

Executive Function Coaching & Post-Secondary Transition for Students with Brain Injury

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Disclosure

- Speaker fee, transportation and hotel.
- Author of *Coaching College Students with Executive Functions Problems*, Guilford Publishing, 2017.
- The views presented here do not represent any official policy from Chapman University.

Description

- Students with TBI are at risk as they transition from high school to post-secondary education. A coaching approach of support for students with TBI will be described. This approach is a partnership between students and coaches, that aims to explicitly guide students in the executive functions that are needed to be successful after high school. The overarching goal of coaching is for students to become their own 'expert' in how they learn, manage time, and self-advocate. Step-by-step examples of coaching instruction will be provided to participants.

Course Objectives

1. Participants will be able to **describe a coaching approach** to executive functions that prepares students for successful transition.
2. Participants will understand **how the expectations and support** of students in post-secondary education differ from the expectations and support of students in high school.
3. Participants will be able to **use a coaching approach** in at least one of three areas of executive functions: time management and organization, studying and learning, and/or self-advocacy.

Traumatic Brain Injury

- >5 million living with disabilities from TBI in US
- **2.2** new injuries annually; most mild
- Leading cause of accidental death or disability worldwide
- The fastest growing population groups are....

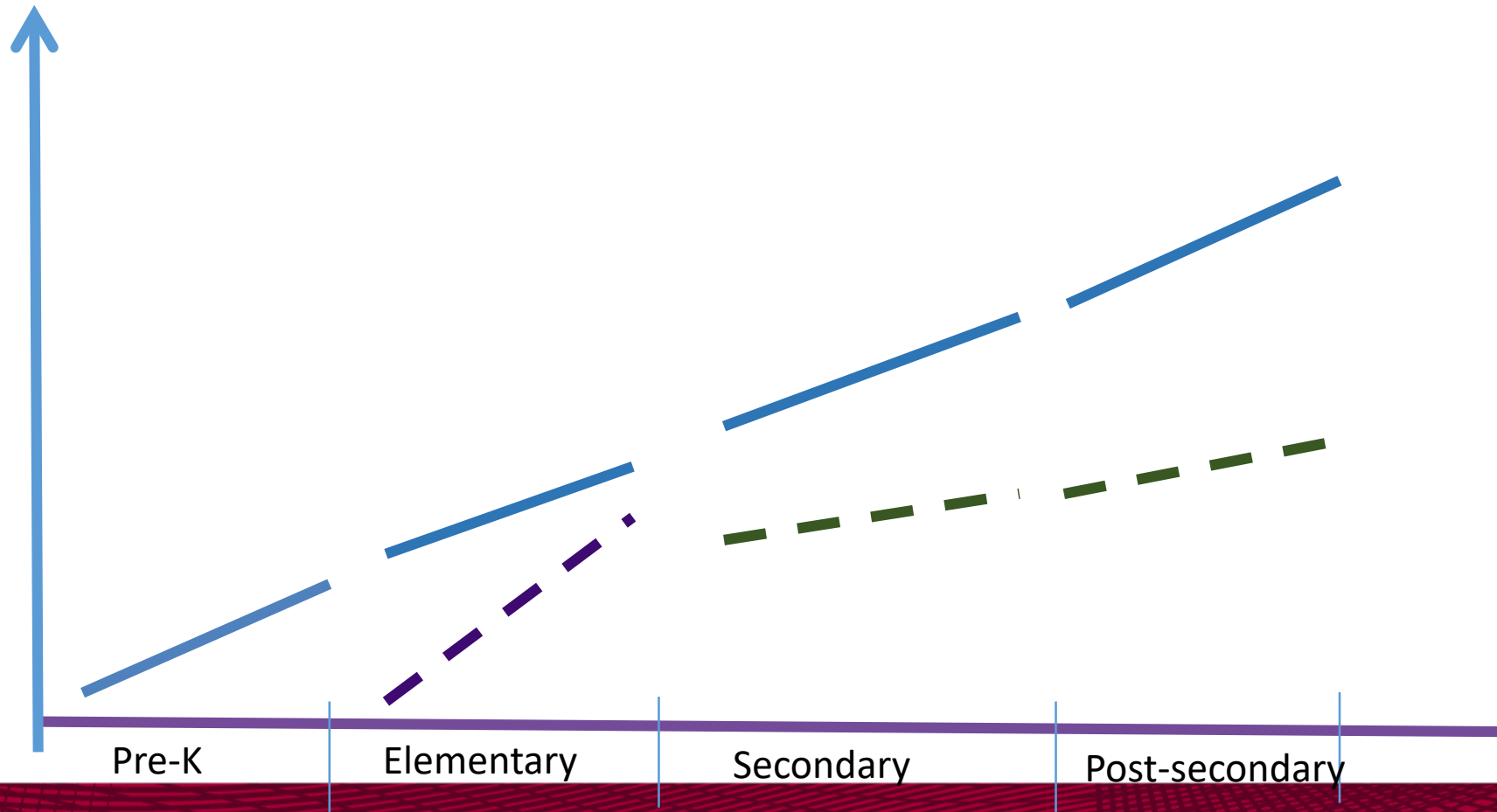
Young Adulthood: A Critical Time

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

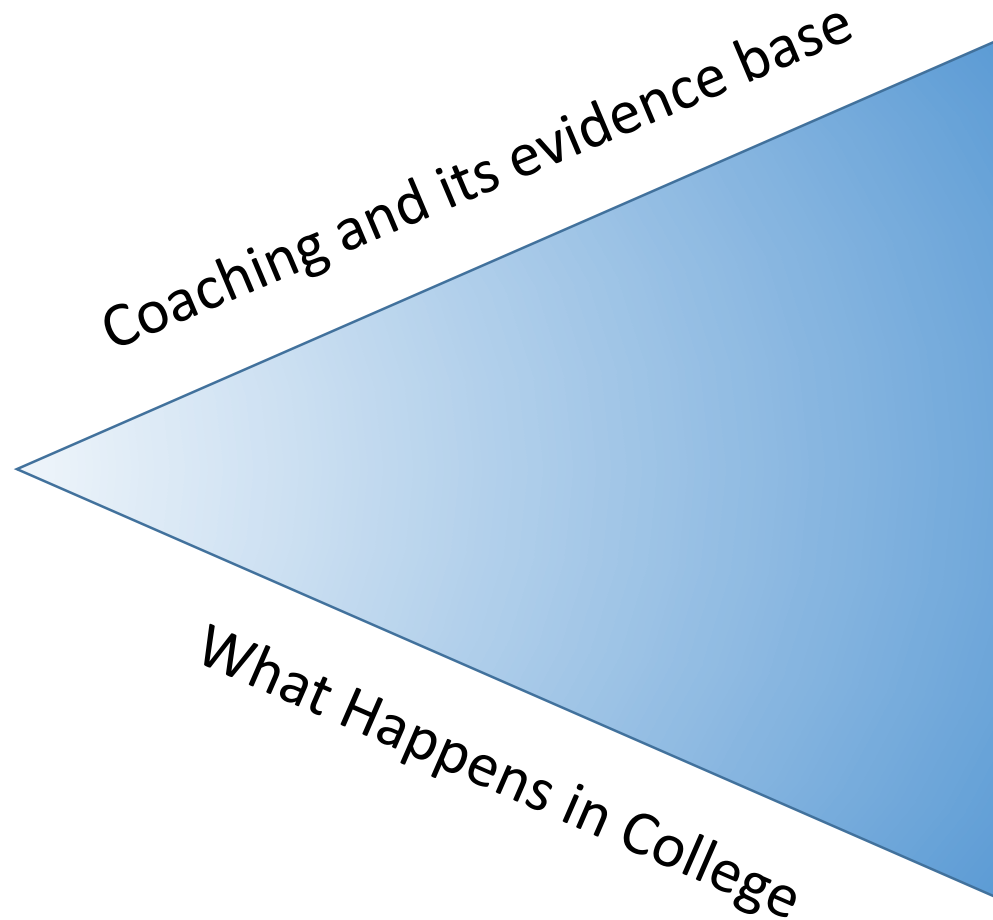


The Widening Gap of Executive Functions

Executive functions



Executive Functions,
Metacognition, & Self-
regulation



Coaching Self-
regulated
management,
learning, & advocacy

Executive Functions

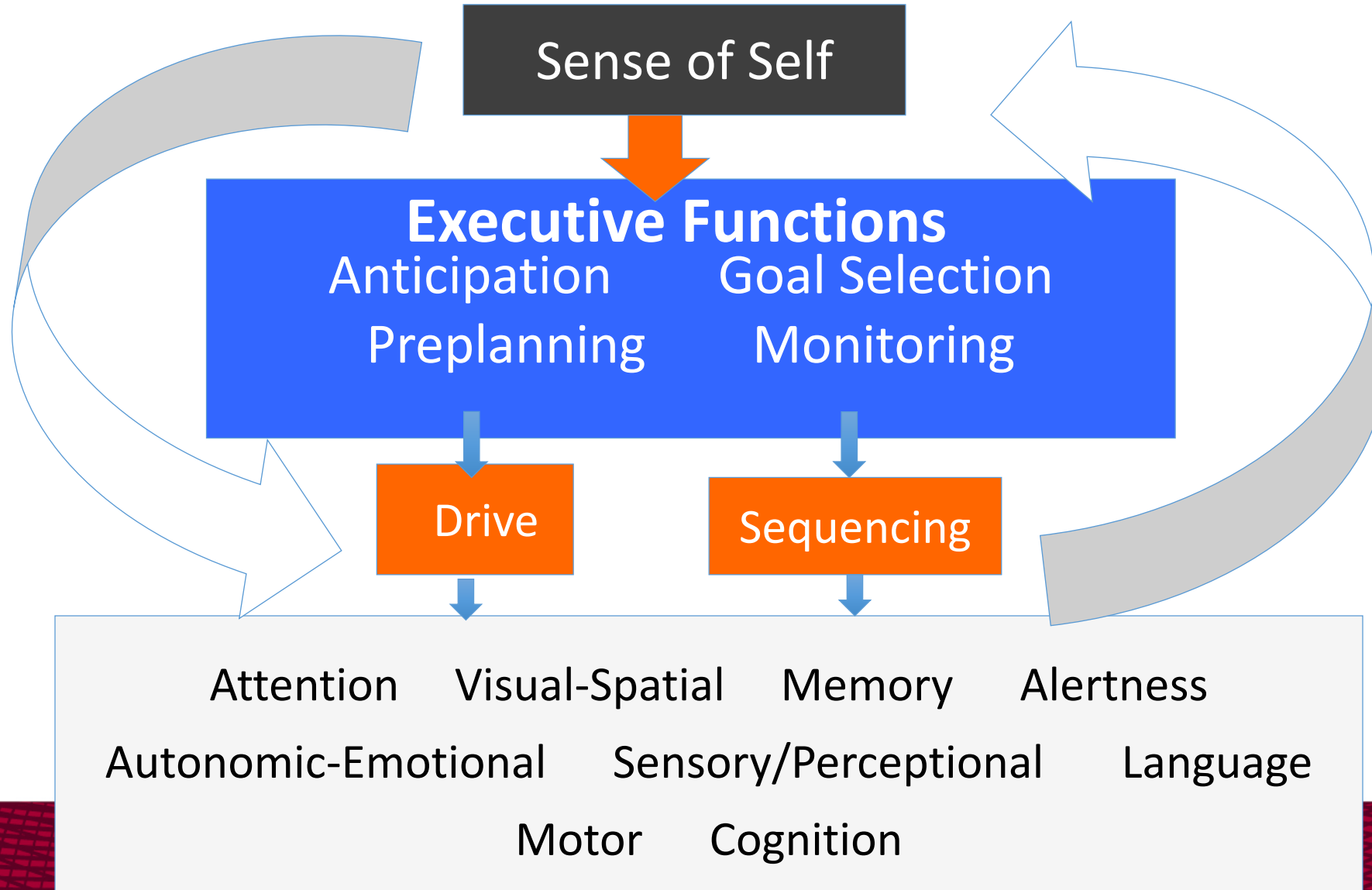
(Dawson & Guare, 2012)

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

Impairments associated with TBI



Model of Cognitive Processing



Stuss & Benson,
1986

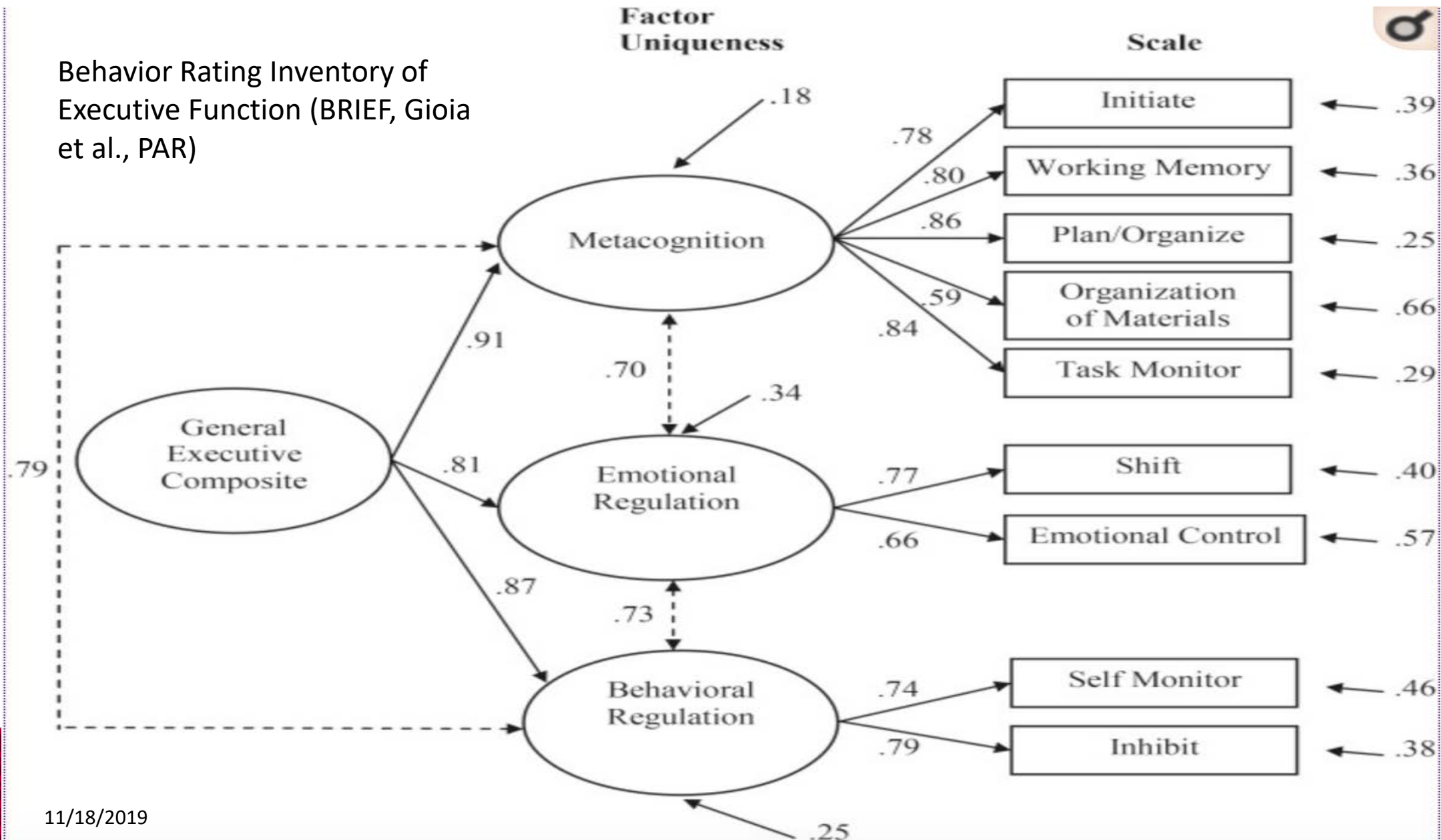
Executive Functions

Researchers	Population sample	Executive functions
Miyake, Friedman, Emerson, Witzki & Howerter, 2000	137 college students	<u>Correlated EFs</u> : Shifting (WCST), Inhibition (TOH), Inhibition & Updating (RNG), Updating (operation span). Dual tasks were not related to any.
Busch, McBride, Curtiss, & Vanderploeg, 2005	104 adults with TBI, > 1 year post injury	<u>Three factors explained 52.7% of variance</u> : 1. higher-order EF of self-generation & flexibility/set shifting; 2. mental control involving working memory; 3. inhibitory errors of memory.
Gioia, Isquith, Retzlaff & Espy, 2002	327 mixed clinical sample of children & adolescents	Parent version of Behavior Rating Inventory of Executive Function (BRIEF), confirmed a 3 factor model: Behavioral regulation (inhibition, self-monitor); Emotional regulation (emotional control, shift); Metacognition (WM, initiate, plan/organize, organizing materials, task monitoring).
Roth, Lance, Isquith, Fischer, & Giancola, 2013	524 healthy adults, 19 adults with ADHD	BRIEF-A survey confirmed a 3 factor model: Metacognition (14%), Behavioral regulation (19%), & Emotional regulation (24%). BR impairment > ER in adults with ADHD.

Executive Functions

- **Are multifactorial cognitive processes that determine goal-directed and purposeful behavior in daily life.**
 - working memory
 - formulate goals;
 - initiate and inhibit behavior;
 - anticipate the consequences of actions;
 - plan and organize in logical sequences;
 - Self-monitoring and adapting behavior to fit a particular task or context.

Behavior Rating Inventory of Executive Function (BRIEF, Gioia et al., PAR)



Individuals with Executive Function Problems

Developmental

ADD/ADHD

ASD

Intellectual Disabilities

Acquired

TBI

Concussion

Stroke, other

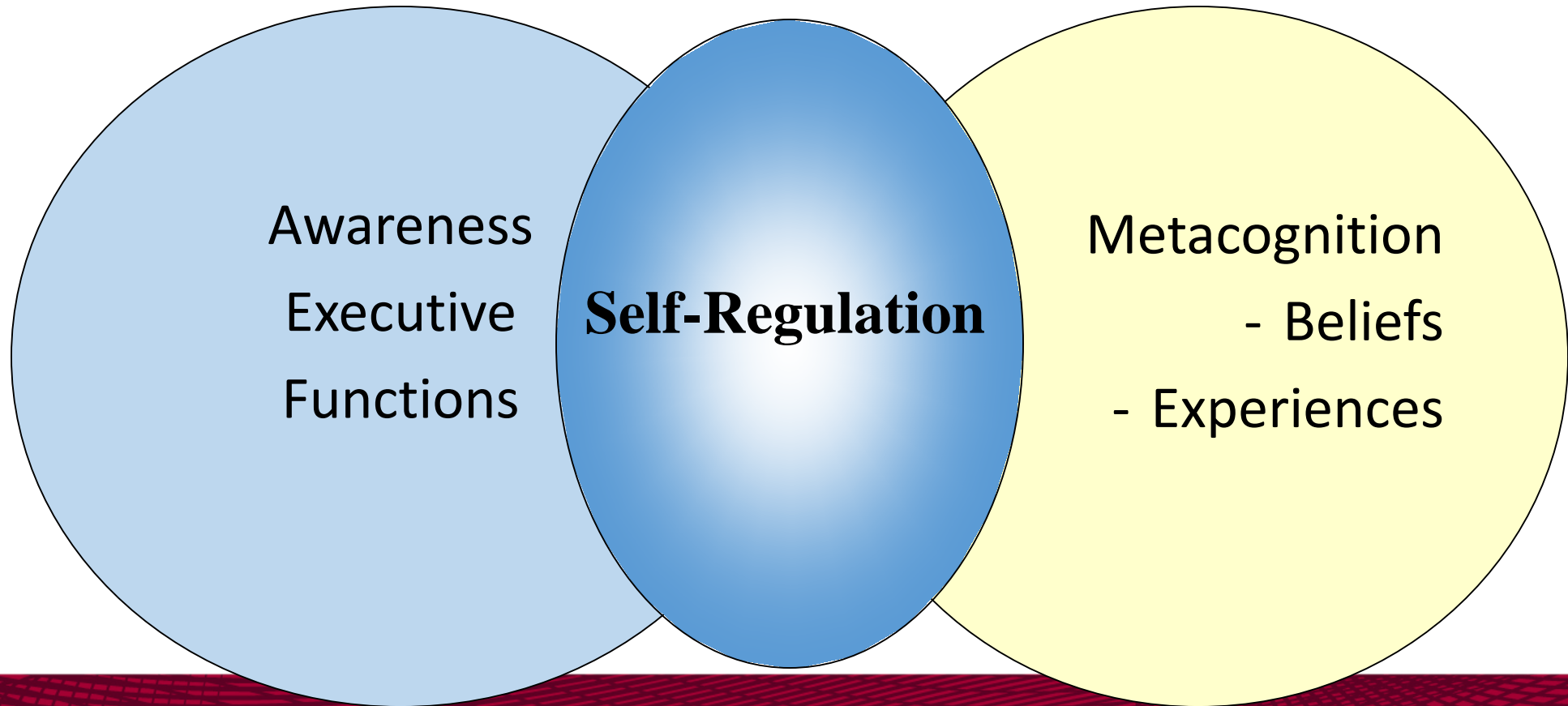
Metacognition

- Metacognition = thinking about your cognition
 - autobiographical **belief**
 - ongoing **monitoring** & **control** of one's own cognition *during* activities
- Applications
 - memory = metamemory
 - comprehension = metacomprehension

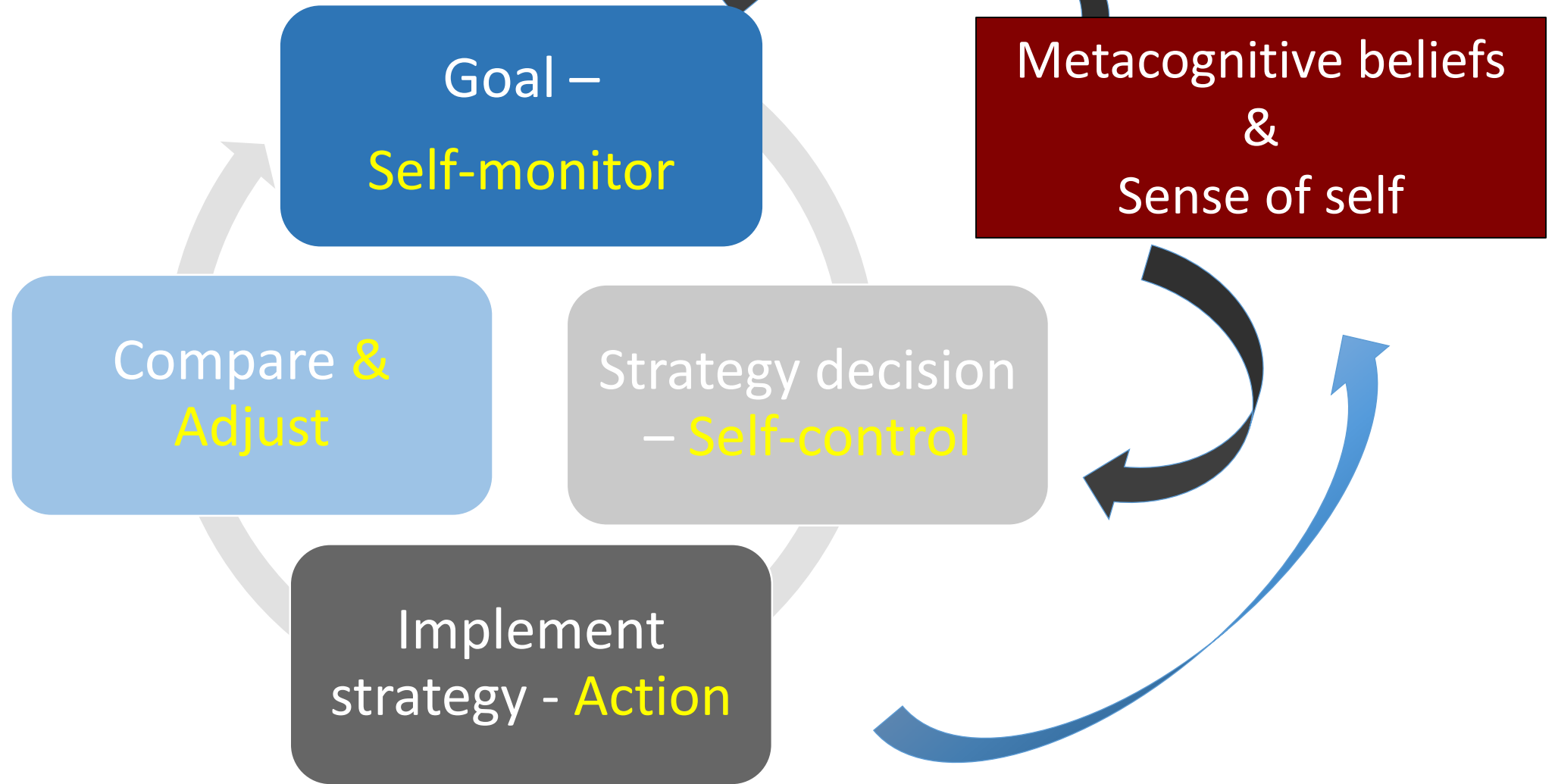
(Flavell, Nelson, Metcalf, Shimamura, Glisky, Schacter, Dunlosky, Reder, Weaver, etc., 1980 - 90s)

Rehabilitation, Neuropsychology

Cognitive, Educational
Psychology



Self-Regulated learning



Revised from Flavell, 1979; Kennedy & Coelho, 2005



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Self-regulation is...

- the ability to assess ones 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 continuously adjusted in a real world context.

Carver & Scheier, 2001; Sitzman & Ely, 2011



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Self-regulated learning skills are the strongest predictors of learning at work and in college. These skills include:

1. Goals
2. Persistence
3. Effort
4. Self-efficacy

Meta-analysis by
Sitzman & Ely, 2011

Self-awareness

- **Individuals without brain injury**

- Metacognitive beliefs (self-awareness) are separate from on-going SR.
- What contributes to changes in self-awareness?
 - Ongoing feedback in supportive, natural contexts

- **Individuals with traumatic brain injury**

- Metacognitive beliefs (self-awareness) are separate from on-going SR.
- Self-awareness changes/improves the longer one lives with disability (e.g., Hart et al., 2007, Prigatano et al., 1986).
 - Physical awareness emerges first, followed by cognitive, communication awareness
- Many underestimate disabilities.

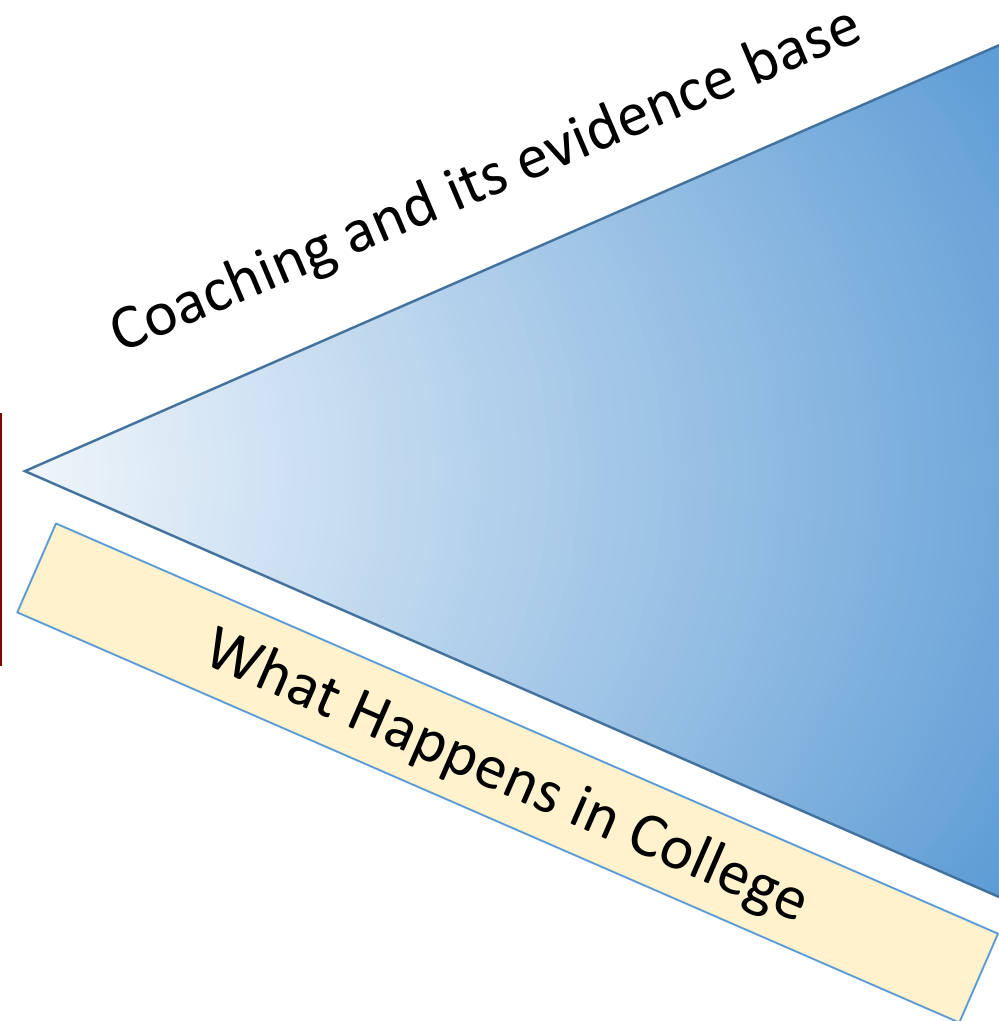
Metacognitive Beliefs/Sense of Self aka Self-awareness

- Values
 - Cultural/societal
 - Familial
 - Personal goals
- Self-efficacy – beliefs
 - about general ability
 - about types of learning & strategies
 - about specific task performance

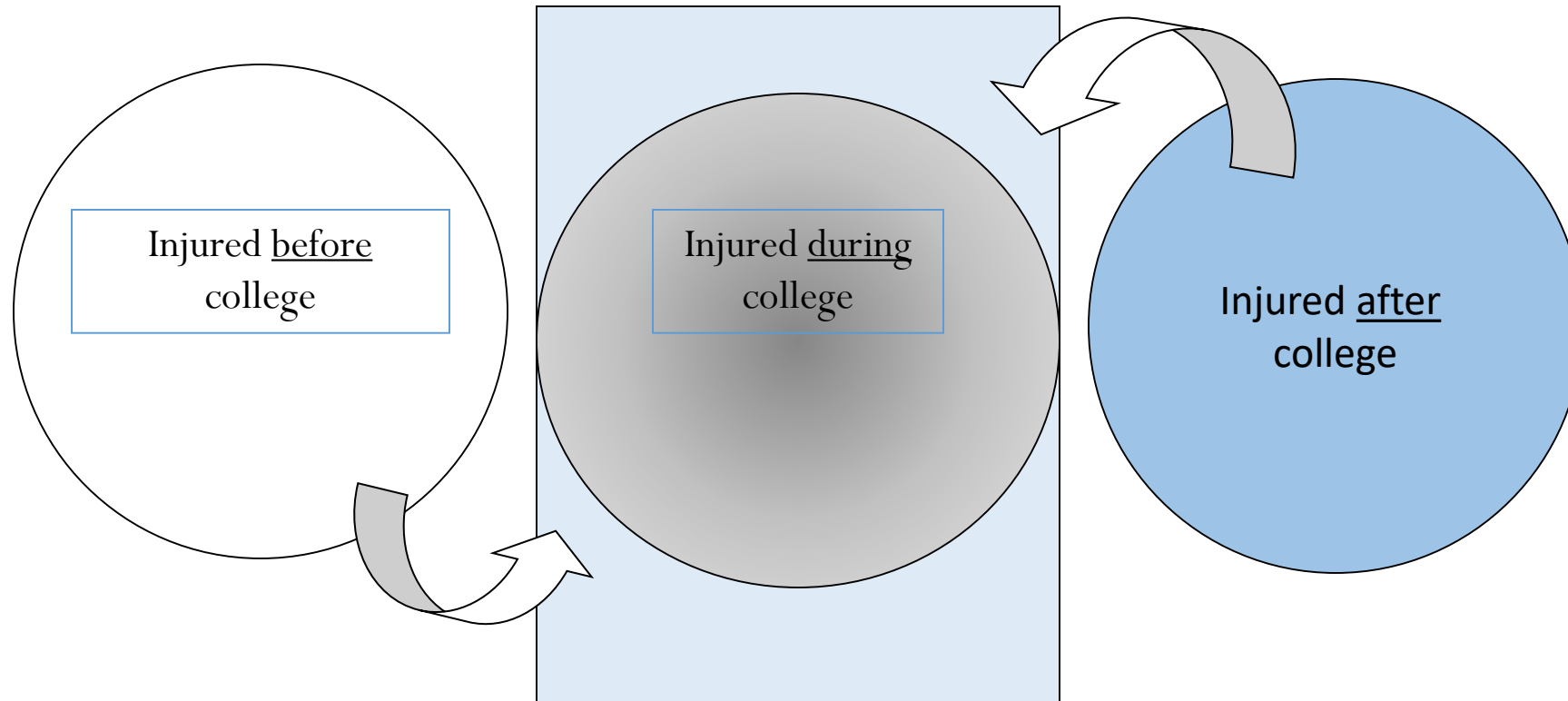
What are you good at doing?

List 6 things

Executive Functions,
Metacognition, & Self-
regulation



Who are college students with TBI?



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 (Beers, Goldstein & Katz, 1994; Stewart-Scott & Douglas, 1998)
 - Need to use strategies, more effort
 - Decreased GPA, outside activities & relationships with peers
 - Worse concentration, memory, problem-solving than students with learning disabilities
- ◎ Injured as adults - work & college (Dawson et al., 2007)
 - Cognitive & psychosocial factors

Shocking statistics

- Kennedy et al., 2008 found that nearly half of college student with TBI had never heard of used Disability resources.
 - Why? Misperceptions, 'my disability is temporary'
 - 24% used services 'all of the time'
- College students with TBI account for about 6% of all students registered with disability resource services*
 - At UMN, 6—70 students in the Twin Cities campus.
- About 50% of college students with cognitive disabilities withdraw by the end of the first year (NCES; Raue & Lewis, 2011).
 - About 50% of colleges do not report students with TBI, ASD, or other cognitive based disabilities.

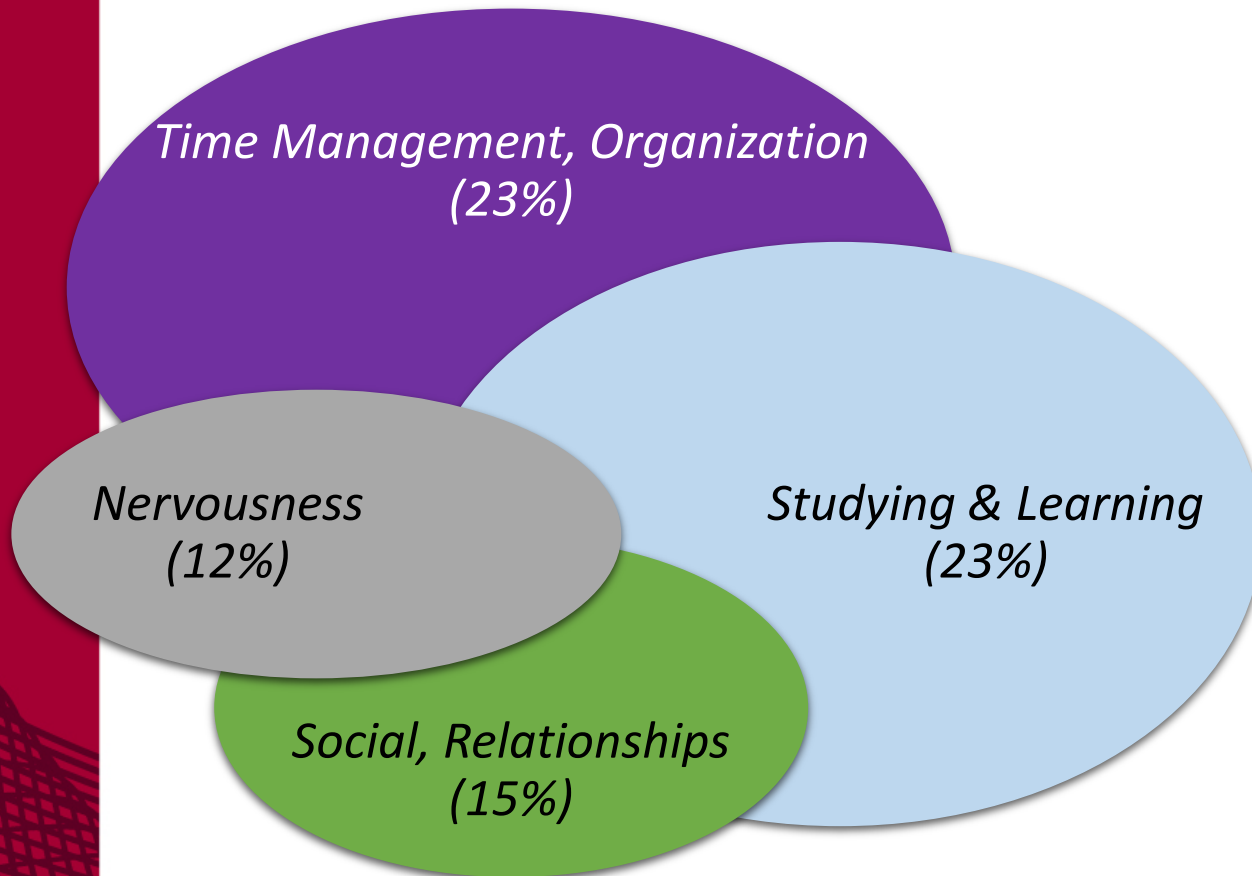
Goals and expectations in college...to become independent, young adults

- Students who ask for it, get support/help
- Disability resources can only interact with students, not parents
- Some colleges are 'disability friendly'
 - Early registration

College Survey for Students with Brain Injury (CSS-BI, Kennedy & Krause, 2017)

(Kennedy, Krause & O'Brien, 2014)

Academic Challenges

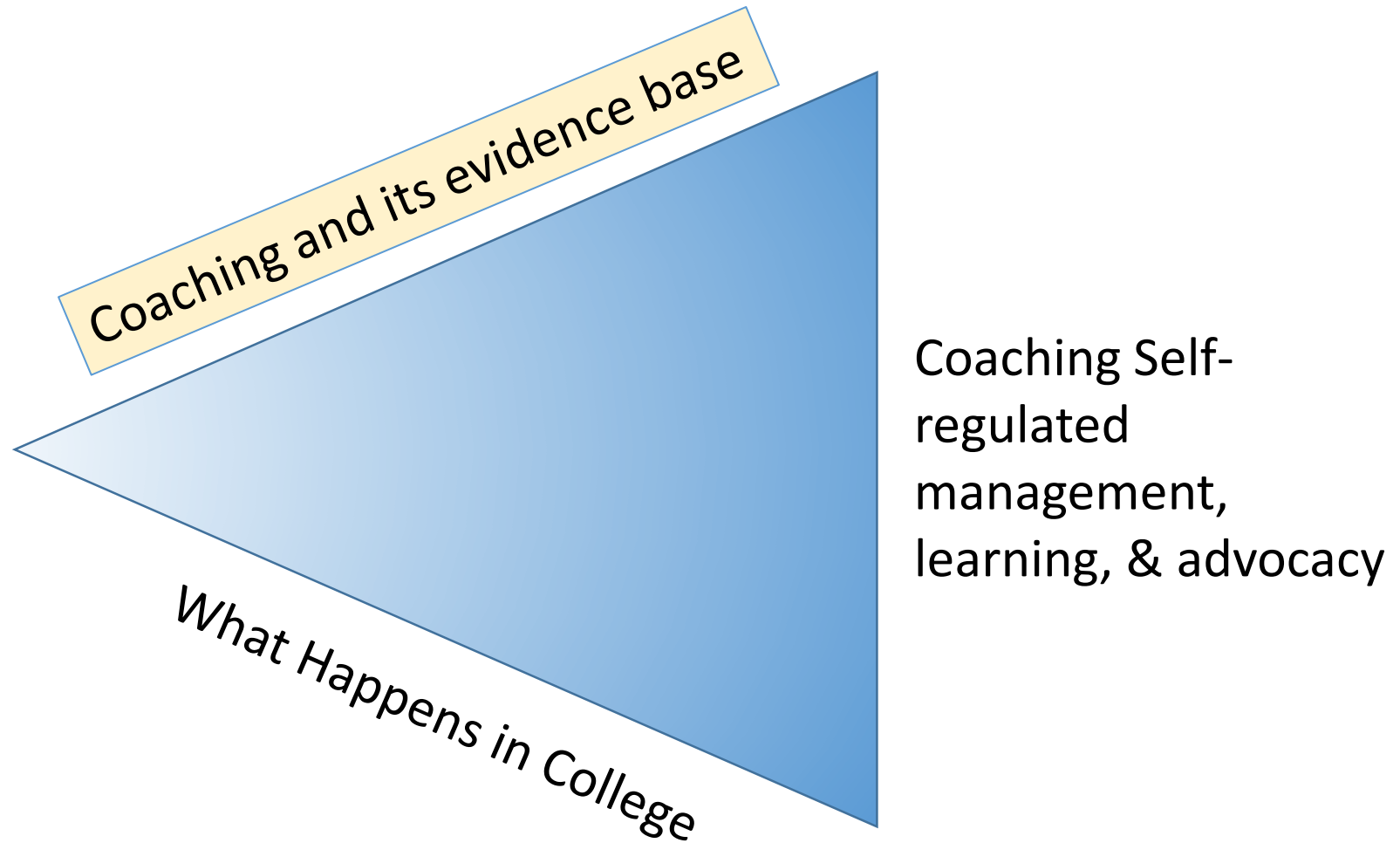


1. I have to review material more than I used to.
2. I forget what has been said in class.
3. I don't always understand instructions for assignments.
4. I get overwhelmed in class.
5. Others do not understand my problems.
6. I have fewer friends than before.
7. I procrastinate on things I need to do.
8. I have trouble paying attention in class or while studying.
9. I am late to class.
10. I have trouble prioritizing assignments & meeting deadlines.
11. I have trouble managing my time.
12. I get overwhelmed when studying.
13. I get nervous before tests.

Core Parts of Dynamic Coaching



Executive Functions,
Metacognition, & Self-
regulation



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

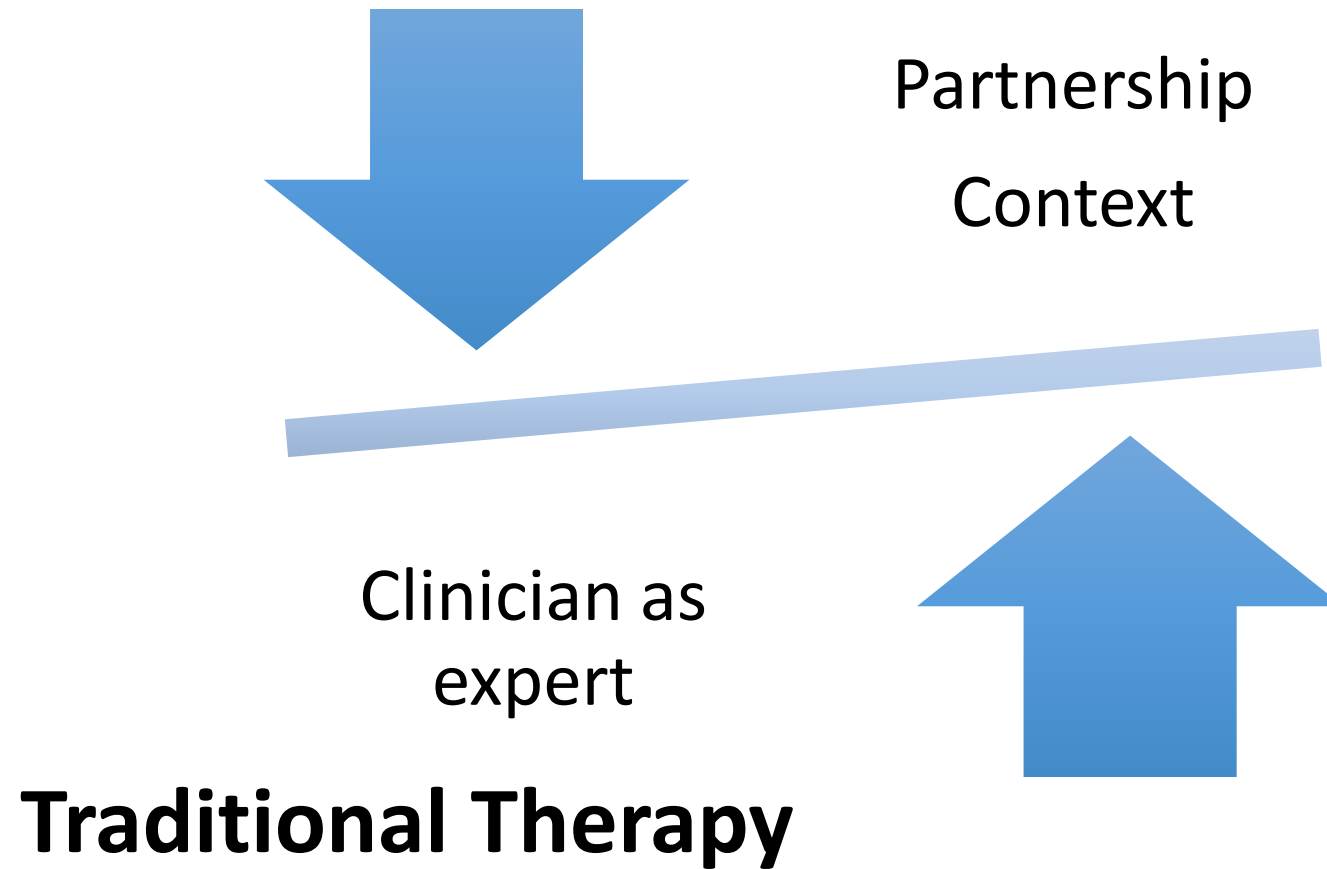
Kennedy, 2017

What is Dynamic Coaching?

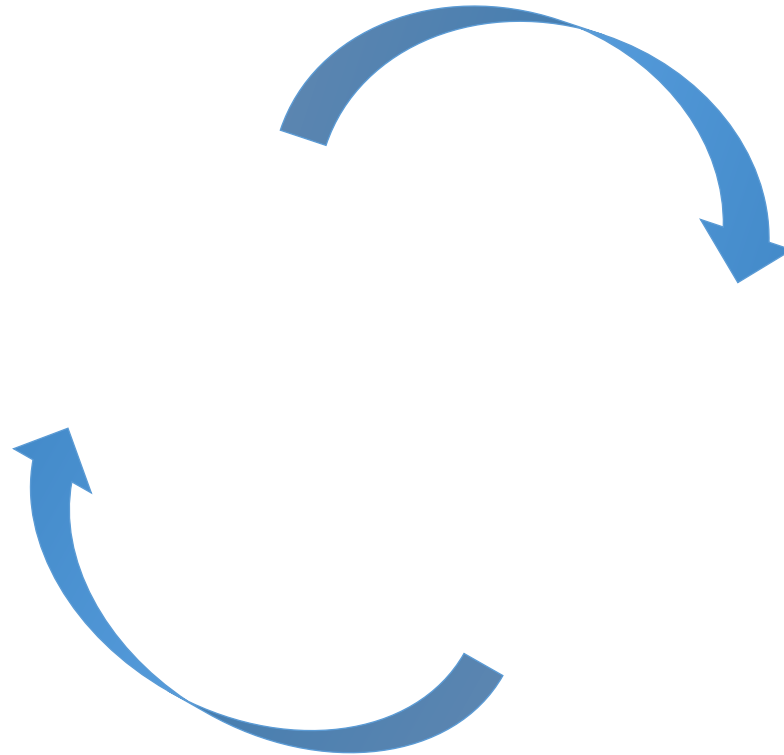
- Dynamic, collaborative approach that models & explicitly instructs self-regulation as a process
(Ylvisaker & Feeney, 1998; Yvisaker, 2006)
 - Reciprocal adjusting, problem solving between the clinician-coach: respect & autonomy
 - In context (campus, work, home) in real time, with constant feedback
 - Sessions are designed to address multiple goals, strategies, barriers and plans.

Kennedy, 2017

Coaching Approach



Coaching

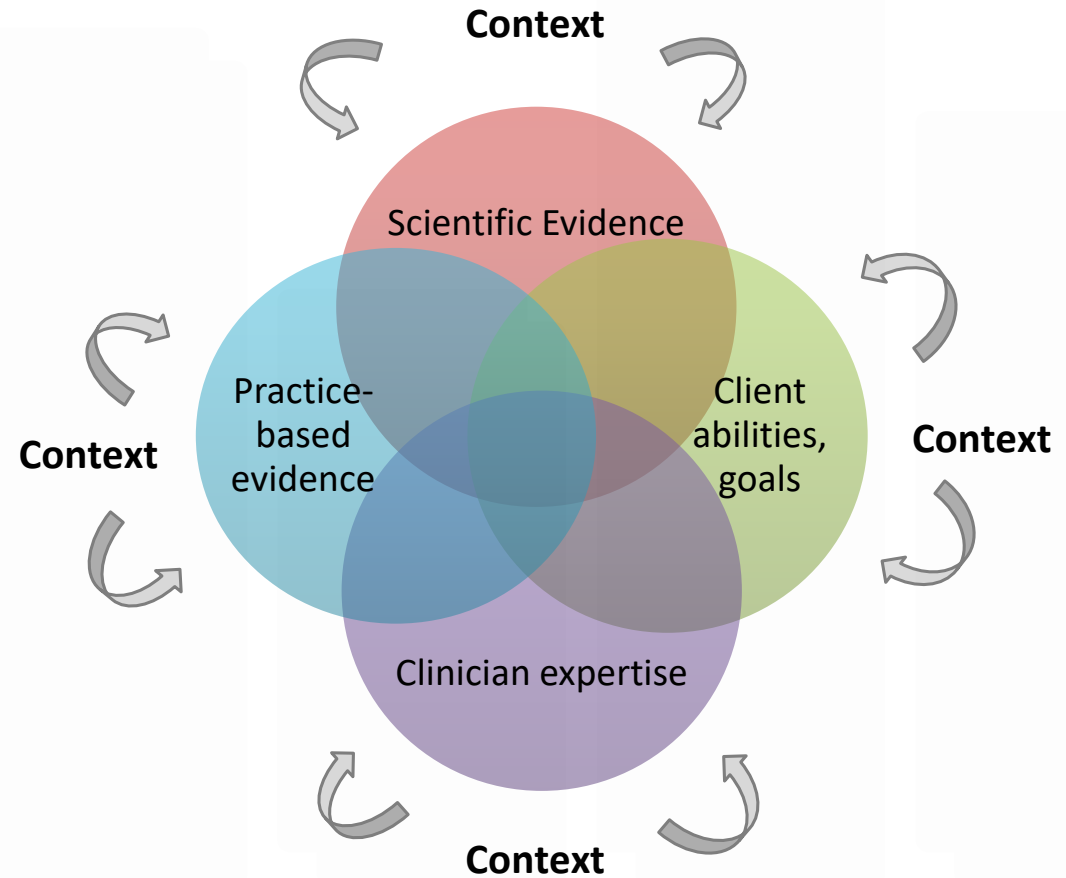


Self-expertise, self-awareness

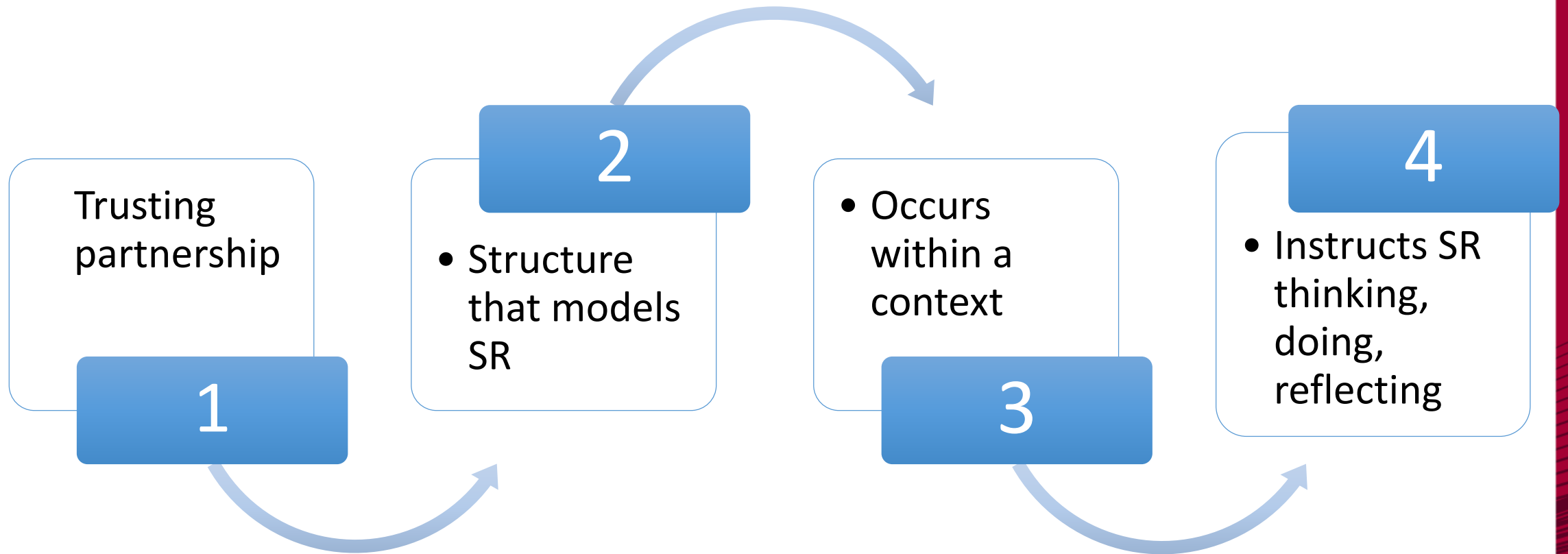
Evidence-based Practice

(Kennedy, 2013; Orlikoff & Schiavetti, 2015)

“...the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients.” (Sackett et al., 1996)



Dynamic Coaching: Four EBP Tenets



Tenet #1. A trusting partnership between the coach and client

- 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

MacFarland, L. (2012). *Canadian Journal of Speech-Language Pathology and Audiology*, 36/1.

Type of Questions and Statements	It shows that the coach:	Example
Open (O): Questions that encourage rich and complex responses rather than simple either/or responses.	Is sincerely interested in understanding and empathizing.	“Tell me what you’ve noticed when you get really tired.” “Tell me more.”
Affirmations (A): Statements that positively communicate your understanding without judgment.	Acknowledges students’ feelings, desires, goals, dreams, ideas, etc.	“You’ve really put allot of thought into this.” “It sounds like there are some reasons for not using your accommodations.”
Reflections (R): Statements that reflect empathy, and promote a deep level of understanding.	Is aware of the complexity of the situation, even its pros and cons, while moving the student towards change.	“I understand how challenging this must be fore you. Its not easy and there are lots of things to consider.”
Summarize (S): Statements that synthesize what you’ve heard & understand.	Understands the situations, pros & cons, and provide opportunity for clarification	“OK, so tell me if I understand this correctly. You can go to disability services to take exams in the distraction-free room, it sounds like its too much trouble or hassle”.

OARS activity

1. I really don't like having someone take notes for me in class. Its embarrassing. I need the notes. And sometimes the notes are not even that helpful.

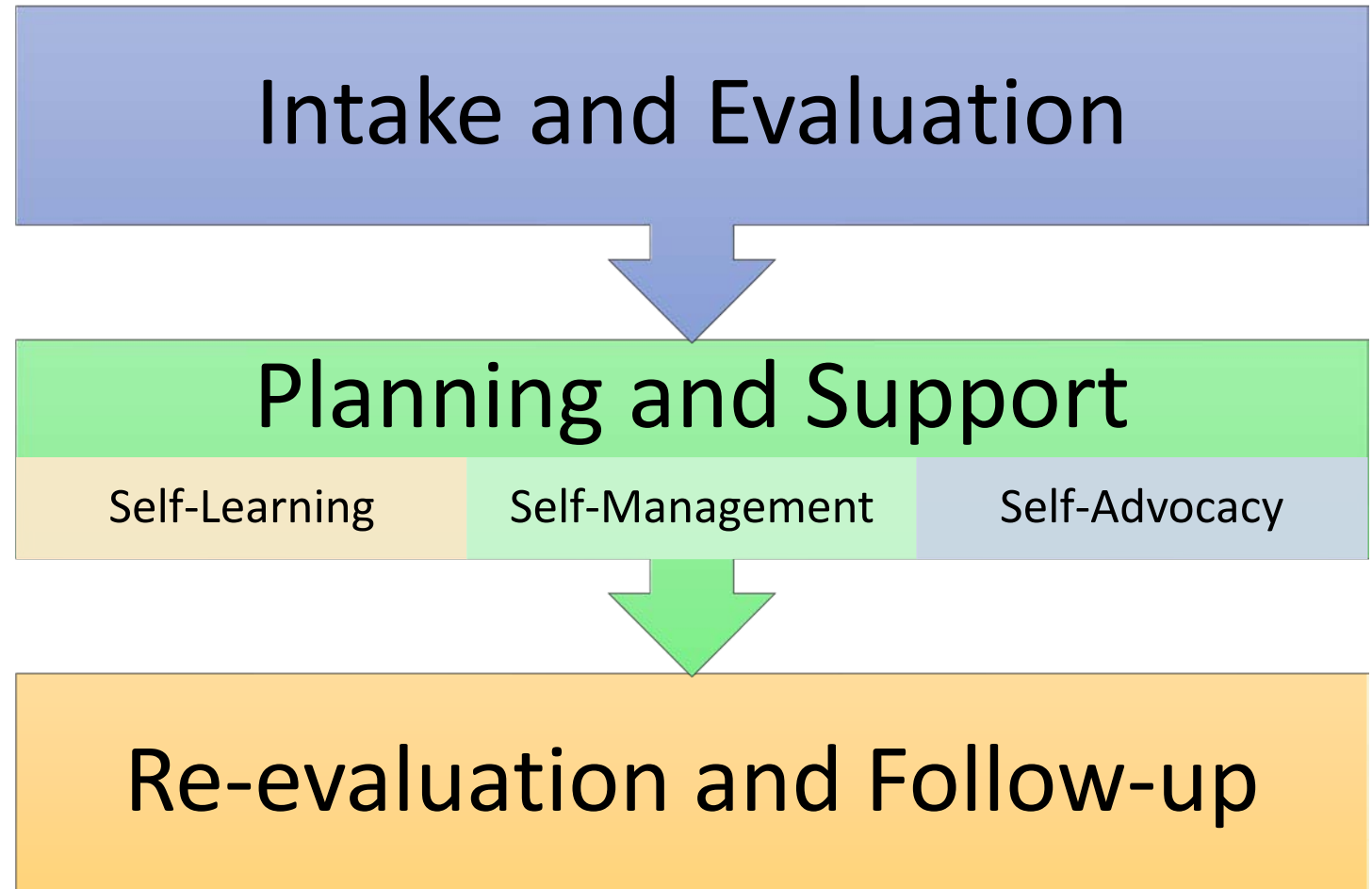
Open, Affirmation, Reflection, Summary

2. I need to be able to meet assignment deadlines! I should be able to do this all of the time, just like before my injury, but now, I don't know...I'm tired allot and everything takes longer. But I should be able to do this!

Open, Affirmation, Reflection, Summary

Tenet #2: Structured to Model Self-Regulation

- Coaching phases model self-regulation



Tenet #2: Structure Models Self-regulation

- Weekly sessions holds clients accountable
 - Persistence cultivates resilience
- Sessions include addressing multiple
 - Proximal goals/needs
 - Distal goals

Resilient individuals...

1. Are resourceful & have good problem-solving skills.
2. Are more likely to seek help.
3. Believe that they can do something that will help them manage their challenges and ability to cope.
4. Have social support available to them.
5. Are connected to others.

(B. Brown, 2010)

Tenet #3. Context Creates Natural Learning, Outcomes and Real Feedback

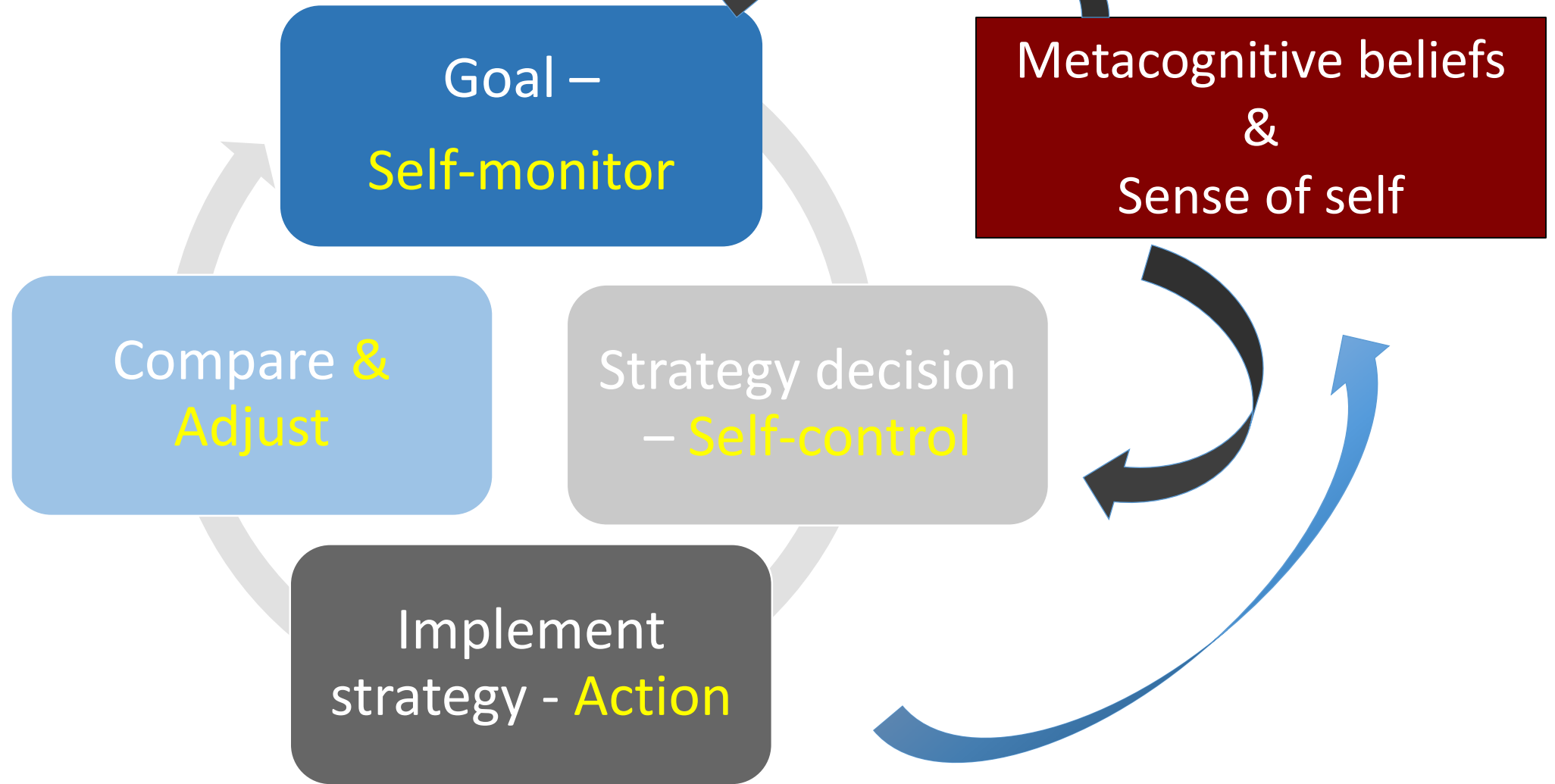
- Fast-paced, real life needs and problems to solve
 - Real deadlines at work, home, school is motivating for...
 - Client AND Clinician coach
- Clients 'see' their strengths, weaknesses
- Strategies that can be used/learned quickly
 - Identified & agreed upon together

Tenet #3. Context Creates Natural Learning, Outcomes and Real Feedback

- Natural outcomes, natural feedback that is obvious
- Generates client-focused outcomes & goals
- Contextually-based learning is evidence-based
 - Learning by active retrieval, 'generation effect'
 - Naturally spaced, distributed learning in various contexts, situations

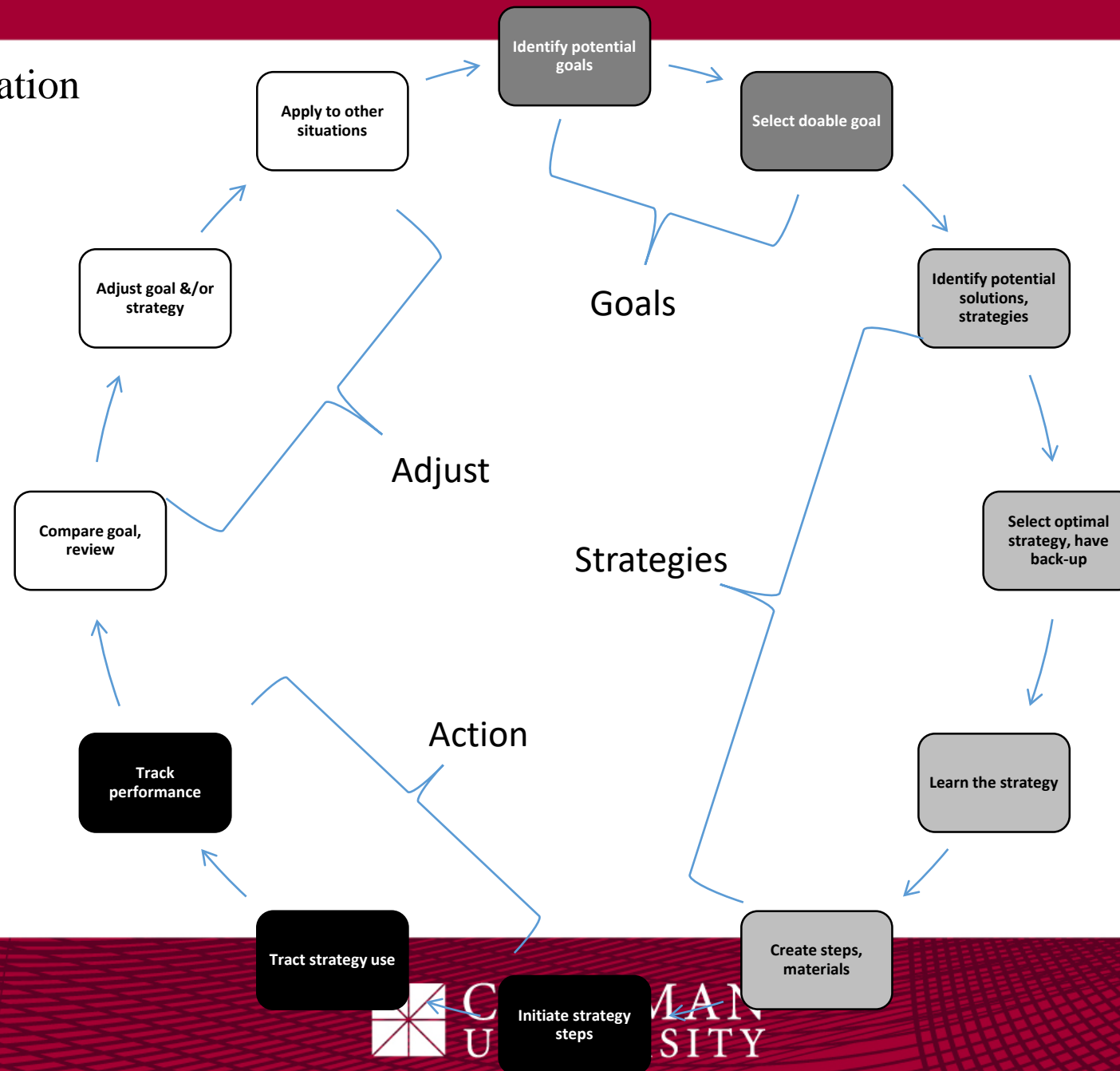
Velikonja et al., 2014; Brush & Camp, 1998

Tenet #4: Explicitly Teach Self-regulation



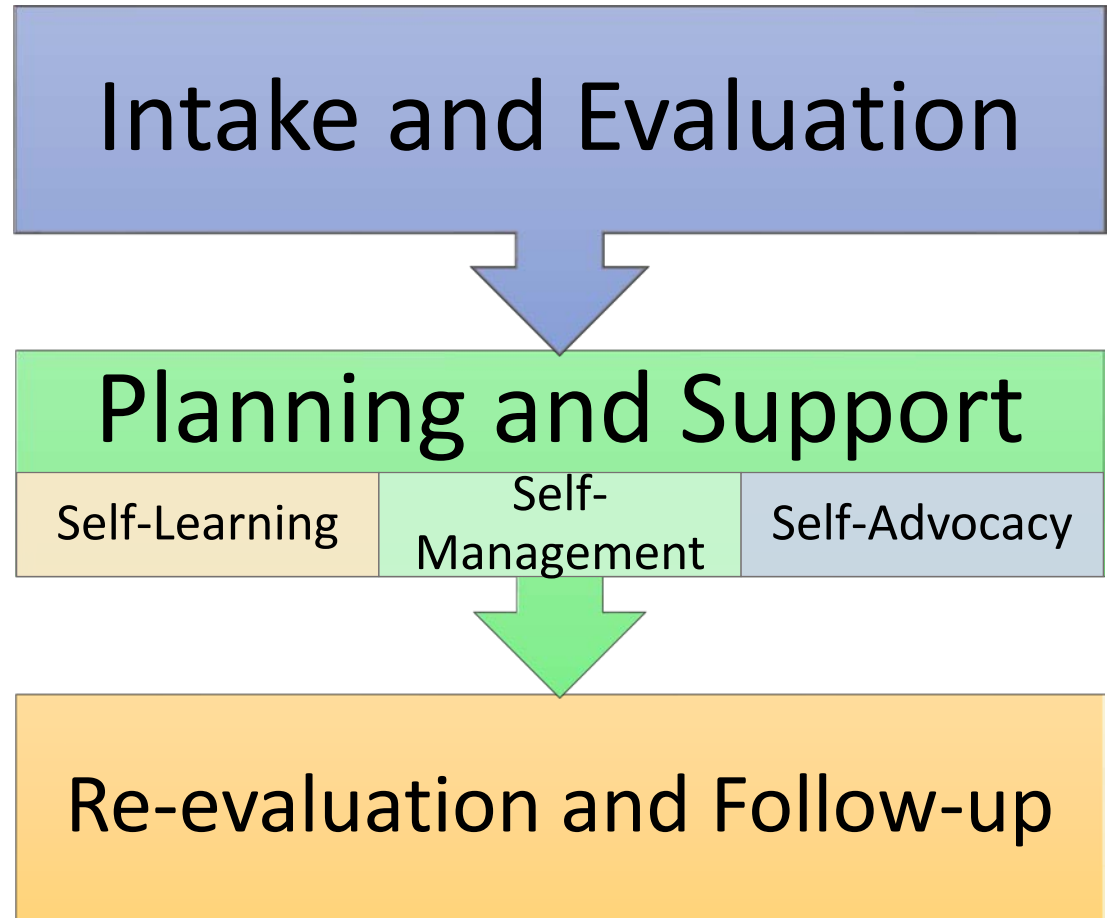
Revised from Flavell, 1979; Kennedy & Coelho, 2005

GSAA - Self-regulation process in steps



Assessing and Planning → Goals, Outcomes

- Personal Goals
 - Activity based goals – turning in assignments on time, good quality
 - Grades on assignments
 - Grades in courses
- Decisions that reflect changes in depth, breath of awareness
 - Studying/learning
 - Managing time
 - Relationships
 - Living situations
 - Academics – using accommodations, changing majors
 - Vocational, work decisions



Abbreviated Evaluation: College Student

- Obtain NP report
- COWAT & WTAR
- FAVRES (adult, student versions)
- Other supplemental specific tests, e.g., parts of the WJ.
- CSS-BI & interview
 - Academic experiences
 - Strategies: learning, organizational, advocacy
 - Goals
- College Academic Self-Efficacy Scale (1988)
- Compared recall with and without taking notes while making predictions
- Plan-do-review for time management

Examples of Questionnaires, Surveys, Interviews

Test	Description
Behavior Rating Inventory of Executive Function – Adult (BRIEF-A, Roth et al., 2013)	75 items in nine areas of executive function, found to correlate into two broad indexes: behavioral regulation and metacognition.
Mayo-Portland Adaptability Inventory (MPAI-IV, Malec, 2005)	Survey of three subscales (i.e., ability, adjustment, participation) represents physical, cognitive, emotional, behavioral, and social issues.
Self-Regulation Skills Interview (SRSI, Ownsworth et al., 2000)	Self-reported readiness to change, strategy generation, strategy use.
Ways of Coping Questionnaire (Folkman & Lazarus, 1988)	Self-reported behavior in stressful situations.
College Academic Self-Efficacy Scale (CASES; Owen, 1988).	Self-reported ratings on 33 different aspects of college experience, e.g., how well class information is understood.
College Survey for Students with Brain Injury (CSS-BI, Kennedy & Krause, 2009)	Multi-purpose survey, that includes 13 academic challenges that cluster into 4 domains: time management and organization, studying and learning, psychosocial issues and stress

Interviewing procedures using the CSS-BI (Kennedy, 2017)

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

I have fewer friends than
before

Uncertain:

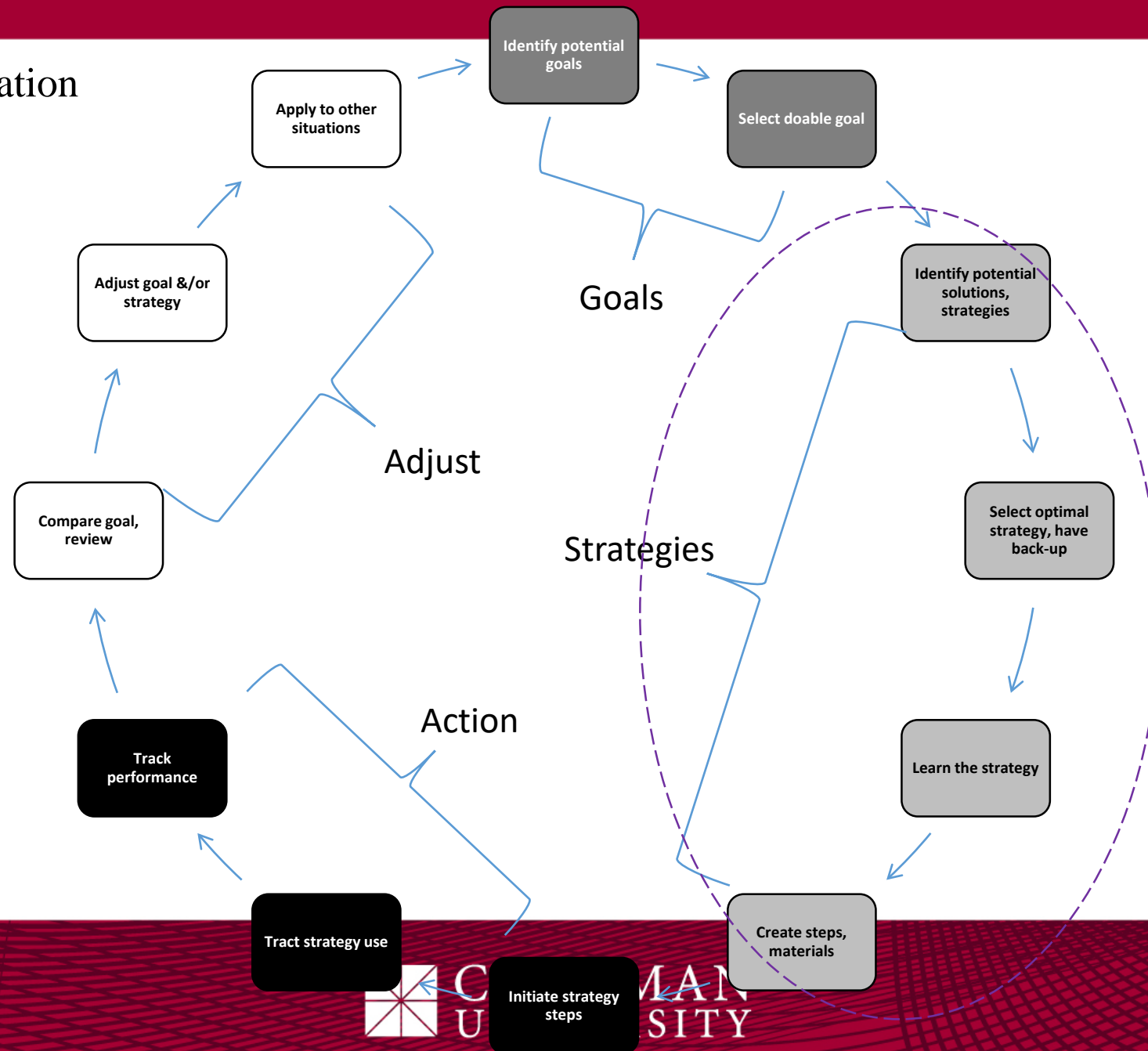
So you are uncertain
about this?

- Yeah well, I don't really have fewer friends, but I have different friends, better friends



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GSAA - Self-regulation process in steps



Academic Statements from the CSS-BI

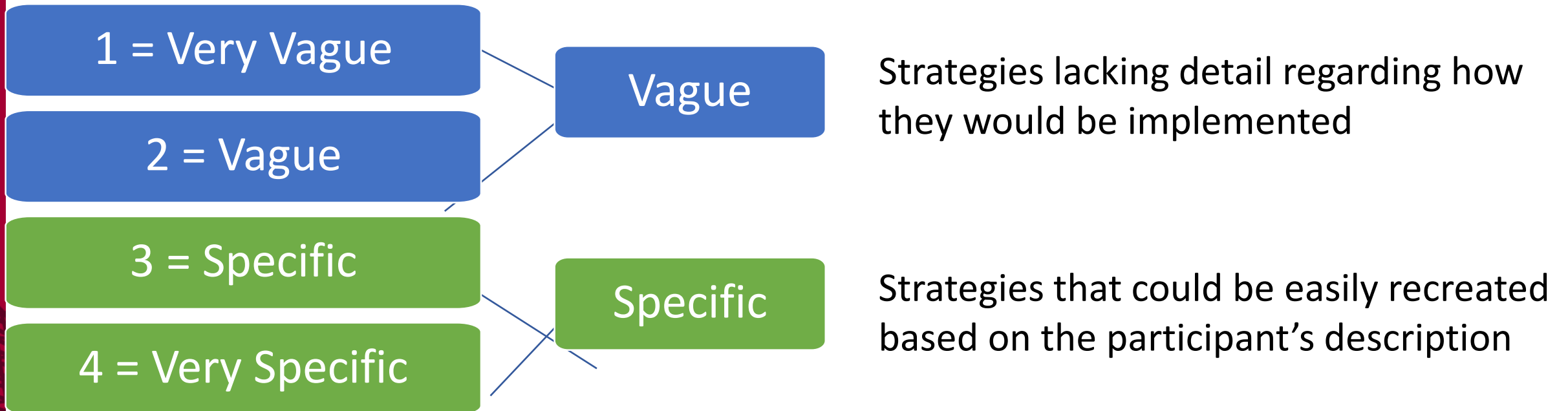
(example from Form 5.8, Kennedy, 2017)

Statement	Agreement rating	Importance rating	Category	Vague Or Specific?	What do you do when this happens? What have you tried? Do you use any strategies?
Review more	4	5	Learning, studying		
Fewer friends	4	2	Social		
Trouble prioritizing	5	4	Organizing, managing		

Methods: Strategy Coding

O'Brien, Schellinger, & Kennedy, 2018

- Strategy specificity was coded using Zimmerman and Martinez-Pons's (1986) schema of self-regulated learning strategies, and Kennedy and Krause's (2013) schema using a consensus process (99.7% agreement between the coders):



Self-regulation strategies used by students with brain injury while transitioning to college (O'Brien, Schellinger & Kennedy, 2018)

Table 1

Number and types of strategies reported by students with TBI from the CSS-BI survey and interview

Student	Total number of strategies		Number of Self-regulation categories		Percentage of specific strategies	
	Baseline	After tx	Baseline	After tx	Baseline	After tx
1	39	34	11	11	53.85%	50.00%
2	18	17	7	9	27.78%	41.18%
3	12	17	9	10	41.67%	58.82%
4	11	19	5	9	0.00%	26.32%
5	22	28	9	13	57.14%	67.86%
Average	20.40	23.00	8.20	10.40	36.10%	48.84%
SD	11.33	7.65	2.28	1.67	23.31	16.04

Self-Learning (SL)

Need to
remember
what I've read,
but I don't
know how?

Develop &
implement
strategies for
taking multiple
choice tests

Self- Management (SM)

Turn in all my
papers on time

Prioritize
assignments to
work
efficiently

Self- Advocacy (SA)

Find more
activities that I
can still do

Schedule &
plan social
activities

Self-Regulation Goals

Often attainable,
even when
performance goals
may not be

Target clients
progress toward a
performance goal

Clients are
involved in the
problem-solving
process & the plan

Focused on
aspects of SR
where clients
struggle

Interest in Executive Functions is Widespread

Effects of the Student Success Skills Program on Executive Functioning Skills, Feelings of Connectedness, and Academic Achievement in a Predominantly Hispanic, Low-Income Middle School District

Journal of Counseling & Development, 2015

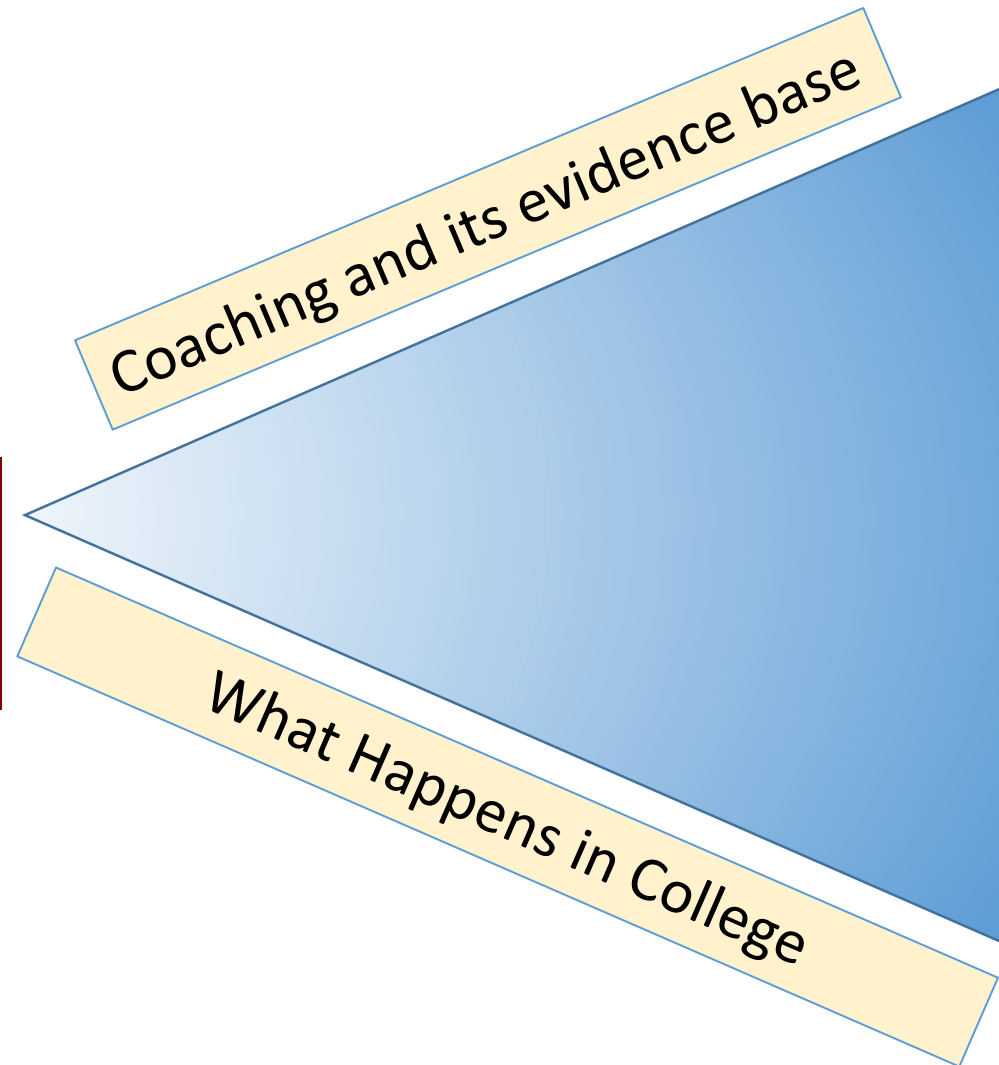
Matthew E. Lemberger, James P. Selig, Hannah Bowers, and Jennifer E. Rogers

■ The authors examined the effects of the Student Success Skills program on executive functioning, feelings of connectedness, and academic achievement of a sample of 193 middle school students in a predominantly Hispanic and economically challenged school district in the southwestern United States. Using multilevel regression analyses in a two-level randomized design, the authors found treatment effects for multiple executive functioning scales, feelings of connectedness to classmates, and mathematics and reading achievement.

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

Dynamic Coaching	Didactic Instruction
Coach provides individualized education	Coach provides individualized education
Both coach & student are experts	Coach is the expert
Emphasizes process & result	Emphasizes process & result
Coach asks questions, students select strategies	Coach identifies & selects strategies
Coach relies interviews, questionnaires & behavior to gather information about student	Coach relies on test scores & behavior to gather information about student
Coach models self-regulation and provides structure, student provides content	Coach models, provides structure, and provides content
Goals are identified by student with coaching guidance	Goals are often independent of the instruction
Coaching occurs in the context, in real time, e.g., college campus	Instruction occurs out of context, e.g., therapy room
Is team based in which student selects team members	One-on-one therapy or instruction are typical
Less intensive, e.g., one session per week	More intense, e.g., 2-3 times per week
Process-based goals are as important as the product-based goals	Product based goals are important
Distributed practice occurs naturally	Practice is artificial, out of the context from which strategies will be used
Feedback comes naturally, from multiple sources	Feedback comes from the coach
Self-regulation is emphasized, i.e., - monitoring, implementing, adjusting	Learning the strategy is emphasized

Executive Functions,
Metacognition, & Self-
regulation



Coaching Self-
regulated
management,
learning, & advocacy

Student #1: Sequence of Events

Severe TBI,
auto accident,
Junior in HS



Inpatient rehab,
returned to HS
with lots of
support



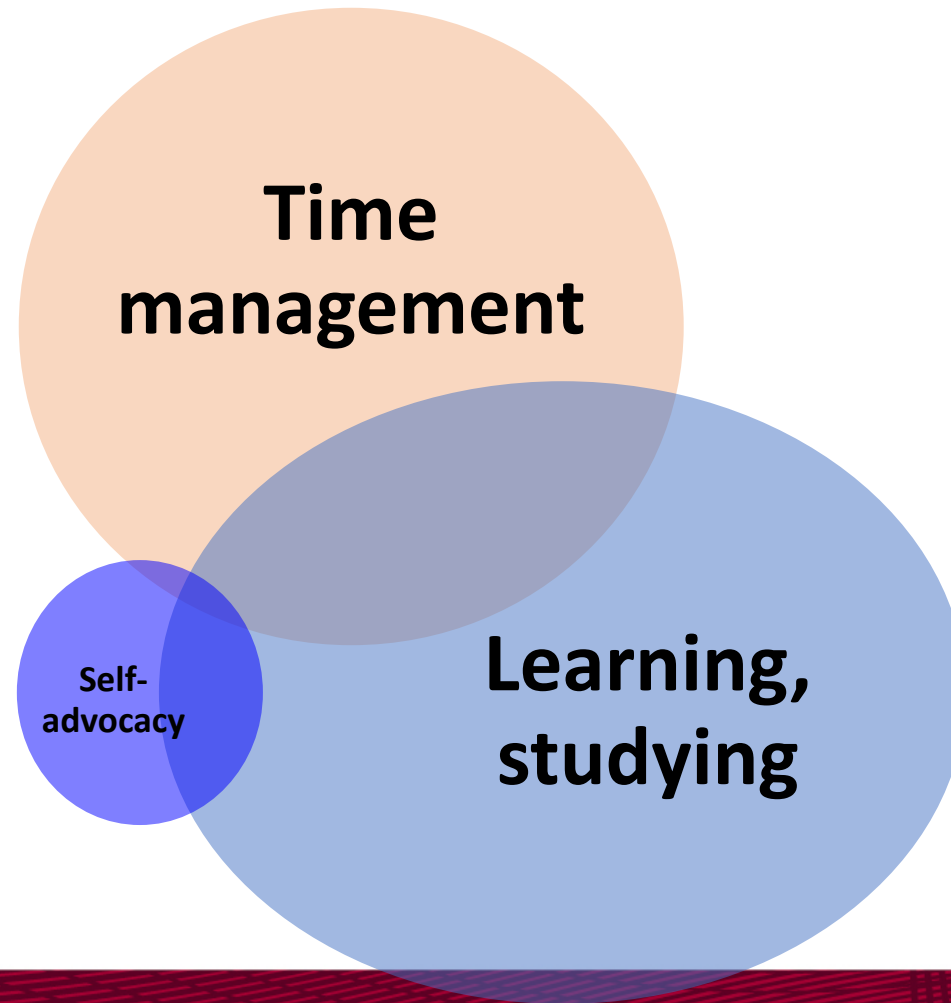
Severe memory
impairment,
excellent social,
EF reflected
memory



Referred to us
by his
vocational
rehab
counselor

Very Supportive family, attending community college,
getting accommodations

Student #1 - learning strategies, time management, advocacy



Self-Learning & Studying: Strategy & goal development

Problem	Performance goal	Self-regulation Goals	Coaching
Student: Reading a novel, I can't recall what I read yesterday so I don't understand next chapter	Recall a sufficient amount that he already read, so he could continue to read/understand.	<ol style="list-style-type: none">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	<p>Coach: Show me what you mean. What do you think you should do?</p> <p>Student: I could 'journal' my reading as I go like I learned last semester.</p> <p>Coach: Lets have you create a way for you to assess.</p>

Goal Attainment Scaling

- 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)

GAS goal applied to reading

Goal Area: Reading Journal		
	5	Writing summaries 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 scenarios (such as using quotes for an essay). Notes are well elaborated and allow for integration of ideas across the narrative.
	4	Writing summaries 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.
Target	3	Writing summaries of most, but not all chapters read. Alternatively, all chapters have notes, but effectiveness of notes in triggering recall is inconsistent. Some time is spent scanning the book rather than relying on summaries.
Starting Point	2	Writing summaries of only a few chapters. Effectiveness of notes in triggering recall is inconsistent. More time is spent scanning the book than relying on summaries.
	1	Writing summaries of chapters read only rarely or not at all.

Student #2: Self-learning & Studying: Strategy

SR goal

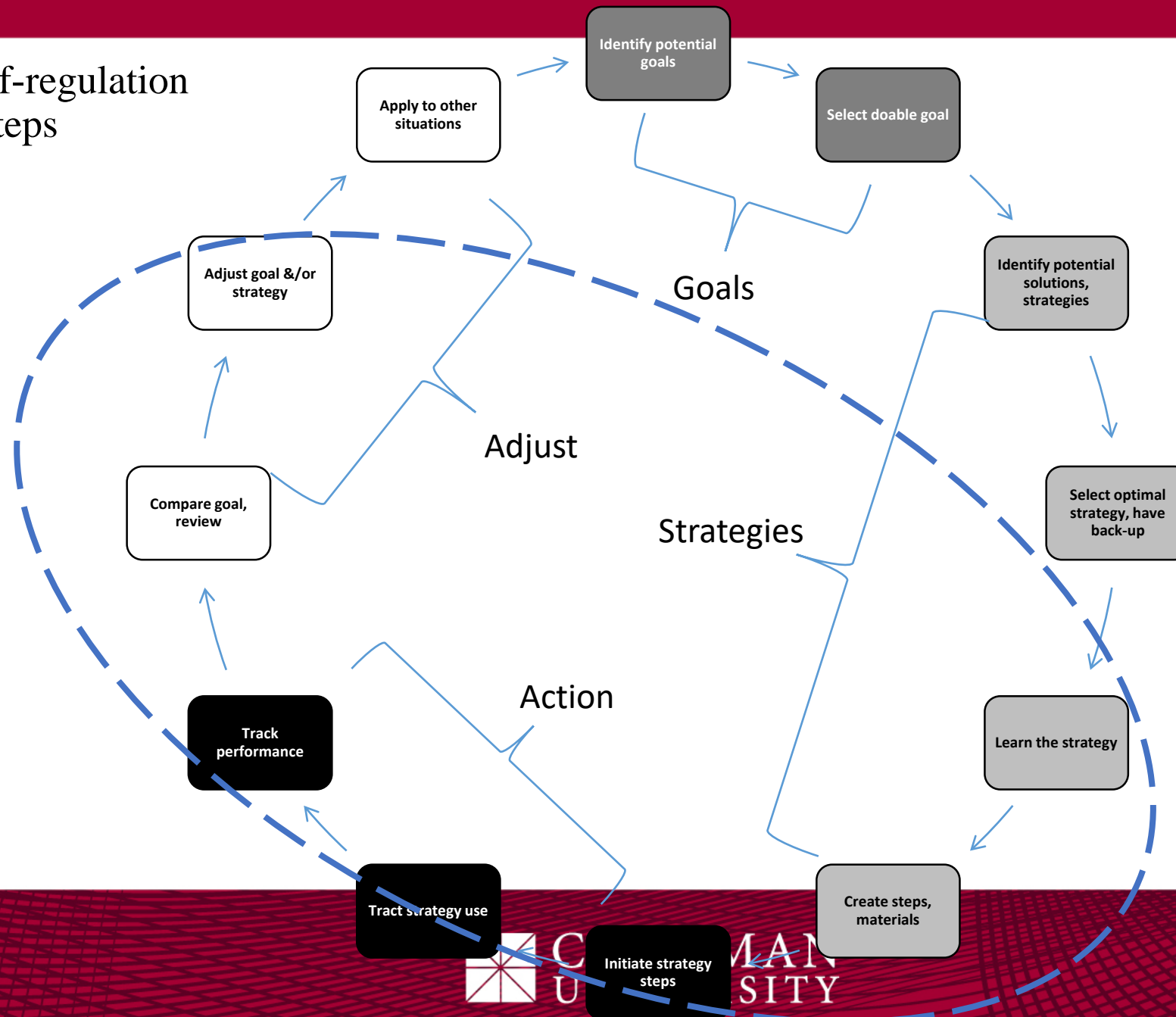
- To be able to review (& recall) what's been said in class.



Self-regulation subgoals 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

GSAA - Self-regulation process in steps



Student #1

- Formed a team
- Supported by voc rehabilitation
- 2 years of coaching, decreased to monthly at the end
- Able to get good grades in highly structured courses with lots of support
- Use more strategies, effective ones, more specific ones
- Worked part-time
- Used this smart phone heavily
- Used schedule management system
- Decided to change educational goal from becoming a teacher to becoming a personal trainer
 - Personal trainer certificate

Student #2

Student #2: Sequence of Events

Multiple concussions in high school soccer with accommodations (6 total?)



Most recent concussion was in a mosh pit 2 years before



Never received concussion management for symptoms other than headaches & anxiety



Referred by University Counseling services in her junior year.

Multiple jobs

Family issues

Concerns with health care system

Cycle of Stressors

- Working, going to school (15-16 credits) 24/7
- Family expectations
- Chronic headaches
- Panic, anxiety attacks
- Doing 'ok' in classes
- Easily frustrated
- Arguments



Loss of control

Student #2: Initial Assessment

<i>Test</i>	<i>Score</i>
RBANS (standard score)	
Immediate Memory	100
Language	85
Attention	97
Visuospatial	112
Delayed Memory	109
Total Scale	100
FAVRES	
Total Accuracy	111
Total Rationale	111
Total Time	110

Student #2: Pre-Coaching Assessment

CSS-BI survey & interview	Pre-coaching
Number of effect of BI	13
Number of academic challenges	12
Number of total strategies reported	39
Number of variety of strategies	11
Percent of strategies coded as specific	54%
Average rating of academic challenges	4.2

Student #2: Pre-Coaching Assessment

Interview and CSS-BI revealed:

- Need for referrals
- Need for accommodations
- Grades were good but took extreme effort
- Difficult social relationships
- Chronic headache
- Strategies lacked effectiveness

Student #2: Student Centered Goals

Proximal

- Headache management
- Fatigue management
- Time management
- Self-advocacy to manage anxiety & all other goals

Distal

- Maintain GPA
- Graduate
- Possible admission to graduate program

Student #2: Sequence of Support

All goals were closely linked; addressed in tandem

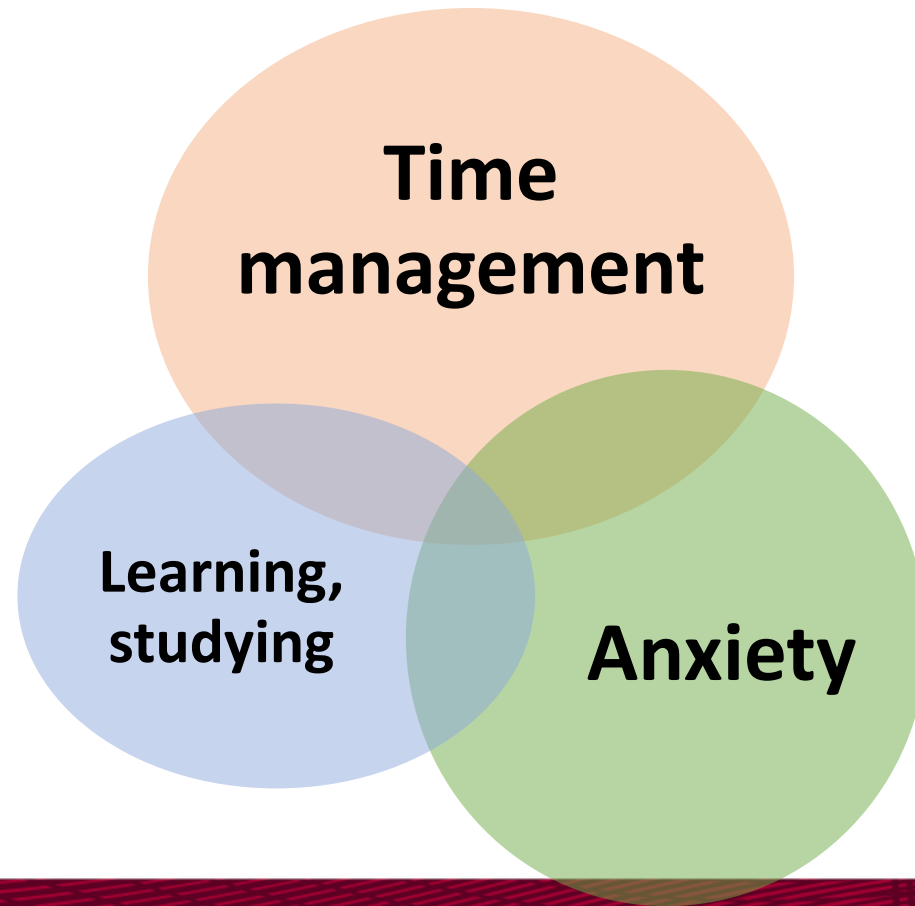
Referrals to Disability Services, Neuro - ophthalmologist, Psychiatrist

Coached for 4 semesters, 22 sessions, averaged 64 minutes.

Missed lots of appointments due to over sleeping, headaches, fatigue.



Education, self-advocacy, time management,
learning strategies



Strategies & Supports Examples

Headaches

- **Step 1:** Use a headache journal to track headaches
- **Step 2:** Analyze journal to identify triggers
- **Step 3:** Develop strategies to avoid/minimize triggers

Time Management

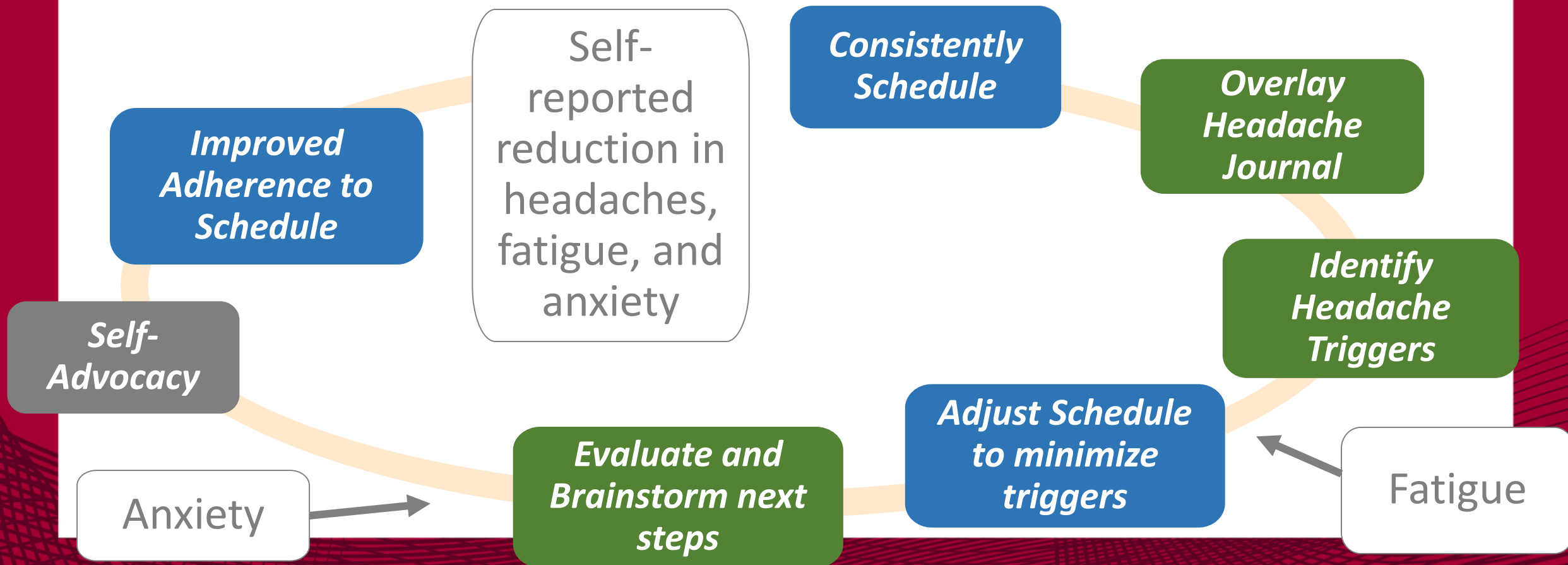
- **Step 1:** Initiate a scheduling/planning system
- **Step 2:** Evaluate/Self-monitor/Adapt planning system
- **Step 3:** Develop strategies to better prioritize her time
- **Step 4:** Develop Self-Advocacy Strategies to increase her ability to adhere to her schedule

Goal attainment scaling: Scheduling

Goal Area: Scheduling

	5	All work, personal, family, and weekend activities/tasks are scheduled on the planner.
Target	4	All work, personal, and family activities are scheduled on the planner. Most weekend activities (about 75%) are scheduled.
	3	All work tasks/meetings are scheduled on the planner. Personal and family activities are scheduled most of the time (about 75%). About half of weekend activities are scheduled.
Starting Point	2	Work tasks/meetings are scheduled on planner most of the time (about 75%). Personal and family activities are scheduled about half the time. Weekend tasks/activities are scheduled only rarely.
	1	Work tasks/meetings are scheduled on planner about half of the time or less. Personal and family activities are rarely scheduled. Weekend tasks/activities are never scheduled on the planner.

Sequence & Overlap of Domains



Student #2: Post-Coaching Assessment

CSS-BI survey & interview	Pre-coaching	Post-coaching
Number of effect of BI	13	13
Number of academic challenges	12	11
Number of total strategies reported	39	34
Number of variety of strategies	11	11
Percent of strategies coded as specific	54%	50%
Average rating of academic challenges	4.2	4.8

Self-Advocacy – Act(ion) example

Problem	Performance goal	Self-regulation goal	Coaching
“I get really nervous before exams. I am easily distracted”	<ol style="list-style-type: none">1. Reduce experience of nervousness2. Reduce headaches, fatigue after exams	<ol style="list-style-type: none">1. Implement her accommodation to take exams in Disability services office	<p>Coach: And this nervousness is since your injury?</p> <p>Student: Yeah.</p> <p>Coach: You could try to taking the exam in the DS office, right?</p> <p>Student: its seems like a hassle, and I don't know, I just don't like going there</p> <p>Coach: But fewer distractions likely?</p>

Student #2: Post-Coaching Assessment

Distal Outcomes	Semester 1	Semester 2
<i>Course Completion</i>		
Credit Hours	14	8
GPA	3.45	2.79
<i>Graduation</i>		
Time to Graduation	6 years, pursued another degree	
<i>Employment</i>	Flight attendant, authors	

Student #3: Sequence of Events

Freshman in college, severe TBI, auto accident



Inpatient rehab, returned to college as a sophomore



Memory impairment, word finding, EF

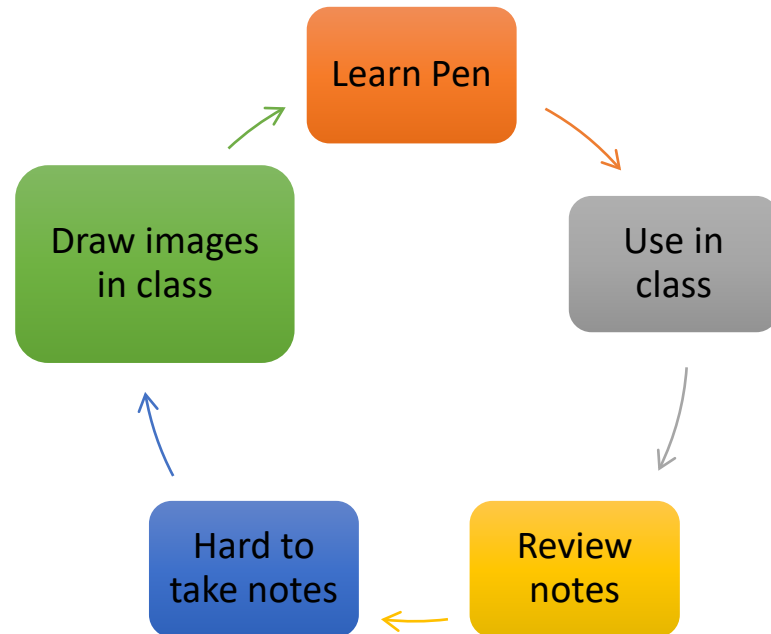


Referred to us by hospital SLP

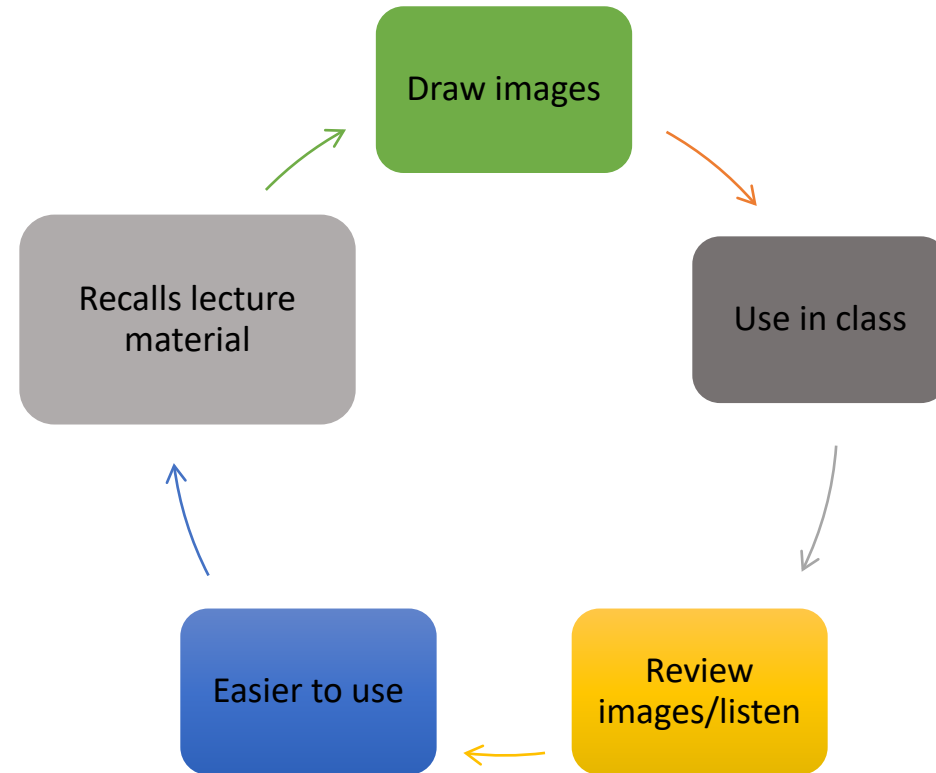
Very supportive family

Self-learning & Studying: Strategy, Act, Adjust

1. Strategy – Live Scribe



2. Performance - Recall



Strategy Usefulness and Next Steps

Instructions: This form can help you figure out what happened when you implemented the plan or strategy. You can also consider your options. Write out the strategy, describe what happened, consider your options, and identify what you want to do next.

Goal:

Strategy/plan:

Did you use it enough so you can tell if it worked?

Yes

No

Describe how well it worked:

- ✓ _____
- ✓ _____
- ✓ _____
- ✓ _____

Describe barriers that interfered:

- ✓ _____
- ✓ _____
- ✓ _____
- ✓ _____

What is your plan?

☐ Continue to use it as is and assess its usefulness.

What is your plan?

☐ Do nothing different and try again.

Student #3

- Coached for 3 semesters, decreasing over time
- Addressed time management, studying/learning and self-advocacy
- Changed his major to art
- Self-efficacy & confidence improved, number & specificity of strategies increased.
- Graduated in 5 years with a BFA
- Employed as an interior designer
- Has lots of friends and family

Student #4: Sequence of Events

Severe TBI, auto
accident, HS
graduation



Rehab for 1 yr,
enrolled in college,
dropped out in 3
weeks



Referred to us
Memory, slow
processing, EF, young.
Switched to a
'disability friendly'
college

Very supportive family



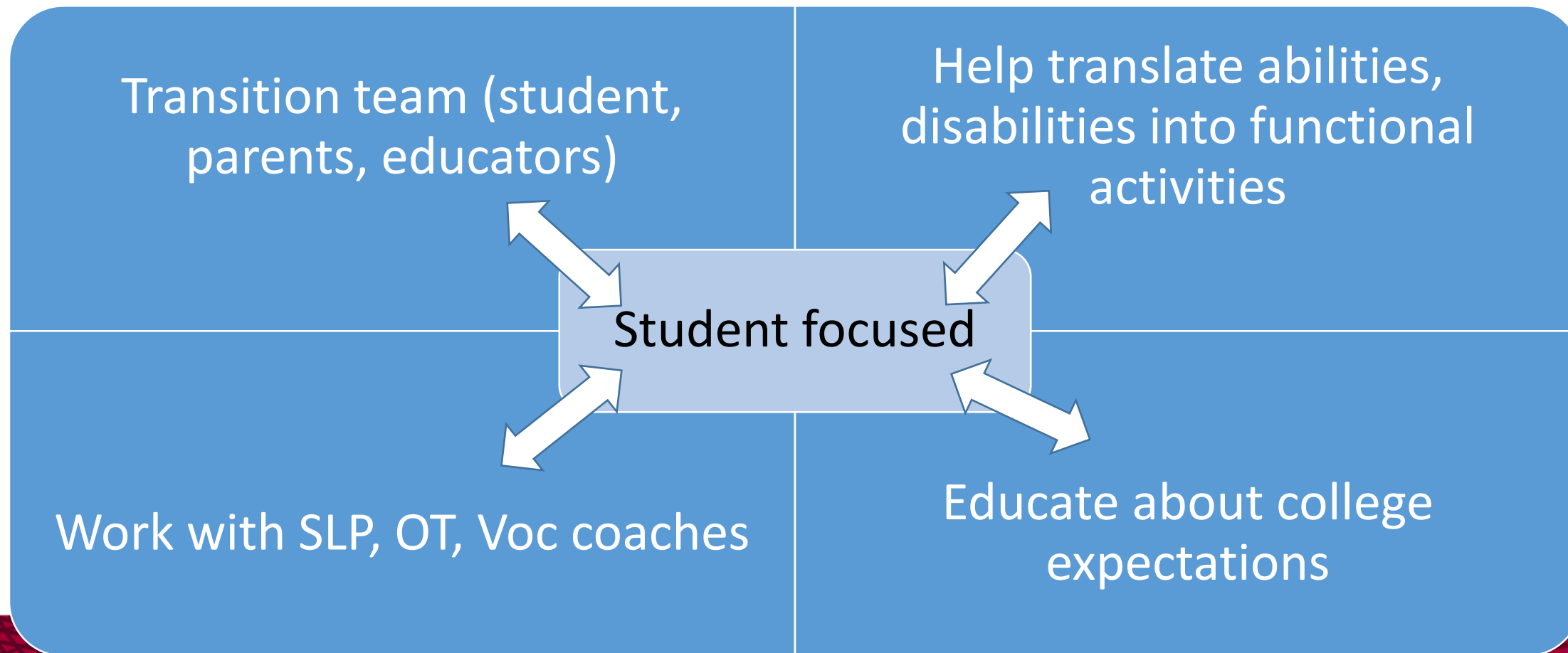
Student #4, Self-Advocacy - Benefits, Costs

- 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

Student #4, 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 measure the student beyond the classroom*

What can educators do prepare students, families for college?



Translating abilities and disabilities

Interpreting Abilities and Disabilities *(page 2 of 2)*

I have difficulty with:

1. _____

2. _____

Examples of this are:

1. _____

2. _____

3. _____

1. _____

2. _____

3. _____



Reach out to local college & universities with resources

TBI - What College Disability Specialists and Educators Should Know about Executive Functions

In closing...

- College students with TBI CAN be successful with personalized support through
 - Transition teams to assist with planning
 - Disability resource specialists
 - Executive function coaches
 - Peer groups on campus and/or on-line

College success? Job, career, personal success...



Projects under construction...

Center for Brain Injury Research & Training

- What Parents need to know...
- What Students need to know...
- What Educators need to know...

Questions

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References available upon request