Webcast Series: Traumatic Brain Injury (TBI) and Challenging Behavior

Planning Interventions for Challenging Behavior after TBI

TBI Webcast Series
1. The Effects of TBI on Student Behavior
2. Ten Strategies for Preventing Challenging Behavior after TBI
3. Using FBA to Understand Challenging Behavior after TBI
*4. Planning Interventions for Challenging Behavior after TBI

WISCONSIN DEPARTMENT OF
PUBLIC INSTRUCTION

Traumatic Brain Injury Webcast Series

Sponsored by: Wisconsin Department of
Public Instruction

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PUBLIC INSTRUCTION

Before Viewing this Webcast...

- Please view the first three webcasts in this series
1. The Effects of TBI on Student Behavior
2. Ten Strategies for Preventing Challenging Behavior after TBI
3. Using FBA to Understand Challenging Behavior after TBI
- Please download the following document which will be referenced in this presentation and is available at http://dpi.wi.gov/sped/tbi.html
  - Intervention Planning Worksheet
- All names of students have been changed and identifiable situations altered to protect student confidentiality

Additional Resources to View

Level I Traumatic Brain Injury Training Modules

- Module 1: Introduction
- Module 2: Understanding TBI
- Module 3: Returning to School
- Module 4: Planning to Meet the Needs of Students with TBI
- Module 5: Providing Positive Behavioral Interventions
- Module 6: Supporting Students with Mild Brain Injury

http://www.dpi.state.wi.us/sped/tbi-trg-pres.html

TBI and Memory Module Webcast

http://dpi.wi.gov/sped/tbi-memory.html

Overview of Webcast 3

- Competing Behavior Pathways
- Six Steps in Planning Interventions
- Teaching Functional Communication
- Multi-component Interventions

Planning Interventions: Examples

- Joe shoves in the lunch line

- Daniel yells and throws his book when his math teacher gives him independent work

- Latoya doesn't initiate tasks she can perform unless cued and prompted

- Maria interrupts other students and repeatedly wanders around the classroom

Why is intervention so important?

- Students with challenging behavior are at risk for
  - Academic failure
  - School dropout
  - Poor social relationships
  - Poor adult outcomes
- Well-planned interventions can prevent these outcomes

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Competing Behavior Pathway: Identify behavior, triggers, consequences and functions
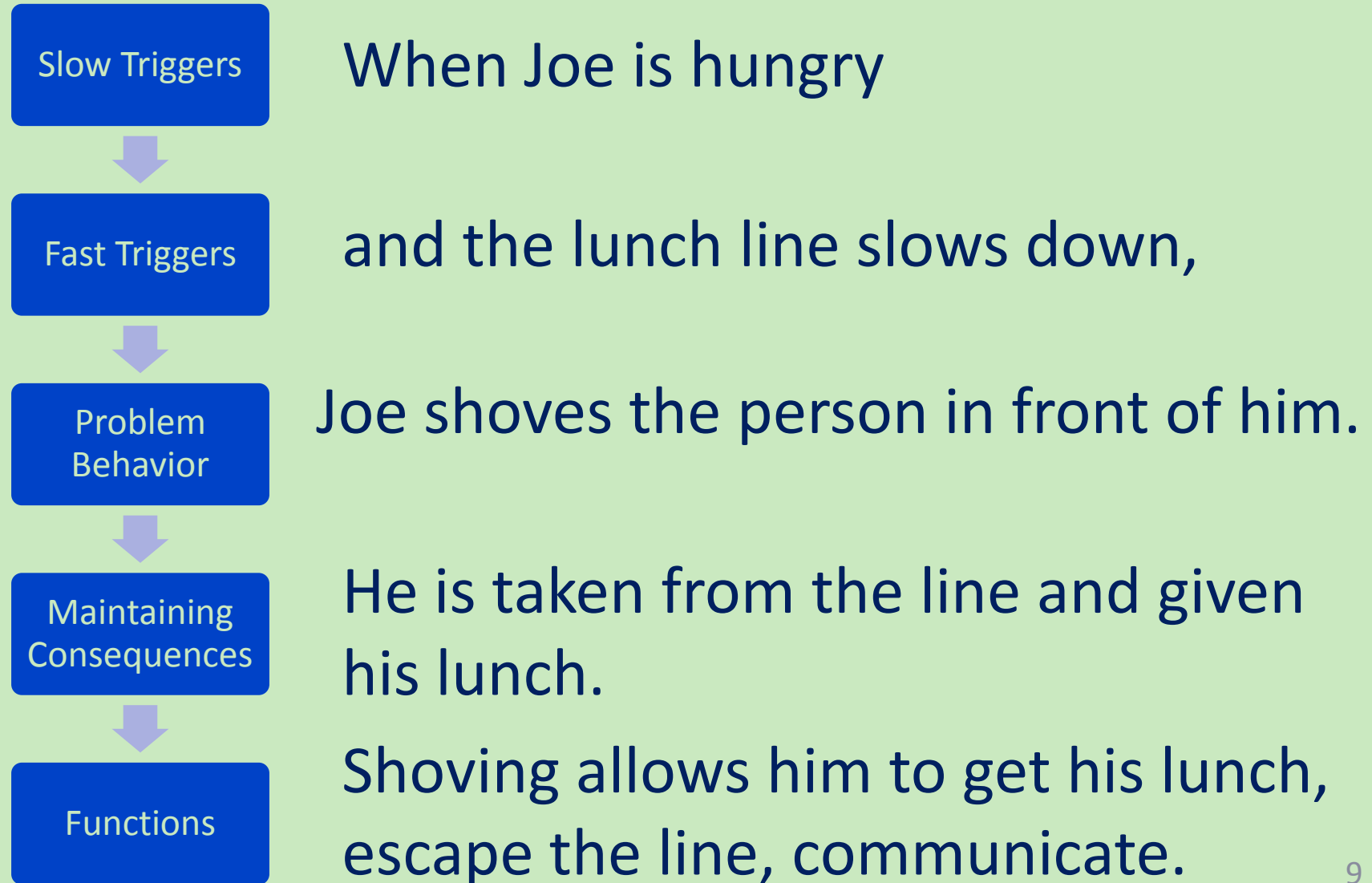
Current pathway:

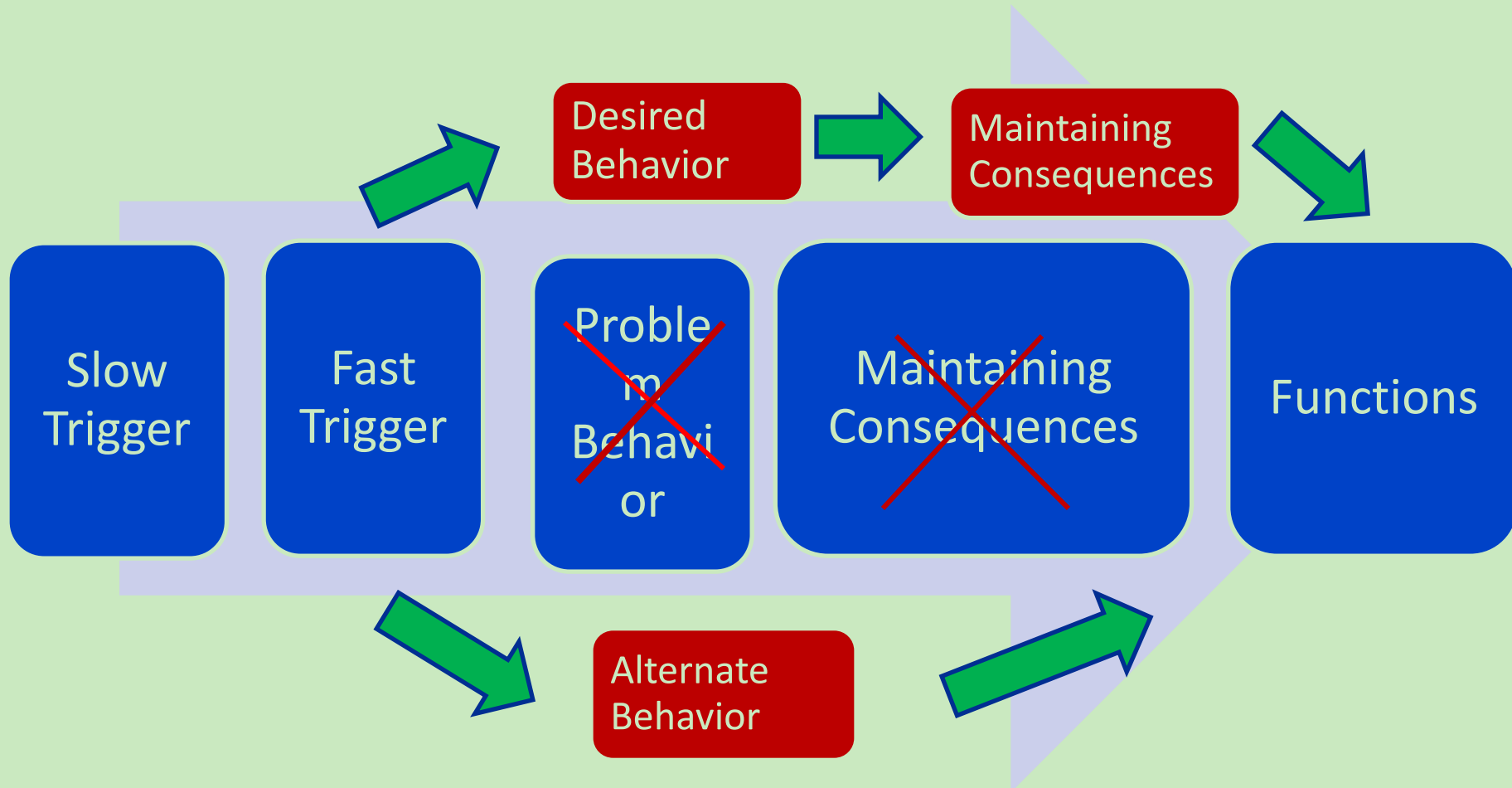| Slow Triggers | Fast Triggers | Problem Behavior | Maintaining Consequences | Functions |

Crone & Horner, 2003; Sugai, Horner, & Gresham, 2002

Competing Behavior Pathway: Develop Hypothesis Statement

Slow Triggers	When Joe is hungry
↓	
Fast Triggers	and the lunch line slows down,
↓	
Problem Behavior	Joe shoves the person in front of him.
↓	
Maintaining Consequences	He is taken from the line and given his lunch.
↓	
Functions	Shoving allows him to get his lunch, escape the line, communicate.

Competing Behavior Pathway: How can we change the path?

Planning Interventions Based on the FBA

Categories of Strategies Based on the FBA

Slow Trigger Strategies	Fast Trigger Strategies	Behavior Teaching Strategies	Consequence Strategies

Crone & Horner, 2003

Goals of Intervention Strategies

Make the problem behavior irrelevant

- No longer a need for the behavior
- Address slow and fast triggers
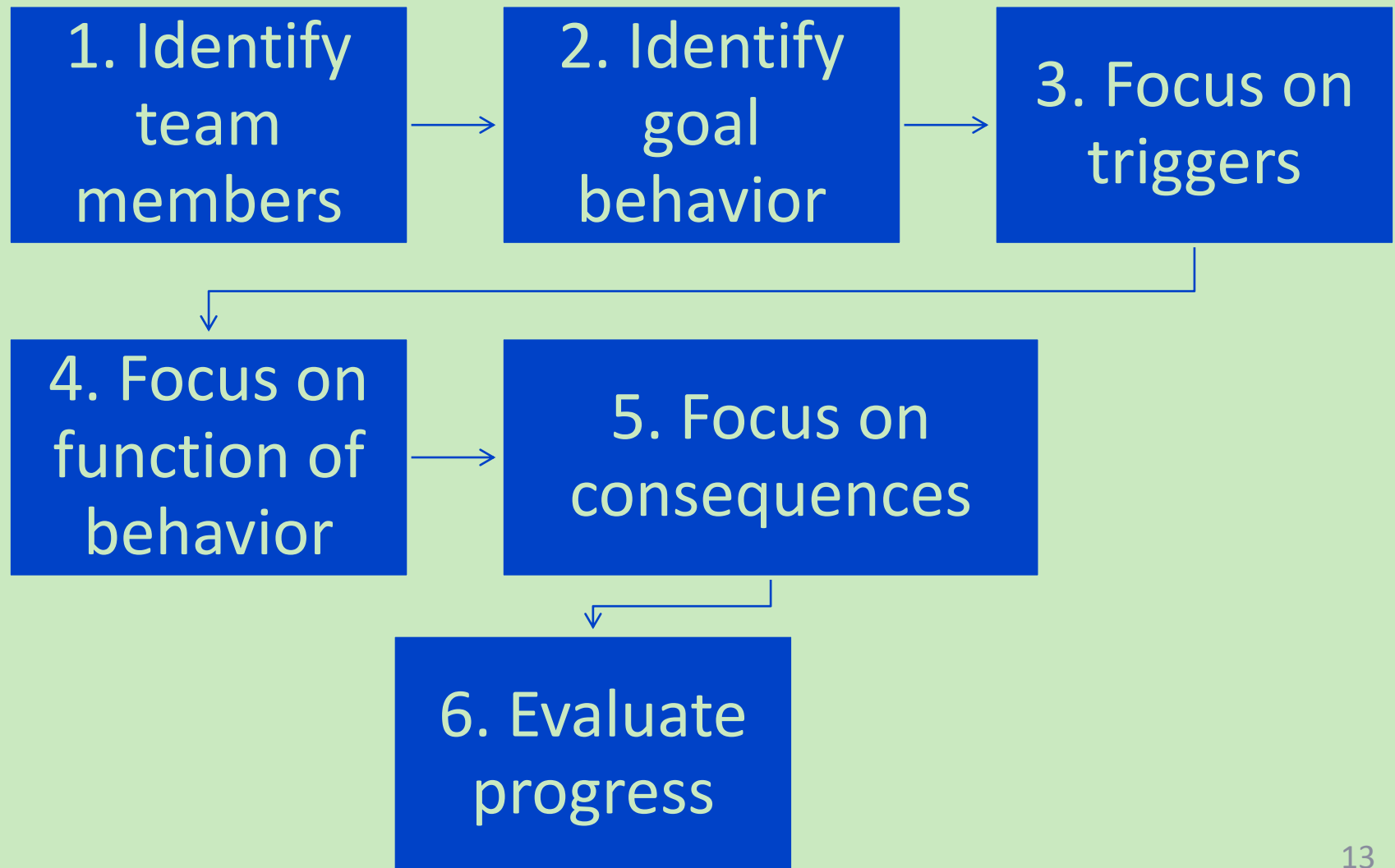
Make the problem behavior inefficient

- Teach a replacement behavior that works better

Make the problem behavior ineffective

- Don't let the student get what s/he wants through the problem behavior; find another way to meet function

Crone & Horner, 2003

Steps in Planning Interventions Based on the FBA

1. Identify team members → 2. Identify goal behavior → 3. Focus on triggers

4. Focus on function of behavior → 5. Focus on consequences

6. Evaluate progress

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Planning Interventions:
1. Identify the Team

- Who needs to be involved in planning interventions for the student?
  - Parents?
  - 1 teacher? 5 teachers?
  - Related services providers?
  - School lunch/bus staff?
  - All communication partners?
- Latoya

Braga, Campos de Paz, & Ylvisaker, 2005; Wade, Carey, & Wolfe, 2006

Planning Interventions:
2. Identify the Goal Behavior

Daniel's Teachers' Reports of Challenging Behavior
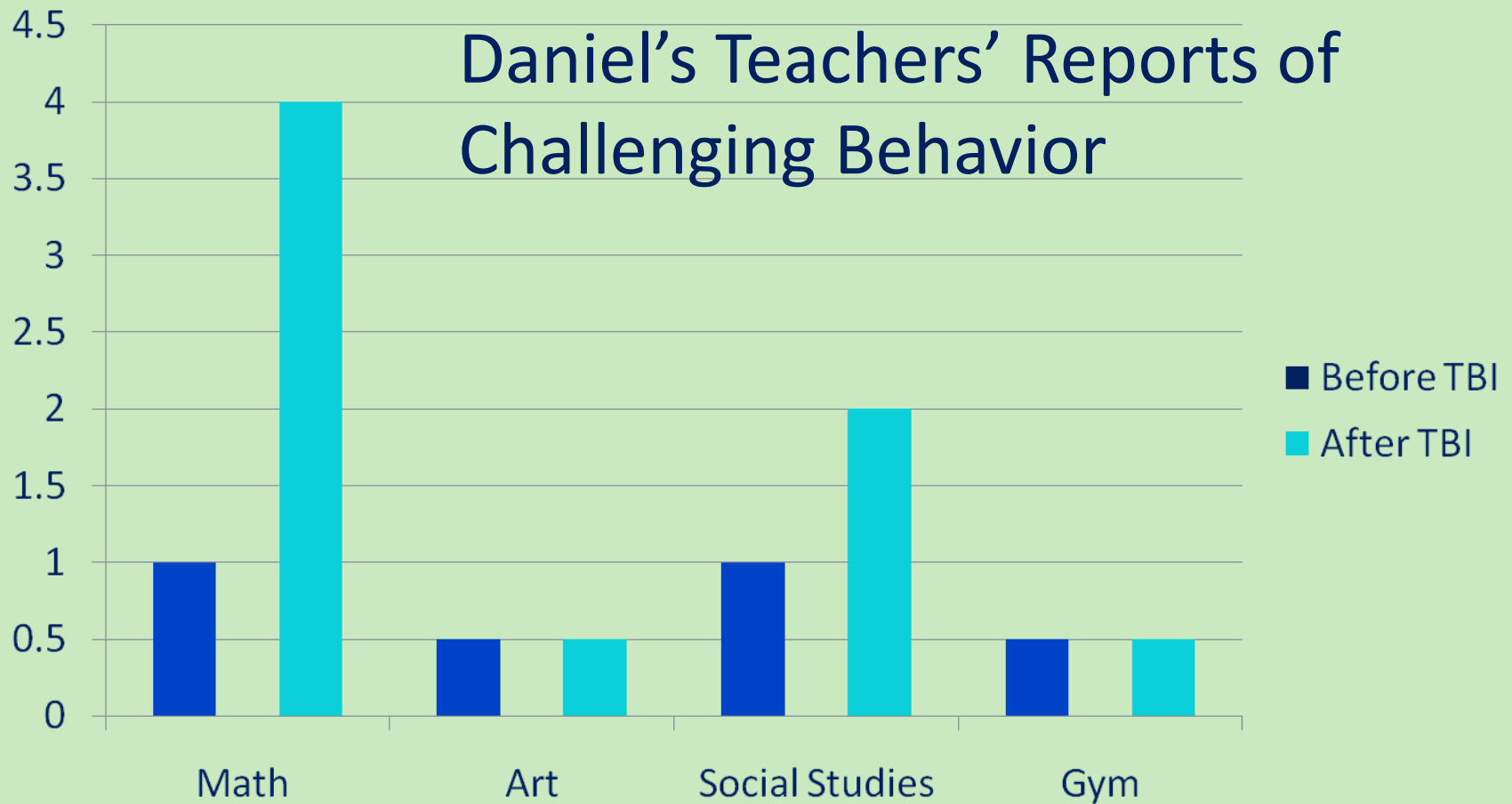
Planning Interventions: Identify the Goal Behavior

- What is your goal or target behavior?
  - State in <u>positive terms</u> what you want the student to do
    - Daniel will work independently in math for 15 minutes
    - Latoya will brush her teeth in two minutes with only one prompt
    - Joe will stand in the lunch line for 4 minutes while staying 12 inches behind the student in front of him
- Is the goal socially valid?
  - Address important areas of functioning
  - Valued by important individuals in the student's life
- Is the goal reasonable? Attainable?

Gioia & Isquith, 2004

Planning Interventions:
Identify Necessary Prerequisites for Goal

To perform the behavior the **student** must

- Understand the expectation
- Be aware of his/her own behavior
- Have the ability to control his/her own behavior
- Have the competence/skills to engage in the behavior
- Have the motivation to complete the behavior

To facilitate the behavior the **environment** must provide

- Opportunity to practice the behavior
- Sufficient reinforcement to motivate the student initially
- Appropriate models of the behavior
- Positive setting events (slow and fast triggers)

Kaplan, 2000

Planning Interventions: Performance or Skill Deficit?

- Critical question
  - Skill deficit: "Can't do"
  - Performance deficit: " Won't do"
- Example: Latoya's teachers say she can brush her teeth, tie her shoes, and write her name, but she won't
    - Can she do them?
    - How much support does the student need to show the skill?
    - Does the setting matter?

Planning Interventions:
Skill Deficit or Performance Deficit

Can't do:

Won't do:

First

- Teach the skill

Alter triggers

Use behavioral momentum

Provide positive consequences

Address functions

Planning Interventions
Won't do: Latoya

Lack of initiation is a problem many students with TBI exhibit

- This is a result of injury to the brain
- Is not necessarily triggered by a specific factor
- Does not serve a specific function
- May or may not be responsive to consequence manipulation
- Develop cues for steps of behavior
- Gradually fade cues as student learns routines

Planning Interventions:
3. Focus on Triggers

- Prevention of challenging behavior
  - Slow triggers
  - Fast triggers

- See Webcast 3

Planning Interventions:
4. Focus on Function

- Often the function itself is not the problem
  - The strategy the student is using is the problem
  - Daniel

- How can the student satisfy this need in another way?

- Behavior teaching strategies
  - Not in early stage of recovery
  - Not when student is upset

Teaching Positive Communication Routines

- All behaviors communicate
  - Even if they aren't intentionally communicative
- Behavior can become communicative based on adults' reactions
- When a student persists in using a behavior, it is likely that behavior is adaptive for the student
  - It is helping the student attain a goal
- When challenging behavior is used to communicate
  - Teach alternative ways to communicate
- Intervention agents are all communication partners

<div align="right">Ylvisaker et al, 1999</div>

Teaching Positive Communication Routines

Phase 1: Interpret the behavior

Phase 2: Decide when escape and access are OK

Phase 3: Ensure large number of positive communication routines daily

Phase 4: Gradually re-introduce normal demands

Ylvisaker et al, 1999

Teaching Positive Communication Routines: Daniel

Phase 1: Interpret the challenging behavior

- Daniel yells and pushes his math book off the table approximately two minutes after the teacher assigns independent work
- FBA indicates that the functions of the behavior are
  - Escape from math
  - Communication that he doesn't want to do math

Teaching Positive Communication Routines: Daniel

Phase 2: Decide when escape and access are ok

- Daniel's math teacher says escape is not ok
- But data show that Daniel is not doing any independent math work now
- The team, with the math teacher, decides that teaching an alternate communication strategy is critical
- The math teacher agrees for now Daniel can escape math when he communicates appropriately

Teaching Positive Communication Routines: Daniel

Phase 3:

Ensure a large number of positive communication routines daily

- Daniel's case manager is identified as the best person to teach Daniel to indicate "no more math"
- She chooses a quiet time in the morning when Daniel is usually rested
- She teaches Daniel how to indicate "no more math" by saying "no more math" (or by using a signal)
- She practices numerous times throughout the day by presenting Daniel with his math work and encouraging him to say "no more math"

Teaching Positive Communication Routines: Daniel

Phase 3: Practice, Practice, Practice

Daniel's math teacher practices the routine with him outside of math class

- Teacher "This is practice time"
- "Daniel, here is your math work."
- Teacher cues Daniel "You don't want to do more math? Show me how you say 'no more math'"
- Daniel gives signal or says "no more math"
- "Good job! We will do more math later."

Move practice to natural context

- Practice during math class

Teaching Positive Communication Routines: Daniel

| Phase 4: Gradually re-introduce normal demands | • Start asking Daniel to do work in math class |

| BUT FIRST | • Why does Daniel want to escape math?
• Need to address all functions of his behavior |

| Address why Daniel wants to escape math | • Additional intervention is needed to help Daniel do his math BEFORE we can reintroduce normal math demands |

Teaching Positive Communication Routines: Obstacles

Teaching communication routines is time consuming

- But significant time is lost due to challenging behavior

Staff may feel student will become "spoiled"

- Expectations will increase over time

Not all activities are negotiable

- For example, taking medications
- Don't allow escape; create a routine

Challenging behavior is unintentionally reinforced

- Timing is critical; Can't allow challenging behavior to be effective

Ylvisaker et al, 1999

Focus on Function: Addressing the Escape Function

- Students often use behavior to express the desire to escape a situation
  - Daniel wants to escape math
- Determine why the student wants to escape
  - Why does Daniel want to escape math?
    - Poor instructional match?
    - Low rates of success?
    - Specific students in the class?
    - Teacher's style?

Planning Interventions:
5. Focus on Consequences

Considerations for using consequence-based interventions with students with TBI

- Student have memory problems; may not remember consequences
- Slow processing and inattention may reduce student's understanding of consequences
- Student may not be able to control behavior even if s/he wants to gain a reward - especially early after recovery
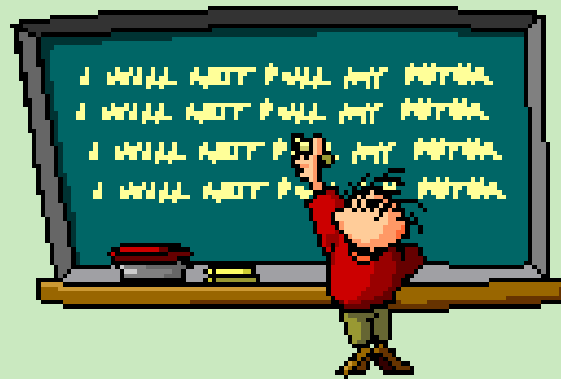
Focus on Consequences: Using Reinforcement

- Reinforcement: <u>increases</u> the likelihood that the behavior will occur again
  - Positive reinforcement: gets desirable consequence
  - Negative reinforcement: avoids undesirable consequence
- If it doesn't increase the goal behavior, it is NOT a reinforcer
- Involve the student in choosing reinforcers if possible
- Start with the level of reinforcer you need
  - Move toward random, intermittent reinforcement

Focus on Consequences: Problems Using Punishment

- **Doesn't teach the student what to do**
- Punishment is designed to DECREASE inappropriate behavior
- May temporarily reduce target behavior
- May escalate the situation
- May impair relationships
- May model anger and negativity
- Example: Maria

Focus on Consequences:
Using Reinforcement with Daniel

- Daniel does not want to do independent math

  - We have addressed slow and fast triggers (Webcast 3)

    - Math class when Daniel is not tired

    - Math is at his instructional level

    - Seat is away from Terry and Janet

- Plan reinforcement

  - Meet with Daniel: What reinforcers would help him work at math for 5 minutes?

    - Brief break to draw

    - Brief break to listen to music on headphones

    - Tickets to earn a snack after math

Focus on Consequences: Tips for Using Reinforcement

- With students with TBI
  - History of failure, frustration and opposition reduce the effectiveness of consequence-based interventions
  - Staff need positive attitude
  - We are rooting for the student to succeed!

Feeney &Ylvisaker, 2008

Focus on Consequences:
Tips for Using Reinforcement

Early in recovery

- Keep rate of reinforcement high
- Keep reinforcers visible/tangible
- Alter reinforcers to avoid satiation

Later in recovery

- Use the smallest amount of reinforcement that works
- Use intermittent reinforcement
- Move to secondary reinforcement (praise, token economy)
- Fade to natural reinforcers

Focus on Consequences: Self-management Strategies

- Use self-management strategies later in recovery

Self-monitoring: Student observes own behavior

Self-evaluation: Student decides whether behavior meets criteria

Self-reinforcement: Student provides reward if behavior criteria are met

Focus on Consequences: Self-management with Daniel

- Daniel later in his recovery: Goal-Plan-Do-Review
  - Daniel still does not like math class – but he has been able to work with cues from the teacher now that the work is at his level
  - Goal: 15 minutes of independent work
  - Plan: Dan will set a timer on his desk for 15 minutes and then show his work to his teacher
  - Do: Dan works for 15 minutes and then takes his work to the teacher
  - Review: His teacher gives Daniel feedback about work and his use of the system.
    - After 15 minutes of math he shows his teacher his work. They review the work and Dan earns his reinforcer, a break to draw

Feeney & Ylvisaker, 2008

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Planning Interventions
6. Evaluating Progress: Is it working?

- Why do we need the data?
  - To decide whether the intervention is working
  - To indicate when it is time to alter/discontinue the intervention
- If we have the data, use it!

Planning Interventions Evaluating Progress: Is it working?

Types of data that can be used

- Frequency, intensity, duration recordings
  - Daniel's screaming is now rare and brief
- Already existing data
  - Work completion: in class and homework
  - School/class attendance
  - Office referrals
- Observations
  - Social indicators (lunch, recess)

Planning Interventions
Evaluating Progress: Is it working?

- Goal Attainment Scale
  - Identify a target behavior
  - Set a goal
  - Identify levels of behavior
- Benefits of Goal Attainment Scaling
  - Easy to design
  - Easy to use for teachers and other staff
  - Short time required to complete
  - Allows simple visual analysis of progress

Bouwens, van Heugten, & Verhey, 2009; Steenbeek, Ketelaar, Galama, & Gorter, 2008.

Planning Interventions
Evaluating Progress: Is it working?
GAS Behavior Levels

Behavior Could be Worse:

- +2: Best possible

- +1: Better, not perfect

- 0: Baseline, current (behavior sometimes occurs)

- -1: Worse than current

- -2: Worst possible

Behavior Could not be Worse:

- +4: Constant occurrence

- +3: Frequent occurrence

- +2: Occasional occurrence

- +1: Rare occurrence

- 0: Baseline, current (behavior never occurs)

Planning Interventions
Evaluating Progress: Is it working?

Goal Attainment Scale for Daniel

+5:_____ Daniel works independently in math class as requested

+4: _____ Daniel completes 21-30 minutes of independent work in math
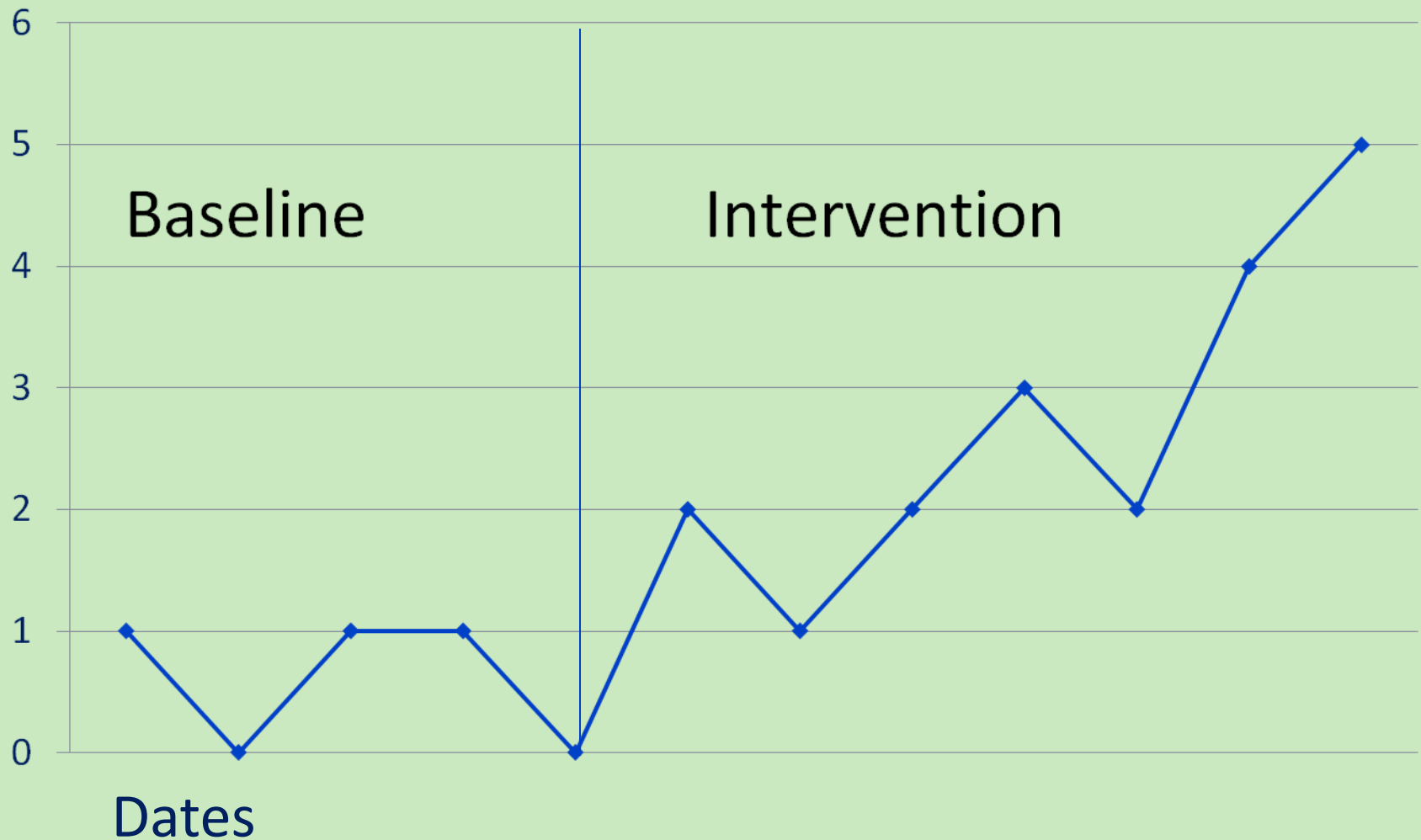
+3: _____ Daniel completes 11-20 minutes of independent work in math

+2: _____ Daniel completes 6-10 minutes of independent work in math

+1: _____ Daniel completes 1-5 minutes of independent work in math

0: _____ Daniel does no independent work in math

Daniel's Independent Work in Math

Planning Interventions: Putting It All Together

- Most intervention plans for serious challenging behaviors require multiple components

    – Prevention: altering slow and fast triggers

    – Consequence manipulation

    – Teaching behaviors to address functions

        - Teaching positive communication routines

Planning Interventions:
Putting It All Together <u>Early in Recovery</u>

- Use prevention strategies
  - Alter triggers of behavior when possible
- Use classroom routines, graphic advance organizers, opportunities for choice, redirection, behavioral momentum, good instructional match, high rates of success, positive staff attitudes (Webcast 2)
- Prevent the behavior from occurring; it is much more difficult to intervene once it occurs

Planning Interventions:
Putting It All Together Later in Recovery

- Continue attention to slow and fast triggers
- Continue appropriate instructional match, high rates of success, opportunities for choice and control, positive staff style
- Continue as necessary graphic advance organizers, classroom routines, behavioral momentum
- Teach alternative behavior to address functions
  - When student is ready
- Add if effective
  - Contingency management: Reinforcement
  - Self-management strategies: Goal-Plan-Do-Review

Beyond Psychosocial Interventions

Medication – student may be on medication

- Understand side effects

Crisis plans – if necessary

- Establish a plan to use when behavior escalates
- Example: When Chris gets angry he hits and kicks others
  - What will teacher do?
  - What should other students do?
- Get professional training

Summary

Good interventions for challenging behavior

- Consider the student's limitations as a result of TBI
- Consider the student's stage of recovery
- Are planned and implemented by a team
- Contain multiple components
- Are contextually-based; occur in natural environment
- Target prevention
- Are positively focused
- Add supports for the student
- Focus on important socially valid goals

Effective interventions facilitate long-term success

Webcasts in This Series

1.   The Effects of TBI on Student Behavior
    – Understanding types and mechanisms of brain injury
    – Understanding how the effects of TBI influence behavior

2. Strategies for Preventing Challenging Behavior after TBI
    – Matching strategies to student's stage of recovery
    – Using proactive strategies to prevent challenging behavior

3. Using FBA to Understand Challenging Behavior after TBI
    – Understanding Functional Behavioral Assessment (FBA)
    – Identifying factors that trigger and maintain challenging behavior

4. Planning Interventions for Challenging Behavior after TBI
    – Designing effective interventions to reduce challenging behavior after TBI

Questions or Comments?

- Address questions or comments to:

    sandra.corbett@dpi.wi.gov

- References cited in the webcast series can be found at http://dpi.wi.gov/sped/tbi.html