Biobehavioral States: What Are They

- States refers to the condition of a person at a particular moment
- Biobehavioral refers to the influences on a child’s state
  - Bio-Physical factors such as hunger, fatigue, comfort
  - Behavioral
    - Internal such as emotions and preferences
    - External environmental factors such as noise, temperature, materials, and social contact
Biobehavioral States

States (Caroline Record of Individual Behavior [CRIB])
- Deep Sleep
- Intermediate Sleep
- Active Sleep
- Drowsy
- Quiet Awake
- Active Awake
- Fussy Awake
- Mildly Agitated
- Uncontrollably Agitated

States (Guess et. Al. 1988)
- Sleep States
  - Asleep - Inactive
  - Asleep – Active
- Indeterminate States
  - Drowsy
  - Daze
- Preferred Awake State
  - Awake Inactive - Alert
  - Awake Active – Alert
- Other Awake States
  - Awake Active/Stereotype
  - Crying/Agitated
Biobehavioral States: Who is it appropriate for?

For students with profound disabilities

- Who have trouble self regulating and may frequently be sleepy, irritable, or anxious, and students who over stimulate and shut down easily
- Can not effect basic change in their environment
- Can not communicate their most basic needs effectively or consistently
Biobehavioral States: Why is it important?

- A child must be in an alert state to receive and process information – to learn
- Students do not learn when they are in lower (sleepy) and higher (agitated) states
- In order for these children to learn we must know what brings them to an optimal state where they are ready to receive and process information
- Each state has a purpose for that individual
Assessing Biobehavioral States:
What Do You Assess

What do you assess

- Medical
  - Conditions, seizure disorder, medications

- Nutritional/Hydration
  - Food and liquid intake oral/tube

- Environmental
  - Temperature, lighting, positioning, social, available stimuli/activities
Assessing Biobehavioral States: Observation

What are you actually observing or what makes a state a state

- Motor?
- Vocalizations?
- Physiological?
- Self stimulatory Behaviors?

Interobserver agreement

- Guy, Guess, Mulligan-Ault (1993) .74 to .93
- Alt, Guy, Guess, Bashinski, and Roberts (1995) BBS Observation training package
  - Pre test .67 to .91 (.78)
  - Post test .66 to .99 (.85)
Assessing Biobehavioral States: 
What are the steps?

**Part 1**

Should be gathered at home and school for the 24hrs preceding part 2 of the assessment (Gathered by parents ideally but if not possible through interview)

- Food and liquid
- Medication
- Seizures
- Sleep
- Elimination
Assessing Biobehavioral States: What are the steps?

Part 2
- Decide on a recording interval of between 1 to 15 m.
- Record for what is happening at the particular moment not the entire interval
- Time, Activity, State, Position, Stimuli, Ambient Conditions, Social Conditions

Part 3
- Summarize information for alert states, sleepy states, and agitated states.
- Impact of food, liquid, and medication schedules
Biobehavioral States: Manipulating States

- The primary task for the teacher of students with profound disabilities is to use environmental management to create conditions that bring a student into an alert state and maintain it for as long as possible.
- Analysis yields information on what effects states which the teacher uses to stimulate the student into an alert state.
- Moderate Novelty
  - Using something different in a familiar activity, or in an unrelated context.
  - Too much can cause withdrawal.
  - An alert state is maintained by an attractive stimuli not an aversive one.
  - Novelty wears off.
  - Use enough repetition to build memory but stop when interest lost.
### Biobehavioral States: Manipulating States

#### Calming and Alerting Stimuli

<table>
<thead>
<tr>
<th>Channel</th>
<th>Calming</th>
<th>Alerting</th>
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<tbody>
<tr>
<td>Vestibular</td>
<td>Slow rhythmic rocking</td>
<td>Fast irregular spinning</td>
</tr>
<tr>
<td>Tactual</td>
<td>Firm touch, warmth</td>
<td>Light Touch, coolness</td>
</tr>
<tr>
<td>Auditory</td>
<td>Soothing music, quiet rhythm</td>
<td>Fast, loud music</td>
</tr>
<tr>
<td>Olfactory</td>
<td>Pleasant scents</td>
<td>Strong pungent odors</td>
</tr>
<tr>
<td>Visual</td>
<td>Dim light</td>
<td>Bright light</td>
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