Supporting Executive Functions with Self-regulation

- Adolescents with TBI are at risk of executive dysfunction which impacts transition to college/community and success.

- Transition needs can be addressed by speech-language pathologists (SLPs) who ‘coach’ students to self-regulate their own learning, time management and self-advocacy.

- Assessing self-regulation is done using surveys & interviews.

- Functional treatment planning & intervention will be described using an evidence-based coaching approach that uses motivational interviewing and metacognitive strategy instruction.
Time ordered agenda

9:00 • Executive functions & Self-regulation
9:30 • Preparing for post-secondary education
10:00 • Coaching: What is it?
10:45 • Assessing Self-regulation & Goal collaboration
11:00 • Coaching self-management, -studying & learning, advocacy

TBI Non-Combat Stats

• >5 million living with disabilities from TBI in US
  – 1.7 new injuries annually; most mild
• Leading cause of accidental death or disability worldwide
  – U.S. leading cause of disability < 34 years old
  – 57 million hospitalized

Post-concussion syndrome (PCS)

Physical
• Fatigue
• Visual
• Headaches
• Balance, tinnitus
• Nausea
• ‘Foggy’ feeling

Cognitive
• Attention
• Word finding
• Slow processing (reading, listening)
• Memory
• Executive functions & self-regulation

Psychosocial
• Adjustment to lifestyle change
• Injury & symptom validation
• Irritability, short fuse
• Depression
• Anxiety, stress
• Frustration
• Feeling alone

http://www.cdc.gov/Features/dsTBI_BrainInjury/
Post-concussion syndrome: A cluster

http://www.cdc.gov/healthypar/basics/concussion_recovery.html

Young Adulthood: A Critical Time

- Brain development
  - Blooming & pruning
- Context: School & Community
  - Peers, social
  - Higher executive functions
  - Game changes, less support

What happens when students with TBI go to college?

- Injured before college
  - Lower graduation rates (National Longitudinal Transition Study, Wagner et al., 2005)
  - IEPs & transition teams are important to successful college entry (Glang et al., 2008)
  - About half are linked to campus disability services (Tobis & Glang, 2008)
What happens when students with TBI go to college?

- High school & college students
  - More strategies, more effort
  - Decreased GPA, outside activities & relationships with peers
  - Worse concentration, memory, problem-solving

Model of Cognitive Processing

![Model of Cognitive Processing Diagram]

The Widening Gap of Executive Functions

![Graph showing the widening gap of executive functions across different educational levels]
Executive Functions are...

• integrative cognitive processes that determine goal-directed and purposeful behavior in daily life
  – formulate goals;
  – initiate behavior;
  – anticipate the consequences of actions;
  – plan and organize behavior in logical sequences
  – “to monitor and adapt behavior to fit a particular task or context.” (Cicerone et al., 2000, p. 1605).

Executive Functions
(Dawson & Guare, 2012)

1) Response inhibition 7) Organization
2) Working memory 8) Time management
3) Emotional control 9) Goal-directed persistence
4) Sustained attention 10) Flexibility
5) Task initiation 11) Metacognition
6) Planning/prioritizing

Examples of Cognitive Impairments

<table>
<thead>
<tr>
<th>Cognitive Process</th>
<th>College students with disabilities may...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attention: Focusing on a specified activity, behavior, or task. Levels from basis to complex include: focused, sustained, alternating, divided.</td>
<td>• Be distractible during class, while studying, or during conversation</td>
</tr>
<tr>
<td></td>
<td>• Talk out of turn</td>
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<tr>
<td></td>
<td>• Have a low tolerance for frustration</td>
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<tr>
<td></td>
<td>• Not follow through on assignments or personal commitments</td>
</tr>
<tr>
<td>Memory: Gathering information so that it can be stored and then recalled at a later time.</td>
<td>• Have difficulty recalling facts, new information for tests</td>
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<tr>
<td></td>
<td>• Forget what they read</td>
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<tr>
<td></td>
<td>• Be unable to connect information; draw inferences when reading</td>
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<tr>
<td></td>
<td>• Not know when assignments are due</td>
</tr>
<tr>
<td></td>
<td>• Rely on poor memory strategies when studying, such as repetition</td>
</tr>
<tr>
<td>Receptive language: Comprehending and decoding meaning – both explicit &amp; implicit language.</td>
<td>• Be slow to respond to questions</td>
</tr>
<tr>
<td></td>
<td>• Become frustrated by group interactions that require listening and responding to multiple speakers</td>
</tr>
<tr>
<td></td>
<td>• Have difficulty understanding implicit information when reading tests</td>
</tr>
<tr>
<td></td>
<td>• Focus on explicit information in texts while missing implicit information</td>
</tr>
</tbody>
</table>

Kennedy & O’Brien, 2016
### Examples of Executive Function Impairments

<table>
<thead>
<tr>
<th>EF Process</th>
<th>College students with disabilities may...</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attention control:</strong></td>
<td>• Get too focused on one part of an assignment</td>
</tr>
<tr>
<td></td>
<td>• Be easily distracted in class, during exams, &amp; while studying</td>
</tr>
<tr>
<td></td>
<td>• Become distracted when completing long assignments</td>
</tr>
<tr>
<td></td>
<td>• Not recall or learn material</td>
</tr>
<tr>
<td><strong>Memory Control (working memory):</strong></td>
<td>• Have trouble multi-tasking (e.g., listening &amp; taking notes)</td>
</tr>
<tr>
<td></td>
<td>• Make decisions based on limited information</td>
</tr>
<tr>
<td></td>
<td>• Forget important details</td>
</tr>
<tr>
<td></td>
<td>• Miss punch lines or story conclusions</td>
</tr>
<tr>
<td></td>
<td>• Have difficulty weighing options</td>
</tr>
<tr>
<td><strong>Cognitive self-regulation:</strong></td>
<td>• Underestimate the need to study &amp; use strategies</td>
</tr>
<tr>
<td></td>
<td>• Underestimate the amount of time &amp; effort studying takes</td>
</tr>
<tr>
<td></td>
<td>• Not adjust or change study strategies even when current ones are ineffective</td>
</tr>
<tr>
<td></td>
<td>• Know study strategies, but do not use them</td>
</tr>
<tr>
<td><strong>Emotional self-regulation:</strong></td>
<td>• React in ways that are out of proportion to the situation</td>
</tr>
<tr>
<td></td>
<td>• Get upset or overly discouraged when given feedback</td>
</tr>
<tr>
<td></td>
<td>• Have fluctuating emotions or &quot;mood swings&quot; over a short period of time</td>
</tr>
<tr>
<td></td>
<td>• Get easily irritated if someone disagrees with them in class</td>
</tr>
</tbody>
</table>

### Impairments associated with TBI

![Diagram of Impairments associated with TBI]

May 13, 2016

### COGNITIVE & EXECUTIVE FUNCTION IMPAIRMENTS

DUAL DISABILITIES

May 13, 2016
Transition Planning

- Taxonomy of Transition Programming (Kohler, 1996)
  - Student-focused planning
  - Student development
  - Interagency collaboration
  - Family involvement
  - Program structures

www.nsttaac.org

What Do Students Need to Succeed after High School?

- SReg learning are the strongest predictors of learning at work and in college
  1. Goal level
  2. Persistence
  3. Effort
  4. Self-efficacy

Sitzman & Ely, 2011

Executive Functions
Self-Regulation
Metacognition
Awareness
Rehabilitation, Neuropsychology
Other Fields of Psychology
Self-regulation is...
- the ability to assess one's own (hence the 'self') cognitive and emotional states and to make decisions about what to do in light of that assessment.
  - a group of cognitive processes
  - are the 'meta' manipulations that allow us to monitor and control our own emotions, thinking, and actions.
  - goal-oriented behavior that is adjusted in a real world context.

Adolescents & Young Adults with Executive Dysfunction: Sense of Self?

- Developmental
  - ADD/ADHD
  - ASD
  - Intellectual Disabilities
- Acquired
  - TBI
  - Concussion
  - Stroke, other

Context is Key

- Sense of self
- Executive Functions
  - Developmental
  - Acquired

Percentage by student group registered with Disability student services (DSS)

(NCES report, Raue & Lewis, 2011)
Percentages of colleges that document these groups of students

(NCES report, Raue & Lewis, 2011)

Preparing Students with Executive Dysfunction for Post-secondary Education

• Transition teams before & after HS
  – Vocational rehabilitation
• Educate student & family
  – Role of Disability services & cultural shift
  – Emphasize independence
  – Plan ahead: meet with DS, early course registration
• Translate executive functions
• Coach time-management, study & learning, self-advocacy

Context: Role of Disability Services

• Maintain medical/psychological documentation in a confidential manner
• Determine if condition is a disability
• Identify and assist with implementation or reasonable accommodations
  – Modify accommodations as needed IN ORDER TO PROVIDE EQUAL ACCESS
• Provide information and referral
• Promote independence, self-advocacy, self-expression, finding your own way
• Provide “support” to those who seek it
**Context: Role of Students**

- Provide medical and/or psychological documentation to Disability Services
- Participate in the process of determining and implementing accommodations
- Inform Disability Services when accommodations are not working, need to be modified, or if symptoms change

*Independence & Advocacy*

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**Context: Role of Instructors**

- Refer students to Disability Services
- Participate in the process to determine and implement accommodations
- Identify essential course components for accommodations to be determined
- Request assistance from Disability Services as needed

---

**What is Dynamic Coaching?**

- A form of intervention that supports and instructs individuals in the use of their own executive functions to be able to assess situations accurately that and solve problems that arise and to accomplish both their proximal (immediate) and distal (long range) goals.
- ‘dynamic’ reflects these self-regulation processes are on-going and ever changing with students’ needs, situations and contexts.
Partner with Students to

- develop goals
- plans (strategies, timelines)
- establish routines
- identify barriers
Partner through Coaching

- Motivates, Inspires
- Models
- Guides
- Instructs
- Supports

Evidence in support of Coaching College Students

- Ylvisaker & Feeney, 1998; Ylvisaker, 2006
- Quinn, Ratey & Maitland, 2000
- Parker & Boutelle, 2005
- Dawson & Guare, 2012
- Field, Parker, Sawilowsky & Rolands, 2010; 2011
- Kennedy & Krause, 2011
- Kennedy, Krause & O’Brien, 2014
- O’Brien, Schellinger & Kennedy, (strategy outcomes) in preparation
- Kennedy, Schellinger & O’Brien, (qualitative outcomes) in preparation

Coaching is based on best-practices

Supports change (& recovery) naturally through experiences

- Strive for Effortless behavior
- Self-awareness & metacognitive strategies
- Person-centered goals
- Instruct Self-Regulation
- Maintenance & Generalization
Scientific Evidence for Using Self-regulation through Metacognitive Strategies

- Systematic Reviews
  - Tate et al. (2014) – JHTR
  - Kennedy et al. (2008) – Neuropsychological Rehabilitation [www.ancds.practiceguidelines](http://www.ancds.practiceguidelines)
  - Cicerone et al. (2000, 2005, 2010)
  - Institute of Medicine (IOM, 2011) report on cog rehabilitation

Intervention for executive functions after traumatic brain injury: A systematic review, meta-analysis and clinical recommendations (Kennedy et al., 2008)

Metacognitive strategy instruction/Direct Instruction had a larger tx effect on functional activities than ‘control’ tx for adults with sufficient attention & memory.

**Practice Standard**

Promoting Metacognitive Strategy Instruction

- Combining the DI with SI to achieve the best outcome!! (Kennedy et al., 2008)

![Effect sizes](image)
“Treating” Self-awareness
Tate et al., 2014

- Educational material
- Experiential, activity based intervention
- Learning (about self) while doing
  - Using tools, strategies
  - Feedback (self, others)

Table 2.1: Similarities and differences between dynamic coaching and didactic instruction. Coaches can be rehabilitation professionals, instructors, or psychologists.

<table>
<thead>
<tr>
<th>Dynamic Coaching</th>
<th>Didactic Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coach provides individual education</td>
<td>Coach provides individual education</td>
</tr>
<tr>
<td>Both coach &amp; student are experts</td>
<td>Coach is the expert</td>
</tr>
<tr>
<td>Emphasizes process &amp; outcome</td>
<td>Emphasizes process &amp; outcome</td>
</tr>
<tr>
<td>Coach asks questions, student selects strategies</td>
<td>Coach identifies &amp; selects strategies</td>
</tr>
<tr>
<td>Coach delivers content &amp; behavior to gather information about student</td>
<td>Coach delivers content &amp; behavior to gather information about student</td>
</tr>
<tr>
<td>Coach models self-regulation and provides structure, student provides content</td>
<td>Coach models, provides structure, and provides content</td>
</tr>
<tr>
<td>Goals are identified by student with coaching guidance</td>
<td>Goals are often independent of the instruction</td>
</tr>
<tr>
<td>Coaching occurs in the context, in real time, e.g., college-campus</td>
<td>Instruction occurs out of context, e.g., therapy room</td>
</tr>
<tr>
<td>In team-based with student selects team members</td>
<td>One-on-one therapy or instruction are typical</td>
</tr>
<tr>
<td>Least intensive, e.g., one session per week</td>
<td>More intensive, e.g., 2-4 times per week</td>
</tr>
<tr>
<td>Process-based goals are as important as the product-based goals</td>
<td>Product-based goals are important</td>
</tr>
<tr>
<td>Distributed practice occurs naturally</td>
<td>Practice is artificial, out of the context from which strategies will be used</td>
</tr>
<tr>
<td>Feedback comes naturally, from multiple sources</td>
<td>Feedback comes from the coach</td>
</tr>
<tr>
<td>Self-regulation is emphasized, i.e., monitoring, implementing, adjusting</td>
<td>Learning for strategy is emphasized</td>
</tr>
</tbody>
</table>

Coaching involves...

- Guiding students using active listening, questioning = motivational interviewing [Miller & Rollnick, 2013]
  
  "a collaborative, goal-oriented style of communication with particular attention to the language of change. It is designed to strengthen personal motivation for and commitment to a specific goal by eliciting and exploring the person’s own reasons for change within an atmosphere of acceptance and compassion."

- Collaboration
- Evocation
- Autonomy

What do Coaches do?

- Instruct in strategies, with emphasis on strategy use in context
- Work to extinguish ineffective strategies
  - Clients track performance
  - Clients report back to coach
  - Together, reevaluate based on outcomes
  - Coach client to make change or stick with plan

Coaching Phases

1. Intake and Evaluation
2. Planning and Support
   - Self-Learning
   - Self-Management
   - Self-Advocacy
3. Re-evaluation and Follow-up

Example of an Intake and Evaluation of Student with Brain Injury

- Interview using the College Survey for Students with Brain Injury (CSS-BI, Kennedy & Krause, 2009)
  - Academic experiences, goals
  - Vocational goals
  - Medical history
  - Academic history
- [Review of documentation/medical history of brain injury]
- Gather other neuropsychological reports
- Supplement testing to determine strengths and weaknesses
Evaluating functional executive functions

- Obtained NP report
- Controlled Oral Word Association Test
- Wechsler Adult Test of Reading
- Functional Assessment of Verbal Reasoning & Executive System - Student
- CSS-BI B/or LASSI interview
  - Academic experiences
  - Strategies – learning, organizational, advocacy
  - Goals
- Compare recall with and without taking notes
  - Made predictions
- Predict how long it would take to complete tasks vs. how long it took, with goal of improving predictions

CSS-BI Academic challenges: To what extent do you agree with the following statements about your experience as a college student since your injury?

5-point Likert rating scale

strongly disagree disagree neither agree strongly agree
1. Others do not understand my problems. ***
2. I have to review material more than I used to. ***
3. I forget what has been said in class.*
4. I don’t always understand instructions for assignments.*
5. I get overwhelmed in class.*
6. I have trouble prioritizing assignments & meeting deadlines.*
7. I have fewer friends than before.*
8. I have trouble managing my time.*
9. I get overwhelmed when studying.
10. I procrastinate on things I need to do.
11. I get nervous before tests.
12. I have trouble paying attention in class or while studying.
13. I am late to class.

Kennedy, Krause, & O’Brien, 2014
College Survey for Students with Brain Injury (CSS-BI)

- Organizing, managing
- Nervousness
- Studying, learning
- Psychosocial

Kennedy et al., 2008, 2014

Interviewing procedures

I have to review material more than I used to.

Agree:
- Give example?
- How do you review? Or what do you do to review?
  - May need to give example, e.g., highlight?

I don't always understand instructions

Agree:
- Give example?
- What do you do when you don't understand?
  - May need to give example, e.g., check syllabus, ask peer

Uncertain:
- So you are uncertain about this?
  - Yeah well, I don't really have fewer friends, but I have different friends, better friends

Interpreting strengths & weakness

<table>
<thead>
<tr>
<th>I am able to:</th>
<th>Examples of this are:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay attention</td>
<td>1. I stay focused in class</td>
</tr>
<tr>
<td></td>
<td>2. I can study for long periods of time</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I have trouble with:</th>
<th>Examples of this are:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dysinhibition, inability to 'wait'</td>
<td>1. I ask too many answers to questions in class</td>
</tr>
<tr>
<td></td>
<td>2. I don't always weigh consequences before making decisions</td>
</tr>
</tbody>
</table>
Teach them self-regulation

Goal – Self-monitor

Compare (& adjust)

Strategy decision – Self-control

Implement strategy

Metacognitive beliefs & Sense of self

Revised from Flavell, 1979; Kennedy & Coelho, 2005

Identify potential goals

Select doable goal

Identify potential strategies, solutions

Select optimal strategy; backup

Learn the strategy

Create steps, materials

Initiate strategy steps

Track strategy use

Track performance

Compare to goal, review

Adjust goal, adjust strategy

Apply to other situations

Self-regulation process for complex activities

Goals

Adjust

Implement Strategies

Kennedy & O’Brien, 2016
**Value is in the process, not just the product**

- **Internal process** - problem or activity based (Goal, Strategy, Adjust – GSA)
- **External process** – weekly sessions of persisting in problem solving, support, adjusting that models and builds resiliency

---

**Performance & Self-Regulation Goals**

Performance goals are appealing because they are written to be **measurable and specific** to identified situations

- "...will recall 4 out of 5 details from orally presented story after 5 minute delay across 3 sessions"

However, these target only the level of the **skill** and not changes in self-regulation

- Also do not explicitly activate the self-regulation loop to allow for an updated understanding and awareness of the skill

---

**Self-Regulation Goals**

- Often attainable, even when performance goals may not be
- Target the client's ability to monitor their own progress toward the performance goal
- With improved monitoring, the client can become involved in the problem-solving process of the therapy plan
- Clients can suggest strategies and evaluate their effectiveness at improving performance
Goal Attainment Scaling
(Mialec and colleagues)

- Individualized scaling system
- Allows clinicians and clients to:
  - develop goals together
  - quantify progress toward reaching the goals
  - Rating scale with 5 levels of achievement
- Demonstrated to be useful for people with TBI with complex executive function tasks such as financial management (Grant, Ponsford, & Bennett, 2012)

Sample Scaled Goal

<table>
<thead>
<tr>
<th>Goal Area: Reading Journal</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Writing summation of all chapters read. Effectiveness of notes in triggering recall is consistent, resulting in rich, specific recall of events and characters. Scanning of the book is limited to only specific sections (such as using quotes for an essay). Notes are well elaborated and allow for integration of ideas across the narratives.</td>
</tr>
<tr>
<td>4</td>
<td>Writing summation of all chapters read. Effectiveness of notes in triggering recall is fairly consistent, so that only minimal scanning of the book is needed to recall details. Notes are well elaborated.</td>
</tr>
<tr>
<td>Target</td>
<td>3</td>
</tr>
<tr>
<td>Starting Point</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>Writing summation of chapters read only rarely or not at all.</td>
</tr>
</tbody>
</table>

Management as a Core Skill

Kennedy et al., 2014
Coaching measurable goals

**Self-Learning (SL)**
- Grade based: want to get a B
- Process based: Write better papers; use keywords
- Develop strategies for taking multiple choice tests

**Self-Management (SM)**
- Turn in all my papers on time
- Keep up with a long term project instead of waiting until the end
- Prioritize assignments to work efficiently

**Self-Advocacy (SA)**
- Discuss my brain injury with my professors
- Find more activities that I can still do with my friends
- Become a part of a class study group

Self-management: Goal generation

<table>
<thead>
<tr>
<th>Problem</th>
<th>Performance goal</th>
<th>Self-regulation goal</th>
<th>Coaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>It should only take me 2 hours a week to read assigned readings, but am not sure... I don’t know how to plan.</td>
<td>Student will keep up with reading &amp; turn in assignments on time.</td>
<td>1. Student will accurately assess how long it takes to read. 2. Student will accurately assess how long it takes to complete assignment.</td>
<td>Strategy: 1. Instruct in “Plan-do-review” 2. Provide form 3. Student tracks 4. Discuss impact on planning</td>
</tr>
</tbody>
</table>

Plan Do Review

<table>
<thead>
<tr>
<th>PLAN</th>
<th>DO</th>
<th>REVIEW</th>
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<tbody>
<tr>
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</table>
Plan-Do-Review

Self-Learning & Studying: Strategy & goal development

<table>
<thead>
<tr>
<th>Problem</th>
<th>Performance goal</th>
<th>Self-regulation Goals</th>
<th>Coaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student: Reading a novel, I can’t recall what I read yesterday so I don’t understand next chapter</td>
<td>Recall a sufficient amount that he already read, so he could continue to read/understand.</td>
<td>1. To create a scale to assess how well I do. 2. To implement the journaling strategy. 3. To self-assess my recall, reading using the scale</td>
<td>Coach: Show me what you mean. What do you think you should do? Student: I could ‘journal’ my reading as I go like I learned last semester. Coach: Let’s have you create a way for you to assess.</td>
</tr>
</tbody>
</table>
**Self-learning & Studying: Strategy**

**Performance goal**
- To be able to review (and recall) what's been said in class.

**Self-regulation goal:**

**Strategy/Execution goal**
1. Student will record lectures while taking notes using LiveScribe (SmartPen) & track use
2. Student will review lectures prior to quizzes

---

**Self-learning & Studying: Strategy, Implement, Adjust**

1. **Strategy – Live Scribe**
   - Draw images in class
   - Hard to take notes

2. **Performance - Recall**
   - Recall lecture material
   - Easier to use

---

**Self-Advocacy: Creating a Team**

[Diagram showing relationships between various groups]
Self-Advocacy: Implementation

<table>
<thead>
<tr>
<th>Problem</th>
<th>Performance goal</th>
<th>Self-regulation goal</th>
<th>Coaching</th>
</tr>
</thead>
</table>
| "I get really nervous before exams. I am easily distracted"            | Reduce experience of nervousness | 1. Implement her accommodation to take exams in Disability services office | Coach: And this nervousness is since your injury?  
Student: Yeah.  
Coach: You could try taking the exam in the DS office, right?  
Student: It seems like a hassle, and I don’t know, I just don’t like going there  
Coach: But fewer distractions likely? |

Self-Advocacy Goal: Benefits, Costs

• Problematic goal for student to earn a 4.0  
  — Capable ... but at cost of studying constantly, no extracurricular activities, would not socialize with roommates, repeatedly checked her work to excess  
  — Side effect - anxiety, self-doubt  
• Set goals to engage in activities that she enjoyed and establish social networks at college  
  — Got a lead in local production of ‘Fiddler on the Roof’  
• Lowered her academic expectations to allow these other goals to be addressed

Self-Advocacy Goal: Benefits, Costs

• Slight decline in grades, but had time and energy to participate in social activities (e.g., being in a school musical, moving to an apartment with friends)  
• Maintained a positive outlook  
• Grades alone do not tell the whole story – outcomes must measures the student beyond the classroom  
  — The back story
Implementation goals: Self-tracking Implementation

- Students will track their own performance on daily (weekly) basis
- Discuss with coach the factors that may be affecting performance
- Also discuss/rate:
  - Effort
  - Effectiveness of strategies
  - Development of routines

Tracking Strategy Use

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Care</th>
<th>Help</th>
<th>Use</th>
<th>Effort</th>
<th>Worth</th>
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Strategy Review and Application

Consider the strategies you are now adding to your toolbox. List these and identify other situations or activities in which you could use these strategies.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Domain</th>
<th>Current Use</th>
<th>Other Uses</th>
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Supporting Executive Functions in Students with TBI by Coaching Self-regulation

- Work with transition teams
- Educate & translate impairments
- Educate in role of DS, college culture
- Explicitly instruct students in self-regulation
  - Monitoring/setting goals
  - Instruct in strategies
  - Implement
  - Adjust
- Students choose goals, strategies, ways to implement
- Domains of:
  - Time management, organization
  - Studying and learning
  - Self-advocacy – identify ‘go-to’ supporters
- Have students create portfolio or toolboxes
Resources

On-line
- www.ancds.org – Practice guideline publications on cognitive rehabilitation therapy for persons with TBI
- www.learnnet.org – NY educational website
- www.thinkcollege.net – Think College!
- www.brainline.org – resources about TBI

Manuals & Books
- "Transitions" series, Brook’s publishers.
- Coaching Students with Executive Skills Deficits, Dawson & Guare, 2011, Guilford Press.

Thank you!
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References
References


