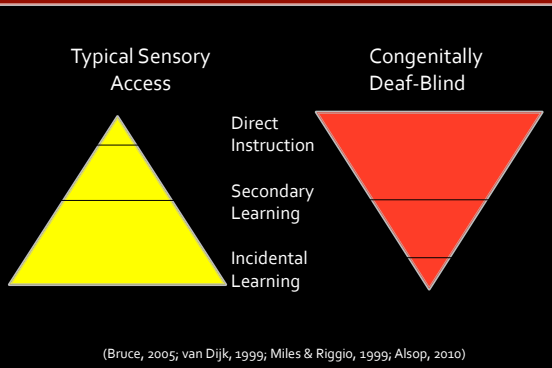
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### Impact of Deaf-Blindness and Incidental Learning



(Bruce, 2005; van Dijk, 1999; Miles & Riggio, 1999; Alsop, 2010)

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### Impact of Deaf-Blindness / Multiple Disabilities

- Sensory deficits
- Lack of social experiences
- Processing delays
- Unconventional forms of communication
- History of others doing FOR instead of WITH
- History of negative experiences with touch



Learned helplessness, stress, behaviors

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Profound Intellectual and Multiple Disabilities (PIMD):

- Impact of additional physical and motor impairments
- Difficulty regulating and maintaining equilibrium
- Seizures and neurological impairments
- Cognitive disabilities and learning challenges
- Sensory impairments to CNS

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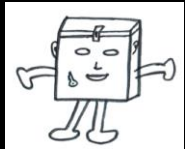
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**What do you have to open the box?**

- Relationships
  - Attachment, security
- Communication
- Sensory access
- Environmental supports
  - How can the environment be modified or altered to support sensory input?




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**NYCDC** **Population Overview**

- Increased population with multiple disabilities...
- 10,749 age 0-21 DB (2016 Child Count)
  - Approximately 90% have 1 or more additional disabilities
  - Most common: cognitive impairments (66-69%), orthopedic impairments (59-61%), and complex health care needs (51-52%)
  - In 2005: 13.1% had four or more additional disabilities
  - In 2016, 43% had four or more additional disabilities.

<http://nationaldb.org/reports/national-child-count-2016>

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**Supporting Communication for Learners**  
 -Who are they? How do we teach them? Multiple Modalities

| LEVEL                   | Examples   | Strategies   | Student Notes |
|-------------------------|--|--|---------------|
| <b>REFLEXIVE</b>        | <b>Reflexive Actions</b><br>Any response to stimulus that is automatic and does not require conscious thought or intention.    | Use of visual and auditory cues to draw attention to the stimulus. |               |
| <b>PURPOSEFUL</b>       | <b>Purposeful Actions</b><br>Any response to stimulus that is intentional and has a purpose.                                   | Use of visual and auditory cues to draw attention to the stimulus. |               |
| <b>UNCONVENTIONAL</b>   | <b>Unconventional Variations</b><br>Any response to stimulus that is unconventional and does not fit into a standard category. | Use of visual and auditory cues to draw attention to the stimulus. |               |
| <b>CONVENTIONAL</b>     | <b>Conventional Variations</b><br>Any response to stimulus that is conventional and fits into a standard category.             | Use of visual and auditory cues to draw attention to the stimulus. |               |
| <b>CONCRETE SYMBOLS</b> | <b>Concrete Symbols</b><br>Any response to stimulus that is concrete and can be directly experienced.                          | Use of visual and auditory cues to draw attention to the stimulus. |               |
| <b>ABSTRACT SYMBOLS</b> | <b>Abstract Symbols</b><br>Any response to stimulus that is abstract and cannot be directly experienced.                       | Use of visual and auditory cues to draw attention to the stimulus. |               |
| <b>COMBINED</b>         | <b>Combined Symbols</b><br>Any response to stimulus that is combined and uses multiple modalities.                             | Use of visual and auditory cues to draw attention to the stimulus. |               |
| <b>FORMALIZED</b>       | <b>Formalized Language</b><br>Any response to stimulus that is formalized and follows a set of rules.                          | Use of visual and auditory cues to draw attention to the stimulus. |               |

**Students who communicate pre-symbolically or even pre-intentionally**

**Current mastered & emerging levels of expressive communication**

**Use abstract modes of communication as models and for exposure, but make sure you scaffold abstract modes with concrete modes at your student's current expressive levels.**

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**NYSPCC** **Children with Limited/No Motor Control**

What do:

- Pre-intentional behaviors / reflexes
- Temperature
- Heart-rate
- Breathing pattern

...tell us about **availability for learning?**

and about visual / auditory / tactile attending...

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**NYSPCC** **Pre-intentional IEP Goals?**

Given a light touch on the shoulder, and shown the tangible symbol for a new activity, Sarah will demonstrate increased anticipation to develop understanding of transition between activities by reducing the elevation of her heart rate and breathing (\*provide measurements?\*)

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### Availability for Learning

How do you know if your child is *available for learning*?

- How can you tell that the child is:
  - Alert?
  - Attending?
  - Responsive or responding?
  - Processing information?
  - Retaining information?

What is learning?

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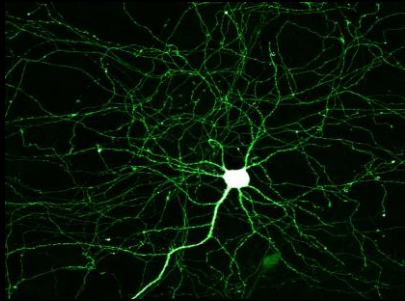
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### Learning is physical change in the brain.



(Slide from Susan Edelman, 2015) <http://encofalus.com/neurology/biology/neuromarketing-neuropolicy-center-emory/>

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### How do you know if your child is learning?

- **Habituation** – getting used to something
  - Eg something that used to make you startle, or be distracted, but now you don't notice it
- **Association** – spoon and pudding example
- **Anticipation** – shift in state given a cue
- **Surprise** – “a mismatch in expectations”

(Robbie Blaha, TSBVI)

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**NYCDOE** **NEW YORK DEPARTMENT OF EDUCATION**

## Orienting Reflex

- "A reflexive alerting to significant things"
- Shift in state
  - Agitated to calm, drowsy to alert
- NOT the same as "defensive startle"

- What does it look like for each child?
- Involve the family in identifying

(Blaha et al., TSBVI; Nelson et al., 2002)

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When are we *NOT* learning?

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## Stress: Good Cop vs Bad Cop

Stress is a protective response, but it is only helpful if limited.

- Respond to challenges and take on tasks
- Norepinephrine promotes brain development

*BUT* stress hormones cause damage if active too long

(Brown, 2011)

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### What does **TOXIC STRESS** look like?

- The stereotype is that stress looks like hyperactivity and nervousness, over-arousal
  - Tantrums, aggressive behaviors



- Stress can also be extreme under-responsiveness and inactivity
  - Exhaustion, shut-down, refusal, learned helplessness



(Brown, 2011)

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### Learned Helplessness

#### Loss of CENTER of CONTROL

- Overwhelmed, highly stressed
- Inability to communicate effectively
- Absence of natural motivators
- Reliant on others
- Feeling that "my actions do not have an impact"



Stop trying, shut down

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### Protective factors against **toxic stress**:

- The presence of sensitive/responsive caregivers
- Secure and safe relationships
- High-quality early care and education
- Peer acceptance
- Responsive environments
- Feelings of competence

(Brown, 2011)

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### Stress and Behavior

- Study by Nelson et al., 2013
  - Measuring cortisol levels before and after intervention
- Assumptions
- Results
  - Cortisol levels
  - Interventions

Maladaptive behaviors may actually serve as a coping mechanism against stress (rather than being an indicator of high levels of stress)

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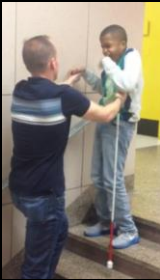
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### Video Example – Mobility Lesson

<https://vimeo.com/143912184>



- How is stress communicated, on what level?
- What feedback does the teacher give?
- Is this a good response?
- What would you do?

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### Video Example – 6 months later...

<https://vimeo.com/241426025>



- How to balance stress and the need for challenge?
- Security and control
- Consistency and persistence

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### Communication and Behavior

- ALL behavior is communicative
  - It is often up to the us to interpret the FUNCTION
  - Support communication development by giving feedback – RESPOND
- Unconventional Communication, Pre-Symbolic
  - Difficult to recognize, interpret, and respond to

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### Self-Stim in the Pursuit of Leisure

- We all have self-stimulatory behaviors
  - What are yours??
- Leisure/recreation activities
  - Fulfill multisensory functions and preferences
- What is the purpose of self-stim for your students?

(Adapted from Moss & Blaha. 1993)

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### Sensory Channels and "Behaviors"

| Channel        | " Creative Variations Which May Plug You Into a Written Behavior Plan"   |
|----------------|--|
| Tactile        | Pulling hair, lying in front of the air vent, slapping face/ear, playing with spit, rubbing head                             |
| Proprioceptive | Burrowing into furniture, wrapping arms inside tee-shirts, wrist flapping  |
| Visual         | Flicking hand in front of eyes, flipping pages of books, light gazing, playing with transparent or shiny objects, eye poking |
| Auditory       | Vocalizing or making sounds, banging on objects, tapping objects together next to ear  |
| Olfactory      | Rubbing feces on the body and smelling, smelling other peoples' hands or shoes   |
| Gustatory      | Mouthing objects, chewing on hair, sucking on fingers, licking objects   |
| Vestibular     | Rocking body, spinning, twirling in swings, head rocking   |

(Adapted from Moss & Blaha. 1993)

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### Sensory Channels and "Behaviors"

|                |   |
|----------------|---|
| Channel        | "Miss Manners' Guide to Appropriate Self-Stimulation"   |
| Tactile        | Twirling hair, drumming fingers, playing with condensation on a drinking glass, fingering fabrics, rubbing eyes                 |
| Proprioceptive | Snuggling in quilts, cracking knuckles, jiggling/crossing legs, sitting on your leg   |
| Visual         | Gazing at your fingernails, hands and rings, watching television without the sound, window shopping, flipping through magazines |
| Auditory       | Humming/whistling, tapping a pencil on a surface, playing background music  |
| Olfactory      | Wearing perfume, sniffing magic markers, scratch and sniff stickers, burning incense  |
| Gustatory      | Chewing flavored toothpicks, sucking on mints/hard candy, smoking, chewing on hair, sucking on pens/jewelry                     |
| Vestibular     | Rocking in chairs or rocking body, amusement park rides, dancing, twisting on bar stools, skating, sliding                      |

(Adapted from Moss & Blaha. 1993)

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### What to do with a sensory behavior?

- Allow?
- Schedule?
- Redirect?
- Replace?
- Adapt?
- Extinguish?

When is a behavior a PROBLEM?

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When is a behavior preventing availability for learning?

When is a behavior supporting availability for learning? ("Sensory Break")

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**NYSPC** NEW YORK STATE PROFESSIONAL COUNCIL ON EDUCATION  
**Self-injurious / harmful behaviors**

Why?

- Do they fulfill a sensory function?
- Do they result in attention or a tangible reward?
- Are they a response to pain or medical/physical input?
- What are they communicating to you?

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**NYSPC** NEW YORK STATE PROFESSIONAL COUNCIL ON EDUCATION  
**Assessing Behavior**

- Establish function(s) of a behavior
  - Behaviors frequently have multiple functions
- Behavioral intervention must be based on assessment, and focus on communication and **increasing availability for learning**
- We often do things that create or inadvertently reinforce behaviors
  - What could these be?

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**NYSPC** NEW YORK STATE PROFESSIONAL COUNCIL ON EDUCATION  
**Influences and Functions**

1. Physical-medical
  2. Attention eliciting
  3. Tangible: Object/activity eliciting
  4. Avoidance and escape
  5. Sensory pleasurable / sensory-seeking
- Self-stim can become self injurious

These functions are basic human rights

Imbalances in accessing these functions lead to challenging behaviors

(Luiselli, J.K., 1994)

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**NYSPC** NEW YORK STATE POLICE TRAINING CENTER

## Physical - Medical

**Pain:**

- Associated with physical disability/condition
- Ears, Eyes, Gastro
- Menstrual
- Growth pains/discomforts

**Arousal state:**

- Fatigue / lack of sleep
- Agitation

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**NYSPC** NEW YORK STATE POLICE TRAINING CENTER

## Indirect Assessment: MAS

- Rating questions to establish a function
- The Motivation Assessment Scale (MAS)

**Motivation Assessment Scale: Functions for usage**

- To direct our understanding of the behavior challenge to the intent of the challenge versus the way it appears or makes us feel.
- To understand the correlation between the frequency of the challenging behavior and its potential for multiple intents.
- To identify those situations in which an individual is likely to behave in certain ways (e.g., requests for change in routine or environment lead to biting).

**Outcomes:**

- To assist in the identification of the motivation(s) of a specified behavior.
- To make more informed decisions concerning the selection of appropriate reinforcers and supports for a specified behavior.

(Duraney & Durand, 1986)

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| Questions  | Never<br>0 | Almost<br>Never<br>1 | Seldom<br>2 | Half the<br>Time<br>3 | Usually<br>4 | Almost<br>Always<br>5 | Always<br>6 |
|--|------------|----------------------|-------------|-----------------------|--------------|-----------------------|-------------|
| 1. Would the behavior occur continuously if this person was left alone for long periods of time?   |            |                      |             |                       |              |                       |             |
| 2. Does the behavior occur following a request to perform a difficult task?  |            |                      |             |                       |              |                       |             |
| 3. Does the behavior seem to occur in response to your talking to other persons in the room/area?  |            |                      |             |                       |              |                       |             |
| 4. Does the behavior ever occur to get a toy, food, or an activity that this person has been told he/she can't have?                                       |            |                      |             |                       |              |                       |             |
| 5. Would the behavior occur repeatedly, in the same way, for long periods of time if the person was alone? (e.g. rocking back and forth for over an hour.) |            |                      |             |                       |              |                       |             |

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| Questions   | Never<br>0 | Almost<br>Never<br>1 | Seldom<br>2 | Half the<br>Time<br>3 | Usually<br>4 | Almost<br>Always<br>5 | Always<br>6 |
|---|------------|----------------------|-------------|-----------------------|--------------|-----------------------|-------------|
| 6. Does the behavior occur when any request is made of this person?   |            |                      |             |                       |              |                       |             |
| 7. Does the behavior occur whenever you stop attending to this person?  |            |                      |             |                       |              |                       |             |
| 8. Does the behavior occur when you take away a favorite food, toy or activity?   |            |                      |             |                       |              |                       |             |
| 9. Does it appear to you that the person enjoys doing the behavior? (It feels, tastes, looks, smells, sounds pleasing).   |            |                      |             |                       |              |                       |             |
| 10. Does this person seem to do the behavior to upset or annoy you when you are trying to get him/her to do what you ask? |            |                      |             |                       |              |                       |             |

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| Questions  | Never<br>0 | Almost<br>Never<br>1 | Seldom<br>2 | Half the<br>Time<br>3 | Usually<br>4 | Almost<br>Always<br>5 | Always<br>6 |
|--|------------|----------------------|-------------|-----------------------|--------------|-----------------------|-------------|
| 11. Does this person seem to do the behavior to upset or annoy you when you are not paying attention to him/her? (e.g. you are in another room or interacting with another person) |            |                      |             |                       |              |                       |             |
| 12. Does the behavior stop occurring shortly after you give the person food, toy, or requested activity?   |            |                      |             |                       |              |                       |             |
| 13. When the behavior is occurring does this person seem calm and unaware of anything else going on around her/him?  |            |                      |             |                       |              |                       |             |
| 14. Does the behavior stop occurring shortly after (one to five minutes) you stop working with or making demands of this person?   |            |                      |             |                       |              |                       |             |
| 15. Does this person seem to do the behavior to get you to spend some time with her/him?   |            |                      |             |                       |              |                       |             |
| 16. Does the behavior seem to occur when this person has been told that he/she can't do something he/she had wanted to do?   |            |                      |             |                       |              |                       |             |

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|                           | Sensory | Escape | Attention | Tangible |
|---------------------------|---------|--------|-----------|----------|
|                           | 1.      | 2.     | 3.        | 4.       |
|                           | 5.      | 6.     | 7.        | 8.       |
|                           | 9.      | 10.    | 11.       | 12.      |
|                           | 13.     | 14.    | 15.       | 16.      |
| <b>Total Score =</b>      |         |        |           |          |
| <b>Mean Score =</b>       |         |        |           |          |
| <b>Relative Ranking =</b> |         |        |           |          |

- There may be multiple functions
  - Usually one main function
- Multiple team members should complete MAS
- Compare and discuss
  - Talk about current responses to the behavior
  - Design intervention

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### Video Example – Intervener Support

<https://vimeo.com/127298149>



- What is the student supposed to be doing?
- Describe the challenging behavior.

- Why do you think the student does the behavior?
- How does the teacher respond?
- Why does the teacher's response work?

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### When is the child ready for an activity?

Study (Green et al., 1994):

- 98% trainers (teachers): Reported it was helpful to conduct training when students were alert vs non-alert
- 69% reported postponing training due to non-alertness

How can we promote alertness when a child is non-alert?

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| Calming and Alerting Stimuli |                              |                         |
|------------------------------|------------------------------|-------------------------|
| CHANNEL                      | CALMING                      | ALERTING                |
| Vestibular                   | Slow rhythmic rocking        | Fast irregular spinning |
| Tactual                      | Firm touch, warmth           | Light touch coolness    |
| Auditory                     | Soothing music, quiet rhythm | Fast loud music         |
| Olfactory                    | Pleasant scents              | Strong pungent odors    |
| Visual                       | Dim light                    | Bright Light            |

### What calms and alerts you?

(Sam Morgan, adapted from Guess et al., 1988 )

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**NYC** **Preferred Sensory Modalities**  
NEW YORK DEAF-BLIND EDUCATION

- Visual
- Auditory
- Vestibular
- Proprioceptive
- Kinesthetic
- Olfactory
- Gustatory

**Which are best for:**

- Gaining child's attention?
- Changing their state?
- Conveying information?

(Blaha et al., TSBVI)

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**Identifying Sensory Preferences**

**Adapted Version of Koenig and Holbrook's Sensory Channel Form**  
(from Learning Media Assessment of Students with Visual Impairments, 1995, Texas School for the Blind)

V = visual; T = tactile; A = auditory; M = movement; S = smell

Child's Name: \_\_\_\_\_ DOB: \_\_\_\_\_  
 Completed By: \_\_\_\_\_ Date Completed: \_\_\_\_\_

| Behavior                | Sensory Avenue(s) Utilized |   |   |   |   |
|-------------------------|----------------------------|---|---|---|---|
|                         | V                          | T | A | M | S |
| Behavior Observation #1 |                            |   |   |   |   |
| Behavior Observation #2 |                            |   |   |   |   |
| Behavior Observation #3 |                            |   |   |   |   |
| Behavior Observation #4 |                            |   |   |   |   |

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|   |   |   |   |   |   |
|---|---|---|---|---|---|
| What calms the child? (describe)                      | V | T | A | M | S |
| What alerts the child? (describe)                     | V | T | A | M | S |
| What stresses the child? (describe)                   | V | T | A | M | S |
| What overloads the child? (describe)                  | V | T | A | M | S |
| What are the child's favorite toys? (describe)        | V | T | A | M | S |
| What activities does the child anticipate? (describe) | V | T | A | M | S |
| What motivates the child to move? (describe)          | V | T | A | M | S |

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(Appendix 7-B)

**"LIKES" INFORMATION**

Child: \_\_\_\_\_ Date: \_\_\_\_\_ 

| FOODS<br>taste/texture           | SMELLS | TOUCH<br>texture/temperature/light-heavy | MOVEMENT<br>rock/forward/away | VIBRATION<br>car ride/teeth appliances | SIGHTS<br>light/shadows       | SOUNDS<br>video/music/pink/redness/echo/reverberate |
|----------------------------------|--------|--|-------------------------------|--|-------------------------------|---|
|                                  |        |  |                               |  |                               |   |
| MUSCLES<br>push-pull/beer weight | PEOPLE | PLACES                                   | ACTIVITIES                    | TOYS                                   | SELF-STIMULATION<br>BEHAVIORS | OTHER   |
|                                  |        |  |                               |  |                               |   |

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(Appendix 7-B)

**"DISLIKES" INFORMATION**

Child: \_\_\_\_\_ Date: \_\_\_\_\_ 

| FOODS<br>taste/texture           | SMELLS | TOUCH<br>texture/temperature/light-heavy | MOVEMENT<br>rock/forward/away | VIBRATION<br>car ride/teeth appliances | SIGHTS<br>light/shadows       | SOUNDS<br>video/music/pink/redness/echo/reverberate |
|----------------------------------|--------|--|-------------------------------|--|-------------------------------|---|
|                                  |        |  |                               |  |                               |   |
| MUSCLES<br>push-pull/beer weight | PEOPLE | PLACES                                   | ACTIVITIES                    | TOYS                                   | SELF-STIMULATION<br>BEHAVIORS | OTHER   |
|                                  |        |  |                               |  |                               |   |

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What Makes a Good Conversation?




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# Biobehavioral States & Assessing Availability

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## Biobehavioral States: What are they?

- States refer to the condition of a person at a particular moment
- Biobehavioral refers to the influences on a child's state
  - Internal Factors
  - External Factors

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(Appendix 6)

### Internal and External Factors that Influence Availability to Learn

A student's availability to learn changes moment by moment based on the balance between what is happening inside him and what is happening outside him.



- Internal factors:**
- How the student feels physically & emotionally
  - Medical conditions
  - Illness or pain
  - Impact of medications
  - Amount of sleep the night before
  - Impact of visual, auditory, and tactile abilities on learning
  - Sensory processing or sensory integration difficulties

- External factors:**
- Lighting (location and type)
  - Background noise
  - Smells
  - The number of people and their movement around the student
  - Tactual input
  - Physical supports, positioning, or equipment



(Scoggin et al., 2014; OHOA Module 5)

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**NYPC** NEW YORK DEAF-BLIND EDUCATION

### Bio Behavioral States:

CAROLINA RECORD OF INDIVIDUAL BEHAVIOR

- Deep sleep
- Intermediate sleep
- Active sleep
- Drowsy
- Quiet awake
- Active awake
- Fussy awake
- Mildly agitated
- Uncontrollably Agitated

D. GUESS ET AL 1988, 1993

- Sleep States
  - Inactive
  - Active
- Indeterminate States
  - Drowsy
  - Daze
- Preferred awake state
  - Inactive alert
  - Active alert
- Other awake States
  - Awake active Stereotypic
  - Crying agitated

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**NYPC** NEW YORK DEAF-BLIND EDUCATION

### Bio Behavioral States: Why is it important?

- A child must be in an alert state to receive and process information – to learn
- What can we do to control the internal and external factors to increase availability for learning?

*Each state has a purpose for that individual*

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### Assessment of Biobehavioral States

- Purpose: To generate information that supports an intervention plan
  - Increase availability for learning
  - *Modify internal and external factors*
  - The environment and presentation of materials
  - Communication & interactions
  - Schedule and timing
  - Biophysical management plan: meds, food/liquid, sleep, positioning

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**ASSESSMENT OF VOLUNTARY MOVEMENT COMPONENT**  
 Adapted from work done by  
**JANE KORSTEN & DIXIE DUNN of RESPONSIVE MANAGEMENT INC.**

By Robbie Blaha and Stacy Shafer: TSBVI Outreach, 1996

| NAME: SUSIE                    |   | DATE: 9/18/96 |       |     |     |       |      |      |      |         |          | STAFF: MS. JONES |        |       |
|--------------------------------|---|---------------|-------|-----|-----|-------|------|------|------|---------|----------|------------------|--------|-------|
|                                | State   | Leg           | Mouth | Eye | Ear | Cheek | Chin | Neck | Head | Arm     | Shoulder | Hand             | Foot   | Other |
| Position #1<br>Supine          | Initial<br>D<br>Changes<br>MA<br>Main<br>MA         | R<br>V        | V     | V   |     |       | V    |      | V    | R<br>V  | R<br>V   | R<br>V           | R<br>V |       |
| Position #2<br>Side-<br>Lying  | Initial<br>D<br>Changes<br>MA, FA, AA<br>Main<br>AA | R<br>V        | V     |     |     |       | V    |      | V    | R<br>IN |          | R<br>IN          | R<br>V |       |
| Position #3<br>Wheel-<br>chair | Initial<br>AA<br>Changes<br>D<br>Main<br>AA         | R<br>V        | V     | V   |     |       | IN   |      | IN   |         |          |                  |        |       |

Blaha & Shafer, 1996. [www.tsbvi.edu](http://www.tsbvi.edu)

**State Assessment: Levels of Arousal**  
 Smith, M. & Shafer, S. (in press). State assessment: Levels of arousal. Retrieved March 26, 2003, from  
<http://www.tsbvi.edu/Outreach/seehear/archive/biobehav.htm>

|           | STATE ASSESSMENT (Levels of arousal) |      |      |       |       |       |      |      |      |      |      |      | COMMENTS |  |
|-----------|--------------------------------------|------|------|-------|-------|-------|------|------|------|------|------|------|----------|--|
|           | 7:30                                 | 8:30 | 9:30 | 10:30 | 11:30 | 12:30 | 1:30 | 2:30 | 3:30 | 4:30 | 5:30 | 6:30 |          |  |
| SUNDAY    |                                      |      |      |       |       |       |      |      |      |      |      |      |          |  |
| MONDAY    |                                      |      |      |       |       |       |      |      |      |      |      |      |          |  |
| TUESDAY   |                                      |      |      |       |       |       |      |      |      |      |      |      |          |  |
| WEDNESDAY |                                      |      |      |       |       |       |      |      |      |      |      |      |          |  |
| THURSDAY  |                                      |      |      |       |       |       |      |      |      |      |      |      |          |  |
| FRIDAY    |                                      |      |      |       |       |       |      |      |      |      |      |      |          |  |
| SATURDAY  |                                      |      |      |       |       |       |      |      |      |      |      |      |          |  |
| SUNDAY    |                                      |      |      |       |       |       |      |      |      |      |      |      |          |  |
| MONDAY    |                                      |      |      |       |       |       |      |      |      |      |      |      |          |  |
| TUESDAY   |                                      |      |      |       |       |       |      |      |      |      |      |      |          |  |
| WEDNESDAY |                                      |      |      |       |       |       |      |      |      |      |      |      |          |  |
| THURSDAY  |                                      |      |      |       |       |       |      |      |      |      |      |      |          |  |
| FRIDAY    |                                      |      |      |       |       |       |      |      |      |      |      |      |          |  |
| SATURDAY  |                                      |      |      |       |       |       |      |      |      |      |      |      |          |  |

Directions: Mark the state the child was predominantly in at the end of each half hour interval.

|                        |                              |
|------------------------|------------------------------|
| 0 - Seizure            | 6 - Active Awake             |
| 1 - Deep Sleep         | 7 - Fussy Awake              |
| 2 - Intermediate Sleep | 8 - Mild Agitation           |
| 3 - Active Sleep       | 9 - Uncontrollable Agitation |
| 4 - Drowsiness         |                              |
| 5 - Quiet Awake        |                              |

**NYCPC** Assessing Bio Behavioral States:  
 What are the steps?

**Part 1**  
 Gather information about the 24 hours before observation

**Part 2**  
 • Observation and assessment of states, environments, and input

**Part 3**  
 • Summarize and develop strategies for intervention





Informal Evaluation:

Note any informal trends observed in each behavior state, in relation to: Time, Position, Environmental, Social Context, Communication Partner. For example, AA Trend Position = Supine (Student was observed generally in Asleep-Active position when supine). \*Do not note trends unless observed specifically.

| Behavior State | Time | Position | Environmental (Ambient) | Social Context | Communication Partner |
|----------------|------|----------|-------------------------|----------------|-----------------------|
| AI             |      |          |                         |                |                       |
| AA             |      |          |                         |                |                       |
| DR             |      |          |                         |                |                       |
| DA             |      |          |                         |                |                       |
| AWAI           |      |          |                         |                |                       |
| AWAA           |      |          |                         |                |                       |
| CR             |      |          |                         |                |                       |
| Z              |      |          |                         |                |                       |

New York Deaf-Blind Collaborative, 2010

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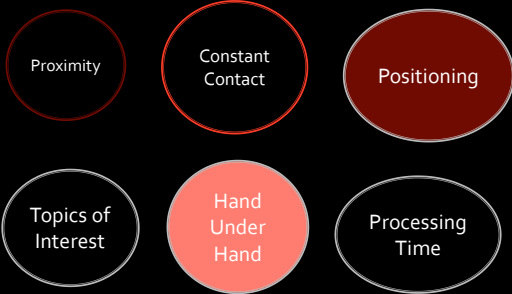
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### Encouraging Availability & Exploration



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### Exploring the world beyond arm's reach...

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**NYC** **Active Learning (Lilli Nielsen)**  
NEW YORK DEAF-BLIND EDUCATION

- Children learn by being active, rather than passive recipients of stimulation

**Concepts:**

- cause/effect
- object permanence
- spatial memory
- comparison of objects
- same/different

**Encourage exploration & experience**

- Motor skills
- O&M

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**The "Little Room" by Lilli Nielsen**



**A constructed learning environment**

- Stimulate and encourage movement



- Requires consistent monitoring
- NOT a babysitting device
- Instructional activity for limited time

Photos Courtesy of:  
<http://www.nfb.org/images/nfb/publications/fr/22/506sum08.htm>  
<http://pmedia.ask.com/1s?u=wikimedia/en/thumb/4/4c/3lmylittleroom2.jpg/180px-3lmylittleroom2.jpg>

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**Active Learning - Little Room**



What would a reactive environment look like for an older student?

[http://www.youtube.com/watch?v=X7\\_S4dfN\\_U](http://www.youtube.com/watch?v=X7_S4dfN_U)

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# Access

Is the information being provided accessible to the student?

Is the environment accessible?

- Cognitive
- Sensory
- Physical
- Linguistic
- Temporal

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## Video Example – Proximity



How does this communication partner encourage exploration and provide tactile proximity at a distance?

<https://vimeo.com/239352986>

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## Video Example – Proximity



How does Heather use tactile input to convey information at a distance?

<https://vimeo.com/237625346>

Heather Withrow  
<http://hexwit.blogspot.com/>

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**NYSPCC** NEW YORK DEAF-BLIND EDUCATION CENTER **CVI – Implications of Positioning**



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**NYSPCC** NEW YORK DEAF-BLIND EDUCATION CENTER **Positioning for a Student with CVI**



What are all the adaptations you can find to support this student's attention/learning?

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 **Video Example – Julianna & Literacy Group Lesson**



<https://vimeo.com/35997208>  
<https://vimeo.com/36015272>

Consider the student's position:

- Access – visual, motor
- Physical and other prompts/interactions by teachers
- What would you do differently?

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Positioning and Adaptations for Students with Deaf-Blindness and/or Multiple Disabilities  
Chart for Planning Activities

| Activity | Position of Student<br>(Seated, standing, moving/walking, side-lying, supine, prone, kneeling, cross-legged, etc.) | Physical adaptive equipment needed<br>(stander, assistive mobility device, adapted chair or attachment, pillow, tumble form, arm rest, cane, wheelchair, etc.) | Extra adaptations and equipment needed for student to attend<br>(slant board, presentation of materials, visual adapt., etc.) | Physical assistance provided by teacher<br>(hand under hand, coactive movement, coactive manipulation, physical support, etc.) |
|----------|--|--|---|--|
|          |  |  |   |  |
|          |  |  |   |  |
|          |  |  |   |  |
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New York Deaf-Blind Collaborative, 2016

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### Processing ("wait") time

"One or two minutes sounds like a relatively short period of time, but when you are waiting for a child to act on a request, it can seem like an eternity."




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### Environments that encourage communication

are:

- Consistent
- Predictable
- Motivating / Child-centered

...in routines that allow for:

- Anticipation
- Practice
- Success
- Fun and social exchanges!

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# Questions?

Chris Russell  
Project Coordinator, NYDBC  
Christopher.russell@qc.cuny.edu

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Thank you for participating.  
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New York Deaf-Blind Collaborative

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