Why is TBI different from other disabilities?

- Acquired Brain Injuries can result from traumatic or non-traumatic sources
  - Acquired sources: ingest toxic substance, stroke, brain tumor, hypoxia...
  - Traumatic sources: Fall, MVA, assault, abuse, sports, recreation, struck by/against...
  - Skull may be open or closed.
- TBI is recognized as a SPED category under IDEA. ABI is not.
The Oregon Department of Education defines a **Traumatic Brain Injury** as:

...an acquired injury to the brain caused by an external physical force, resulting in total or partial functional disability or psychosocial impairment, or both, that adversely affects a child’s educational performance. The term applies to open or closed head injuries resulting in impairments in one or more areas, such as cognition; language; memory; attention; reasoning; abstract thinking; judgment; problem-solving; sensory, perceptual, and motor abilities; psychosocial behavior; physical functions; information processing; and speech. The term does not apply to brain injuries that are congenital or degenerative, or to brain injuries induced by birth trauma.

**TBI is a Low Incidence Disability**

- 1.4 million children injured annually (CDC)
- Each year 180/100,000 infants, children & adolescents hospitalized for TBI (Krause, 1995)
- However, TBI is under-identified for SPED services in schools.

**Numbers in Oregon**

- 566,067 students in Oregon schools
- 1,018 students hospitalized for TBI annually
- If 16% require SPED services... (Zaloshnà, et al., 2008)
- Conservative cumulative estimate for k-12... 1,955 Oregon students need SPED services for TBI

**Identified on 2009 Oregon SPED census:**

294
TBI vs. Other Disabilities

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>TBI</th>
<th>Autism</th>
<th>Learning Disability</th>
<th>Emotional Disturbance</th>
<th>ADHD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudden onset</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Previous successful functioning at higher level</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Prior self-image as “normal,” loss of sense of self</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Medical complications and fatigue are common</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Previously learned information can assist in re-acquiring skills</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Problems generalizing new information</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Inconsistent patterns of performance</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Memory difficulties</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Compromised self-awareness and difficulty recognizing difficulties</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Extreme difficulties with self-regulation</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Difficulty building or maintaining interpersonal relationships</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Inappropriate behavior in normal circumstances</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Poor judgment and loss of emotional control</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Slower pace of skill acquisition</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Family grief experience</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td></td>
</tr>
</tbody>
</table>

Unique to TBI

- Sudden onset
- Previous functioning at higher level
- Loss of prior self-image as “normal"
- Medical complications are common
- Previous knowledge can help or hinder re-acquiring skills
- Loss of sensory functioning

Traits shared with other disabilities:

- Problems generalizing new information
- Inconsistent patterns of performance
- Memory difficulties
- Compromised self-awareness and difficulty recognizing difficulties
- Extreme difficulties with self-regulation
- Difficulty building or maintaining interpersonal relationships
- Inappropriate behavior in normal circumstances
- Poor judgment and loss of emotional control
- Slower pace of skill acquisition
- Family grief experience
As a Highly Competent Professional

- You multi-task
- Learn new information easily
- Get along well with others
- Are adaptable
- Flexible
- And solve problems quickly

Let’s Practice

Imagine if you came to work after falling off a ladder and what you just experienced was part of your new reality......
What Students With TBI Need

- Schools are the rehab that most students with TBI receive
  - Provides
    - Support with known people
    - Familiar routines
    - Repetition

Two Critical Intervention Stages

Credit: Sandra Chapman, Dallas Children’s Hospital
With Effective Intervention…

Without Intervention

Normal Development

Effective Intervention

What Teachers Can Do

Teachers can…
- Prepare
- Prevent
- Teach
- Work Around
What the Experts Say

- Article reviewing state of the art services for supporting students with TBI

Preventing School Failure: How to Provide Support for TBI (2005)

- Provide a single source of information
  - Evidence-based
  - Promising-practices
  - Tools

- Available to Oregon schools:
  - TBI Ed. website: www.tbied.org
  - TBI Statewide Seminar Series
  - Regional training opportunities


...Support for TBI (continued)

- Supplement information with:
  - Coaching
  - In-service training
  - Periodic consultation
    - Detailed and specific strategies for TBI

- Available to Oregon schools:
  - TBI Liaisons
  - Oregon TBI Team (organized within regions)

…Support for TBI? (continued)

- Structured process for school reentry and 504/IEP development
  - Checklists and guides
- Available to Oregon Schools:
  - [www.tbied.org](http://www.tbied.org) provides checklists and information on the process
  - Oregon TBI Liaisons & Team are trained in the process


Suggestions from Experienced Educators and The Literature:

- Establish a communication system early
  - Link school, family and rehab
  - Consider family needs and strengths
  - Appoint a school staff member as liaison
- Obtain:
  - Info about the injury
  - Successful interventions from rehab


Suggestions… continued

- Tailor interventions to student’s strengths and needs
- Structure:
  - School day for productivity
  - Environment to fit needs
  - Be prepared to make changes

Examples of Helpful Interventions

- Formalize support through a 504 or IEP
- Explicitly teach executive functions
- Teach scripts and routines for completing tasks and navigating challenging situations
- Maximize hands-on demonstration
- Emphasize concept over quantity of work
- Don't penalize slower performance
- Break down tasks into smaller segments

Supports available to districts in Oregon

Working to create statewide infrastructure:

Model of Service Delivery for Oregon Students with TBI
Regional Programs for Low Incidence Disabilities

Oregon Statewide Leadership Grant (Teaching Research-Eugene)

- 1 Liaison per region at .5 FTE
- TBI Coaches
  - 1.0 FTE/region minimum
  - Building capacity for school teams serving students with TBI
  - Coaching teams/staff in schools for students who have TBI
- Provide state-wide leadership for TBI Liaisons & Coaches, Team
  - Providing leadership for TBI with Districts, Staff, SPED Directors, & 504 coordinators
- Collect data for continuous program improvement
- Support evidence-based capacity building at state, regional and district levels
- Providing educational opportunities open to educators in Oregon
- Offering materials and referral for parents seeking help
- Serve as a central point of contact for regional medical centers
- Serving as a centralized data collection point
- Building awareness of needs & services for students with TBI
- Assisting districts to identify need and build regional capacity
- Receive information & Referring students to TBI Coaches

Regional Model of Service Delivery

- Statewide between 08-09 & 09-10
  - Oregon TBI Team increased by 48%
    - 147 team members 2010
  - 37% increase in number of students served
    - 216 students in 2009-10
  - Increased contacts by 167%
    - 1,309 contacts in 2009-10

Pilot Data- Type of Services Provided

- 65% (11/17) Ongoing coaching for strategies
- 65% (11/17) Problem solving processes- identify and worked on specific issues
- 65% (11/17) Shared information
- 35% (6/17) Shared resources
- 24% (4/14) helped with SPED processes
### Pilot Data-Coaching Evaluation

- **89%** (5.35/6) satisfaction
- **93%** (16/17) improved staff response and or services to support student
- **64%** (11/17) Student improved academics and or behavior
- **0%** No change or a negative change

### Statewide:

**Behavior Challenges Reduced When…**

- Communication increased and was ongoing
- Staff capacity increased through training
- Change carried out in any of several areas; environment, instruction, personnel, and the student
- Staff were consistent in approach to student
- Expectations were modified
- Mentors were matched to the student

### 2010-11

**What is happening in your region?**

- Region 3
- Region 8
List of Liaisons & Contact Information

<table>
<thead>
<tr>
<th>Region</th>
<th>Name</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Eastern Oregon</td>
<td>Lon Thornburg</td>
<td><a href="mailto:lon.thornburg@umesd.k12.or.us">lon.thornburg@umesd.k12.or.us</a></td>
<td>541-966-3162</td>
</tr>
<tr>
<td>2 – Central Oregon</td>
<td>Sue Hayes</td>
<td>sue <a href="mailto:hayes@dheds.org">hayes@dheds.org</a></td>
<td>541-675-5712</td>
</tr>
<tr>
<td>3 – Southern Oregon</td>
<td>Vicki Bernard</td>
<td>vicki <a href="mailto:Bernard@wesd.k12.or.us">Bernard@wesd.k12.or.us</a></td>
<td>541-776-5551</td>
</tr>
<tr>
<td>4 – Cascades North</td>
<td>Betty Capt</td>
<td>betty capit@bndis 12.or.us</td>
<td>541-672-2098</td>
</tr>
<tr>
<td>4 – Cascades South</td>
<td>Brenda Ritz</td>
<td><a href="mailto:bndes@nresd.k12.or.us">bndes@nresd.k12.or.us</a></td>
<td>541-266-4015</td>
</tr>
<tr>
<td>5 – Willamette</td>
<td>Pam Carey</td>
<td><a href="mailto:pam.carey@wesd.org">pam.carey@wesd.org</a></td>
<td>503-385-4598</td>
</tr>
<tr>
<td>6 – Columbia</td>
<td>Penny Jordan</td>
<td><a href="mailto:penny.jordan@coososk12.net">penny.jordan@coososk12.net</a></td>
<td>503-260-4958</td>
</tr>
<tr>
<td>7 – Lane County</td>
<td>Wendy Frieden</td>
<td><a href="mailto:wendy@lane.k12.or.us">wendy@lane.k12.or.us</a></td>
<td>541-790-7859</td>
</tr>
<tr>
<td>8 – Northwest Oregon</td>
<td>Laura Bekken</td>
<td>Laura <a href="mailto:Bekken@wesd.k12.or.us">Bekken@wesd.k12.or.us</a></td>
<td>503-814-1583</td>
</tr>
</tbody>
</table>

Max’s Law
What does it mean for SPED?
Overview: SB 348  Max’s Law

3 Requirements of Max’s Law:
- Coaches receive annual training in concussion recognition and management
- Same Day No Play
- Athlete cannot return to play until
  - a release is signed by health care professional and
  - athlete no longer has symptoms

Concussion Management Steps

- Recognize
- Remove
- Refer
- Return
  - Follow graduated return to play & academic guidelines
  - Medical clearance signed
  - Student is symptom free
    - School makes final decision for return

Implementing Max’s Law

- OSAA website- for coaches
- Max’s Law—Implementation Guide for School Administrators
  - Distributed to all high schools by PACE and OSBA
Regional managers decision

☐ If symptoms last more than 45 days
☐ Contact regional TBI Liaison directly or email: tbiteam@wou.edu

Traumatic Brain Injury Resources

☐ TBI Educator www.tbied.org
☐ Website devoted to serving those who serve Oregon students with TBI
☐ Brain line www.brainline.org
☐ Resources for preventing, treating, and living with brain injury
☐ Brain Injury Partners http://free.braininjurypartners.com/
☐ Tools and training to help parents to navigate the school system
☐ LearNet www.projectlearnet.org
☐ Examples of teaching strategies, tutorials, etc.
☐ Ask a Research Librarian
☐ Laura Beck can identify and retrieve appropriate information resources
☐ Phone: 877.872.7246
☐ Email: tbiteam@wou.edu
☐ Pat Sublette, Ph.D.
  Oregon TBI Education Services Coordinator
  541-346-0597