**Strategies for Success:
Addressing Executive Functioning Deficits
in Students with Autism Spectrum**

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Objectives

- Attendees will be able to define executive functioning

- Attendees will be able to discuss the importance of executive functioning skills to learning and behavior

- Attendees will become familiar with specific assessment measures that address executive functioning.

- Attendees will identify classroom interventions or technology that directly teach executive functioning skills necessary for a successful educational experience.

"Children do well if they can. An explosive outburst-like other forms of maladaptive behavior-occurs when the cognitive demands being placed upon a person outstrip that person's capacity to respond adaptively."

-Ross Greene

Core Deficits of ASD

- Theory of Mind

- Weak Central Coherence

- *Executive Functioning*

Theory of Mind (ToM)

- The ability to recognize the
  - Thoughts, feelings/desires, beliefs intentions of others   *AND*
- To use this information to
  - Understand their behavior and predict what they might do next in a given situation

Weak Central Coherence

- Proposed by Frith (1989) as theory to explain the cognitive style of individuals with ASD
- Refers to the strong focus on details without being able to coherently link details into a meaningful whole
  - Can't see the forest through the trees

WCC

- Hypothesized to responsible for common strengths and deficits often seen in individuals with ASD

Strengths
- Special Talents
- Strong visual-spatial skills
- Memory for details
- Savant skills

Deficits
- Overselectivity
- Insistence on sameness
- Difficulties with reading comprehension, organization & generalization

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"If one were to gather 100 researchers, policymakers and practitioners and ask them the importance of the development of executive function (EF) skills in preschool-age children, it is likely that most if not all, would place a high importance on such an outcome."

- Griffin, J.A., McCardle, P. & Freund, L.S. (Eds.). (2016). Executive function in preschool-age children: Integrating measurement, neurodevelopment, and translational research. American Psychological Association, Washington, DC.
- Miller and Parks (2016)

"If one were to ask the same 100 to define executive function, at least 100 different definitions would likely be given. Such is the state of the field – there is general agreement regarding the importance of EF in early childhood and later adolescence but little consensus on the definition and components of EF."

- Miller and Parks (2016)
- Griffin, J.A., McCardle, P. & Freund, L.S. (Eds.). (2016). Executive function in preschool-age children: Integrating measurement, neurodevelopment, and translational research. American Psychological Association, Washington, DC.

Have you ever worked with a student who appears disorganized, inflexible, impulsive, and who struggles with planning and problem solving? The student may find it difficult to achieve in school, follow through with responsibilities at home, and interact appropriately in vocational and community settings – not because of a lack of effort or desire to do well but due to deficits in executive function (EF) skills.

Have you ever worked with a student with ASD that demonstrated repetitive behaviors (hand flapping, rocking), difficulties with change, overselectivity, perseveration, difficulties regulating emotions, difficulties in taking another person's
perspective, in social reciprocity, and in taking initiative?
These characteristics have also been correlated with deficits in EF

What is Executive Functioning?

http://developingchild.harvard.edu/resources/inbrief-executive-function-skills-for-life-and-learning/

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Definition

- In general, Executive Functioning (EF), are cognitive processes that work together to support goal-directed behavior and self-regulation (Dawson and Guare, 2010)

It is the conductor of all cognitive skills

What is Effected by EF?
Almost EVERYTHING!

- Organization
- Time management
- Finishing work on time
- Multitasking
- Apply previously learned information to solve problems

- Analyzing ideas
- Looking for help or more information when it is needed
- Remembering details
- Transitioning
- Focusing attention

AND…….

- Initiating activities
- Generating new ideas
- Communicating details in an organized and clear manner
- Making a plan
- Prioritizing
- Control impulses

- Filter distractions
- Avoid saying or doing something inappropriate
- Maintaining relationships
- Learning
- Maintaining relationships

SELF CONTROL

LEVEL: EXPERT

It's Important to Understand….

- There is no correlation between EF skills and intelligence

- More predictive of school success than IQ

- Exercising students' EF skills results in significant improvements in their ability to regulate behavior

Possible Causes of EF Deficits

Causes could include….

- Genes and heredity
- Brain differences
  - Diseases, disorders or injury to the prefrontal cortex
- Prenatal exposure to tobacco, alcohol and illicit drugs

Development of EF Skills

Developing EF Skills

- Although we aren't born with executive function skills, we are born with the potential to develop them.
- The process is a slow one that begins in infancy
  - **7-12 months**-inhibitory control and working memory skills emerging
- Continues into early adulthood
- Development is shaped by our experiences

Developing EF Skills

- Children build their skills through engagement in meaningful social interactions and enjoyable activities that draw on self-regulatory skills at increasingly demanding levels.

- Between the ages of 20-29, executive functioning skills are at their peak

Executive Function Across the Lifespan

Executive function develops with age, peaking in early adulthood and eventually declining in old age.

http://www.aboutkidshealth.ca/en/news/series/executivefunction/pages/executive-function-part-three-the-development-of-executive-function-across-the-lifespan.aspx

Clinical Populations that May Demonstrate Deficits in EF

EF and Disorders

EF Deficits are strongly associated with numerous disorders including

|	
Autism	Depression
Attention Deficit	Schizophrenia
Tourette's Syndrome	Social Communication Disorders
Anxiety	Traumatic Brain Injury
Intellectual Disabilities	Specific Learning Disabilities
Fetal Alcohol Syndrome	

However

A student DOES NOT have to have a disability to have challenges with executive functions.

Wilkings & Burmeister (2015)

Executive Functioning: Behavior Categories

Executive Functioning

Behavior Regulation
- Inhibit
- Shift
- Emotional Control

Metacognition
- Initiate
- Working Memory
- Plan/Organize
- Organization of Materials
- Monitor

BRIEF rating scale Gioia et al,2000

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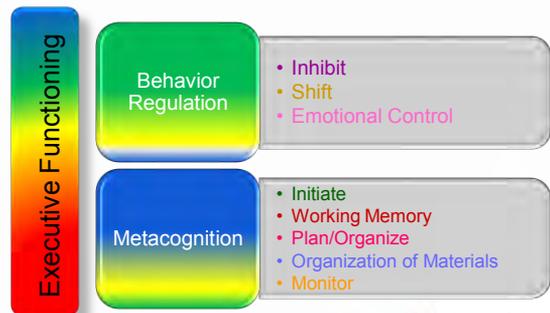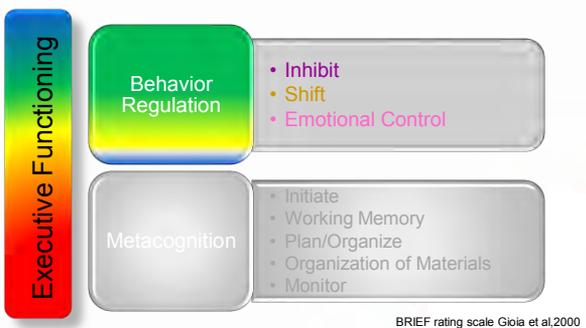
BRIEF rating scale Gioia et al,2000

Inhibit

- The ability to master thoughts and impulses so as to resist temptations, distractions, and habits, and to pause and think before acting.
- The gateway to other EF
  - Deficits in <u>behavioral</u> inhibition
    - Impulsive, Can't stop an action when asked
  - Deficits in <u>cognitive</u> inhibition
    - "Daydreams", "off topic"

Inhibit

- Three different types of inhibition (Friedman and Miyake 2001)
  1. Inhibition of prepotent responses
  2. Resistance to interference
  3. Resistance to proactive interference

Inhibit

- Also known as:
  - Self-control
  - Impulse-control
  - Response inhibition
- Antonym: Impulsivity

Shift

- Also known as Cognitive Flexibility

- Shifting is 'the ability to shift to a different thought or action according to changes in the situation' (Hill, 2004)

Shift

- Examples
  - Copying information from the whiteboard requires shifting between the whiteboard and the notebook
  - Stopping math to begin reading
  - Talking to a friend about your new favorite music artist and the friend says "Hey, are you going to the football game tonight?

Shift

- Shifting can occur in the following ways:
  - From internal to external stimuli
  - Relevant external stimuli vs. irrelevant external stimuli
  - From self to others
  - From another person back to internal stimuli for comparison of what s/he said vs. own thoughts

Shift

- Generating internal thoughts as compared to what s/he will think
- Verbalizing thoughts while comparing person's reaction to see if reaction matches predictions made in step 4.
- If s/he has a different reaction, search internal "database" to problem solve what went wrong and how can error be corrected (i.e., need more information? Need clarification of verbalization - Oh, I mean…)

Shift

- Speed of Shifting
  - Shifts too quickly
    - Distractible", "Doesn't finish"
  - Shifts too slowly
    - "Daydreams", "off-topic comments
  - "Rigid", "Perseverative"

Emotional Control

- The ability to modulate emotional responses by bringing rational thought to bear on feelings.

Life is 10% what happens to us and 90% how we react to it.
(Charles Swindoll)

Emotional Control

- Deficits in emotional control present as:
  - Over-emotional, over-sensitive, immature, moody, easily frustrated
  - Inability to "pump up", unenthusiastic

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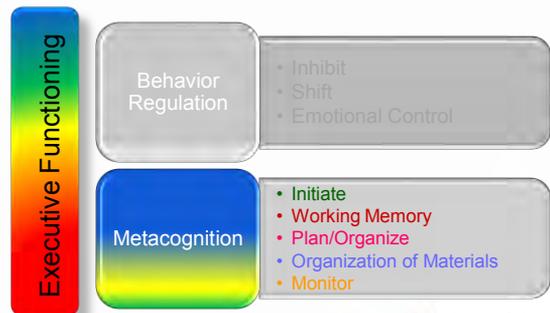
BRIEF rating scale Gioia et al,2000

Initiate

- The ability to begin a task or activity and to independently generate ideas, responses, or problem-solving strategies.

Working Memory

- The capacity to hold information in the mind for the purpose of completing a task.

Working Memory

- Allows us to complete multi-step tasks
- Remember directions
- Take notes
- Understand something just explained to us
- Stick to a task until finished

Plan/Organize

- The ability to manage current and future-oriented task demands.

Organization of Materials

- The ability to impose order on work, play, and storage spaces.

Monitor

- The ability to monitor one's own performance and to measure it against some standard of what is needed or expected.

How do we identify which skills to teach?

Assessment

- Direct Observation
- Interviews
- Behavior Checklists
- Tests

Direct Observations

Inhibit

Difficulties with Inhibit:

What Does it Look Like?

Does the student:

- Answer questions without thinking?
- Answer questions for others?
- Begin tasks without finishing reading or listening to directions?
- Physically respond quickly (ex. darts across street to get something)? Lim-Perez, C. (2013)

Difficulties with Inhibit:

What Does it Look Like?

Does the student:

- Interrupt others or violate physical boundaries?
- Make comments that can be considered rude, insensitive, or disrespectful?
- Engage in constant noise making, chatter, or talking? Lim-Perez, C. (2013)

Difficulties with Inhibit:

What Does it Look Like?

Does the student:

- Engage in potentially physically aggressive behaviors with others?
- Have difficulty waiting
- Need to be told "no" or "stop that" frequently?

Difficulties with Inhibit:

What Does it Look Like?

Does the student:

- Get out of his or her seat at wrong time?
- Have trouble putting on the "brakes"?
- Get in trouble if not supervised by an adult?
- Not think of consequences before acting?

Shift

Difficulties with Shift:
What Does it Look Like?

Does the student:
- Have difficulty ending one task to move on to the next, even if it is a preferred?
- Become frustrated when a task or activity is ending?
- Have a drive to finish or complete the task/activity at hand before moving on?

Lim-Perez, C. (2013).

Difficulties with Shift:
What Does it Look Like?

Does the student:
- Become rigid and resistant to change?
- Have difficulty with changes in plans, environment, expectations, schedules, and/or staffing?
- Seem "rule bound" and gets upset easily when others do not follow the rules?

Difficulties with Shift:
What Does it Look Like?

Does the student:
- Become upset when asked to try a task a different way?
- Have difficulty finding a different way to complete tasks?
- Have difficulty letting go of a disappointment?

Difficulties with Shift:
What Does it Look Like?

Does the student:
- Have trouble getting used to new situations?
- Think too much about the same topic?
- Get stuck on one topic or activity?

Emotional Control

Difficulties with Emotional Control:
What Does it Look Like?

Does the student:
- Overreact to small problems?
- Have explosive, angry outbursts?
- Have outbursts for little reason?
- Have frequent mood changes?
- React too strongly to difficult situations?

Difficulties with Emotional Control:
What Does it Look Like?

Does the student:
- Have angry or tearful outbursts that are intense but end suddenly?
- Frustrate, anger, or become discouraged/give up quickly?
- Make comments such as, "I can't do that", "it's too hard", "I'm not smart enough"?

Lim-Perez, C. (2013).

Difficulties with Emotional Control:
What Does it Look Like?

Does the student:
- Engage in challenging behaviors (attempts to avoid, give up, or becomes aggressive) with difficult tasks, when problems arise, or with new or novel tasks?

Larry David: Airplane Emergency Exit

https://youtu.be/ZQyaoTVM2bQ

Initiate

Difficulties with Initiation:
What Does it Look Like?

Does the student:
- Begin tasks only after being asked or watching others start first?
- Need cues to start even typical routines, tasks, or activities?
- Have difficulty beginning a task?
- Need cues to begin another task when initial task is complete?

Lim-Perez, C. (2013).

Stuck On An Escalator - Take Action

https://youtu.be/VrSUe_m19FY

Working Memory

Difficulties with Working Memory:
What Does it Look Like?

Does the student:

- Remember first or last part but forgets the middle directions?
- Ask for the directions to be repeated or need continued assistance to remain on task?
- Forget necessary items for task at hand (ex. frequent trips between bedroom and bathroom because forgets necessary showering items)?

Lim-Perez, C. (2013).

Difficulties with Working Memory:
What Does it Look Like?

Does the student:

- Lose or misplace items frequently?
- Forget steps in process?
- Need one step directions due to forgetfulness?

Dory:
Suffers from Short-Term Memory Loss

https://youtu.be/M1Tui0Gbvq4

Plan/Organize

Difficulties with Plan/Organize:
What Does it Look Like?

Does the student?:
- Not turn in homework, assignments and/or materials?
- Have good ideas but does not get them on paper?

Difficulties with Plan/Organize:
What Does it Look Like?

Does the student?:
- Get caught up in the details and miss the big picture?
- Underestimate time needed to finish tasks?
- Not plan ahead for school assignments?
- Have poorly organized written work?

Organization of Materials

Watch The Middle Brick Loves Math

Difficulties with Organization of Materials:
What Does it Look Like?

Does the student?:
- Lose lunch box, lunch money, permission slips, homework, etc.
- Have difficulty finding clothes, glasses, shoes, toys, books, pencils, etc.?
- Leave messes that others clean up?

Monitor

Difficulties with Monitoring:
What Does it Look Like?

Is the student:

• Unaware of his or her own behavior?
• Unaware that certain actions bother others?
• Unaware of how his/her behavior causes negative reactions?

Interviews

• Executive Skills Semi-Structured Interview
 – Teacher Version, Parent Version, & Student Version

 – Found in the book: Dawson & Guare (2010). Executive Skills in Children and Adolescents: A Practical Guide to Assessment and Intervention. Guilford Press - www.guilford.com

http://jillkuzma.wordpress.com
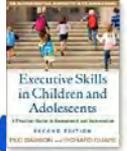
Interviews

• Executive Function Semi-Structured Interview
 – Teacher Version, Parent Version, & Student Version
 – Found in the book: Kaufman, Christopher. (2010). Executive Function in the Classroom: Practical Strategies for Improving Performance and Enhancing Skills for All Students. Brookes Publishing www.brookespublishing.com

http://jillkuzma.wordpress.com

Rating Scales

• Behavior Rating Inventory of Executive Functioning (BRIEF)
 – BRIEF Preschool Version (BRIEF-P)
 – BRIEF Self-Report Version (BRIEF-SR)
• Social-Emotional Assessment/Evaluations Measure®

Behavior Rating Inventory of Executive Functioning (BRIEF)

• Teacher and parent rating scale
• Regular, preschool and self-report versions
• 10-15 minutes
• wpspublish.com

Social-Emotional Assessment/Evaluations Measure®

• Can be used to measure and monitor social-emotional and behavioral development in young children.
• Can be used in tandem with the ASQ:SE
• Assesses 10 benchmarks critical to social-emotional competence.
• Brookes Publishing Company, $49.95
• https://www.youtube.com/watch?v=zlp68FHK67Y

Child Behavior Checklist –
Teacher Report Form (CBCL):

• A general measure of behavior that taps into social emotional functioning attention. It was published in 1991 by Achenbach, who is also the author.

- See more at: http://cbirt.org/tbi-education/assessment-eligibility/school-based-assessment-executive-functions/#sthash.OBEiuG4A.dpuf

Behavior Assessment System for Children – Second Edition (BASC-2)

• BASC-2
  • **TRS/PRS/SRP Externalizing Problems Scales**
    Hyperactivity
  • **TRS/PRS/SRP School Problems Scales**
    Attention
  • **TRS/PRS Adaptive Skills Scales**
    Adaptability & Functional Communication
  • **TRS/PRS Content Scales**
    Emotional Self-Control & Executive Functioning
    Negative Emotionality & Resiliency

Conners – Third Edition (Conners 3)

• Conners 3
  • P/T/SR Scales
    Inattention
    Hyperactivity/Impulsivity
  • P/T Scales
    Executive Functioning

Organization Problems Inventory

Onion Mountain Technology, Inc. ©2004

http://www.al-udl.com/library_bkup/DATA/Consideration%20and%20Evaluation/Organization%20Inventory.pdf

Tests

Inhibition (Inhibit)
• Go-No-Go Tasks
• NEPSY-II (Auditory Attention and Response Set; Inhibition; Statue)
• Stroop Color-Word Test

Working Memory
• WISC-IV (Digit Span, Letter-Number Sequencing)
• WJIII:COG (Numbers Reversed, Auditory Working Memory)

Planning, Reasoning, Problem Solving
• NEPSY-II (Block Construction)
• WISC-IV (Block Design, Matrix Reasoning, Picture Completion, Picture Concepts)
• Tower Tests

Tests

• Cognitive Assessment System (Naglieri Das, 1997)
  • Planning and attention

• Children's Category Test (Boll, T. 1993)
  • Shift

Josh Activity

Can we teach these skill deficits?

Can Instruction Change the Brain?

Applying rote learning to meaningful activities activates neural networks that then undergo the cellular changes of neuroplasticity that link them to larger neural networks of related information.

Judy Willis, Neurologist and Teacher

How do we teach these skills?

Types of Social Skills Deficits

Skill Acquisition: Student does not know how to perform or can not discriminate when appropriate.

Performance: Student knows what to do but fails to do it at acceptable levels in real life situations.

Fluency: Student knows how and performs at acceptable levels but is awkward and unpolished.

Gresham, Sugai, & Horner, 2001
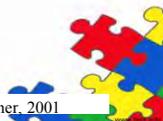
Direct Instruction

Who?	What?	When?
• General Educator • Special Educator • SLP • Counselor • OT • PT • Others???	• Define • Describe • Rationale • Model • Practice • Feedback • Situations	• Mini Lessons • Small Groups • Incidental Teaching Throughout Day • Therapies

Steps for Teaching

- Establish a goal;
- Develop simple steps towards meeting the goal;
- Ensure the person has the skills to do each step;
- If skills are missing, establish methods of structuring the task differently;
- Model and practice the target skill
- Consider the use of chaining, shaping, and reinforcing for issues of 'learned helplessness'
- Supervise, monitor, and provide feedback Lim-Perez, C. (2013).

Executive Functioning

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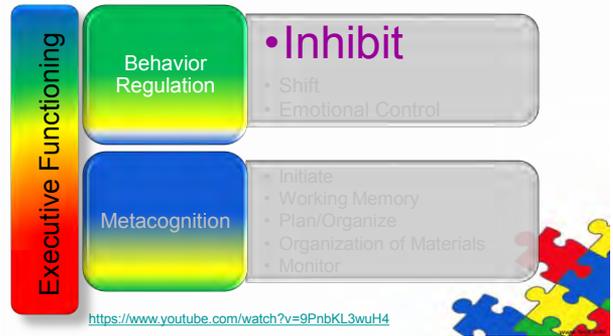
Environmental Supports: Inhibit

- Reduce distractions within the environment

- Plan for short tasks

- Incorporate movement within the task or between sedentary tasks

Environmental Supports: Inhibit

- Allow use of fidgets

- Use timers and other visuals to support waiting

- Provide structured routines and schedules with embedded choices Lim-Perez, C. (2013).

Skill Development: Inhibit

- Preteach immediately before situations where student is likely to be impulsive

- Help the person to understand another person's perspective

- Teach verbal meditation such as self-talk

Skill Development: Inhibit

- Include self-monitoring to increase awareness of their own performance

- Use Behavior Cue Cars

http://www.therapyandlearningservices.com/blog/activiti es-for-strengthening-executive-function

Copy and attach to popsicle sticks. Use as a visual cue when students blurt during lessons.
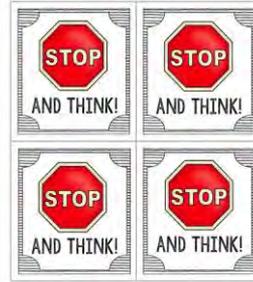
SODA

- The SODA Strategy is a step-by-step strategy designed to lead students through successful social interactions both inside and outside of the classroom
- Stop, Observe, Deliberate, Act (SODA)
- Each SODA component includes three to five questions or statements that serve as an ongoing cueing system

Bock, M.A. (2001).

Bock, M.A. (2001).

Stop
Provides a framework for students to evaluate the setting.
1. What is the room arrangement?
2. What is the activity, schedule, or routine?
3. Where should I go to observe?

Observe
Prompts students to be aware of social cues used by others.
1. What are the people doing?
2. What are the people saying?
3. What is the length of the typical conversation?
4. What do people do after they have talked?

Deliberate
Helps students develop a plan for what to do or say.
1. What would I like to say?
2. What would I like to do?
3. How will I know if others would like to continue talking or end the conversation?

Act
Encourages students to act on the plan and engage successfully with others.
1. Approach person(s) to talk to.
2. Greet the person(s).
3. Listen and ask related questions.
4. Look for cues to know if the person(s) would like to continue talking or end the conversation.
5. End conversation; walk away.

Stop-Think-Go

- Choose key word. The funnier the better.
- Say word. When child stops he/she thinks about options
- For each option ask 3 questions
  - *"Is it going to hurt anyone?"* *
  - *"Is it going to hurt me?"* *
  - *"Is it going to help me?"*
- Go with choice
- Evaluate

Stop, Think, Go for Impulsivity, Student Success strategies and materials (c) 2009-2013, Monte W. Davenport, Ph.D.
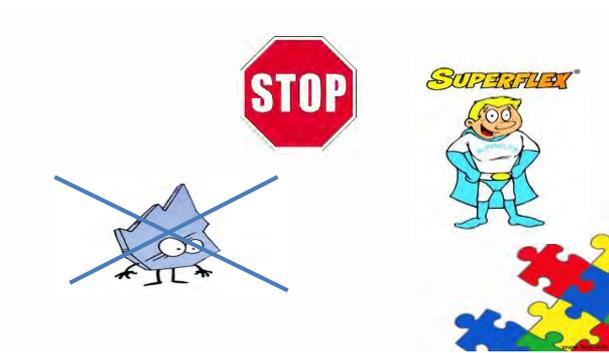
Choiceworks

- Feelings

- Provides choices they can do to deal with the feelings

- Provides things they will be able to do once they handle their feelings.

Choiceworks

- Waiting opens the timer section

- Not only can the child see how much time is left they can also see choices provided while they are waiting.


Games

Simon Says

- Simon Says-example of inhibiting control under one circumstance (Simon didn't say) but responding to the command under another (Simon Says)

Distractor Types Activity

◦https://jillkuzma.files.wordpress.com/2012/12/distractor-types.pdf

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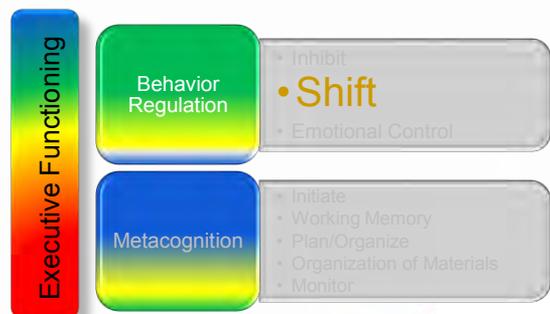
BRIEF rating scale Gioia et al,2000

Environmental Support: Shift

- Avoid making sudden and abrupt changes.
- Involve the person in changes when possible.
- Prime for new tasks/places/people with rehearsals and "dry runs"
- Simplify or shorten tasks whenever necessary and especially when novelty or a new method is involved.

Environmental Supports: Shift

- Provide an increase in reassurance, reinforcement, and support throughout new process.
- Verbally cue for preparation before the transition begins
- Develop tasks that are structured with a natural ending point. If no ending point can be found, timers can be useful

Lim-Perez, C. (2013).

Environmental Supports: Shift

- Give appropriate amount of time to complete or shorten task

- Talk about what is being finished and what is next

Environmental Supports: Shift

- Ask questions about or make statements about what was liked or not liked in the ending task and what might be fun, interesting, or exciting about the next task;
- Begin cleaning up/ putting things away and/or using objects to cue transition;
- Move yourself into a different area to cue transitions.

Lim-Perez, C. (2013).

Skill Development: Shift

- Use social narratives to explain situations and expectations.
- Teach coping strategies, and relaxation strategies.
  - Progressive Muscle Relaxation

RELAXATION ROUTINE

Edmund Jacobson

Skill Development: Shift

- Practice shifting attention and cognitive set by working with two to three familiar tasks and rotating them at regular intervals.

- Teach students about their own inflexibility-there is only one right way of doing things, or only one solution to a problem.

- Teach strategies to prepare for situations that don't have a predictable outcome.
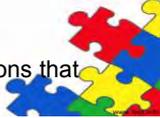
Relaxation Wheel

Texas Autism Resource Guide
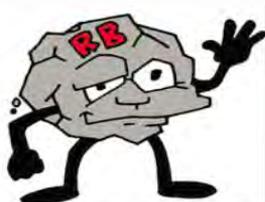
**Rock Brain-
I make people
get stuck on
their ideas**

SocialThinking.com

Superflex Takes on Rockbrain and the Team of Unthinkables

http://srsp.weebly.com/uploads/7/2/4/4/7244139/appen
dix_b_-_cards.pdf

- Visual scales- can represent levels of a behavior or concept
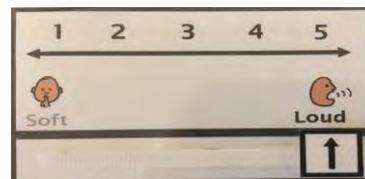
Choiceworks

- Scheduler connects your to the visual schedule section

- 165 pre-loaded images and audio bytes but you can upload your own photos and audio

Shift: Apps

Set Pro HD ($4.99) is the classic game of visual perception and set-shifting. The interactive tutorial makes learning the game simple and your student can play solitaire-style or can challenge a friend in multi-player mode.

Your Fantastic Elastic Brain ($4.99). , "this innovative and timely interactive edutainment app teaches children that they have the ability to stretch and grow their own brains. It also delivers the crucial message that mistakes are an essential part of learning and introduces children to the anatomy and various functions of the brain in a fun and engaging way...."

Towers of HanOINK! ($0.99). Players move a stack of animals from a tree stump on the left to one the right by moving one animal at a time. Only smaller animals can stand on the backs of larger ones.

Games

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- **Emotional Control**

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- Organization of Materials
- Monitor
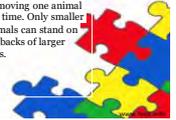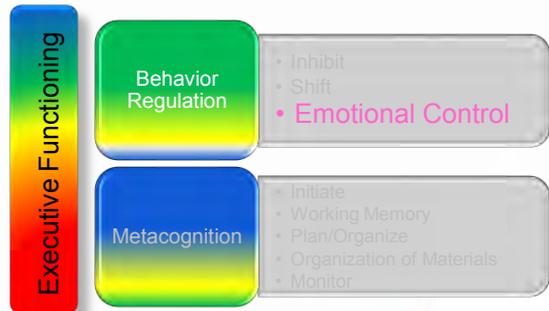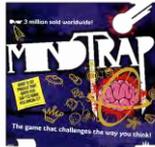
BRIEF rating scale Gioia et al,2000

**Do not teach your children never to be angry; teach them how to be angry.
~Lyman Abbott**

Applies to any "negative" emotion that can lead to behavior problems

Skill Development: Emotional Control

- Identify triggers for emotional issues
- Help the person learn these triggers if possible
- Help the person identify solutions and choose the best solution
- Break the strategy down into manageable and simple steps

Lim-Perez, C. (2013).

https://www.tes.com/teaching-resource/colour-coded-triggers-chart-with-image-support-6315719

Skill Development: Emotional Control

- Teach and reinforce the steps and process when person is calm and/or in mildly upsetting circumstances initially

- Teach positive self-talk

- Model self-talk as an appropriate emotional modulation

Skill Development: Emotional Control

- Teach the student to categorize issues as "a big deal" or "a little deal."

- Teach the individual a 'script' to help with self-monitoring

'It's Too Heavy' | An Oscar-Worthy Toddler Tantrum

https://youtu.be/1ycoXiEDBZk

Big Deal, Little Deal

Socialthinking.com

Developing a Self-Talk Script

- Identify/label the issue (e.g., "I'm mad".... or "It is really hot out here.")
- State the reason (e.g., "We're having white instead of brown gravy, and everyone knows you have brown gravy with roast beef" ...... "I get all sweaty and itchy")
- Offer a strategy (e.g., "Maybe I can get some chocolate milk and get out of here" ... "Maybe I can sit under a tree and cool down")
- General reassurance (e.g., "There you go. Good idea." ... "You see, that's better!"

Skill Development: Emotional Control

- Practice response delay techniques (leaving the situation, counting before responding)
- Use emotional regulation thermometer with each level tied to a specific response delay techniques
- Develop emotional vocabulary
- Develop emotional scripts for dealing with situations that provoke strong emotions

The Incredible 5 Point Scale
Buron & Curtis, 2003

- Teaches students to identify and label their own emotions
- Helps students identify and manage behavioral responses to emotions
- Can be used to address social skills, such as voice volume, personal space
- Represents emotions and social skills visually
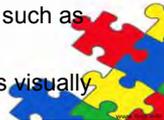
Ben's 5 Point Scale for Mad/Angry

| Rating	Looks/sounds like	Feels like	Safe people/I can try to. . .
5	Swearing, breaking or throwing stuff, clenched teeth, hitting	I have to break something, I need to get out, like I will explode!	Ask someone to help me leave, take a walk, ask people to not talk to me yet
4	Swearing, angry face	Mad, hot inside	Leave the room with permission, go to Mrs. Harbaugh
3	Not talking, pacing, a little swearing	Upset, frustrated	Go get a drink, short walk
2	Not happy, might still talk to others	Confused	Ask to talk to Mrs. Harbaugh, try deep breathing
1	Doing my work, asking for help	Ok	Ask teacher for help, try deep breathing if starting to get madder

Fill in your own Stress Scale

Scale applied to how certain situations make student feel

## Using the Incredible 5 Point Scale for Emotional Regulation

- Importance of Columns 2, 3 & 4

Column 2 & 3 – provides visual breakdown of what the emotion looks like and feels like at each level

Column 4 – provides the student with appropriate behavioral response choices for each level

Linking these parts together helps the student learn to recognize physically where they are on the scale and carry out appropriate strategies.

https://www.teacherspayteachers.com/Product/Printable-Self-Regulation-Meters-298641
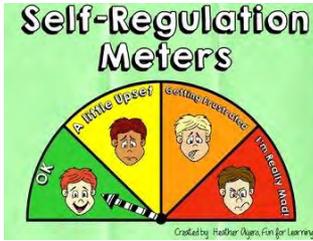
Emotion Thermometers
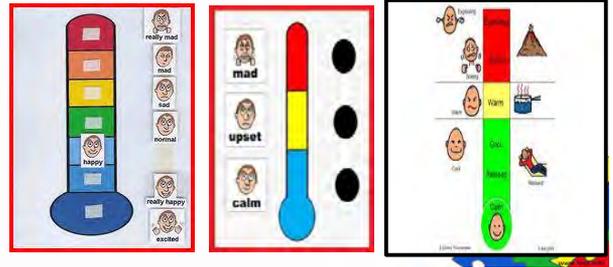
Zones of Regulation

- Teaches students about self-regulation and controlling difficult emotions by Leah Kuypers, M.A., Ed, OT/L. The "Zones of Regulation", are described by the author as, *"..... a systematic, cognitive behavior approach used to teach self-regulation by categorizing all the different ways we feel and states of alertness we experience into four concrete zones. The Zones curriculum provides strategies to teach students to become more aware of, and independent in, controlling their emotions and impulses, managing their sensory needs, and improving their ability to problem solve conflicts."*

- • Weaves principals from the field of sensory integration, use of the 5 Point Scale (Dunn-Buron & Curtis, www.5pointscale.com) and the principles of social cognition as described by Michelle Garcia Winner, (www.socialthinking.com).

https://youtu.be/beWlK8RLfmA

Surfing the "Worry Wave"

- Teach students that worry and anxiety are normal and that they come and go like a wave in an ocean.

- "The trick is to ride the "worry wave" through to the end until it comes to shore, as if they were riding a surfboard, rather than getting swallowed up by it and knocked off the surfboard." (Meltzer, 2010, p. 197)
  – Students can take deep breaths and use self-talk: *"This is just a worry wave. I can ride it out and stay on top. It will pass very soon. In the meantime, I can take deep breaths or image of a peaceful place"*

Positive Self-Talk

- **I've tried these kinds of problems before. I can do them again.**

- **I can do the easy ones first and then ease into the more difficult ones.**

- **If I get stuck, I can ask for help.**

- **If I make a mistake, it'll be ok.**

Meltzer, Lynn (2010)
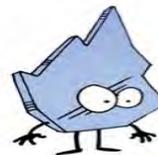
**Glassman-
I make people
have huge
upset reactions**

SocialThinking.com

Ask me to recite my coping skills!

Date/Initials

Some good choices I can make to help me calm down and feel better are:

1. I can use my words to tell an adult how I feel.
2. I can ask for a break.
3. I can take deep breaths.
4. I can think about things that I like to do and that make my happy.

Problem Solving

- Knowing when there is a problem to be solved
- What are some solutions to the problem?
- Possible outcomes?
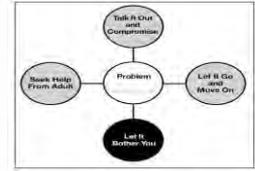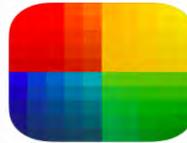
Mood Meter ($.99)
http://moodmeterapp.com
This app builds emotional regulation by:
- Expanding emotional vocabulary
- Learn what causes the feeling
- Notice patterns in feelings over time
- Learn effective strategies to regulate feelings
- Check in regularly to monitor feelings and prompt the use of effective regulation strategies

Mood Meter-6 Main Components

1. Plot feelings
2. Describe why you have that feelings.
3. Select a strategy to shift your feelings.
4. View personal reports to track your feelings.
5. Receive reminders to check in with yourself.
6. Share feelings with friends.

Tame the Anger Monster ($1.99)
https://itunes.apple.com/us/app/taming-the-anger-monster/id445990430?mt=8
This app explains how anger works in the body in basic terms, and gives 15 techniques to assist the child in coping with and curbing anger. It also includes a guided meditation MP3 for the child to listen to daily to reinforce the anger management skills. It is appropriate for kids ages 4-12 and is easy enough for a child to use alone or can be used by a parent or therapist in teaching coping skills.

Taming the Anger-Monster

Techniques:
1. Draw the Anger-Monster
2. Hit a Pillow
3. Give or Get a Hug
4. Take Some Deep Breaths
5. Do the Opposite
6. Count to Ten
7. Relax Your Body
8. Talk to a Grown-Up

What is Anger?   Guided Meditation

Write a Letter

Writing a letter to the person you are angry with helps you get the feelings out. You do not have to mail it, just writing the feelings down helps.

Back

iStress ($.99)
https://itunes.apple.com/us/app/istress/id308147604?mt=8
This app is designed to provide all modes of stress reduction including monitoring, relaxation, positive thinking, humor, and developing an encouraging attitude toward stress It provides a daily/weekly record of stress levels related to thoughts and emotions.

iStress Main Menu

Main Menu   Info
Rate Feelings & Thoughts
Relax
Reframe Thoughts
View Cumulative Graph
Stress Humor
Encouraging Quotes
Poem

PsiApps, Inc.

Quotes

When everything seems to be going against you, remember that the airplane takes off against the wind, not with it.
Henry Ford

The block of granite which was an obstacle in the pathway of the weak becomes a stepping-stone in the pathway of the strong.
Thomas Carlyle

Most of the important things in the world have been accomplished by people who have kept on trying when there seemed to be no hope at all.
Dale Carnegie

Every problem has a gift for you in its hands.
Richard Bach

Reframe

I always fail.
I'll never live this down.
I never succeed.
I know it won't work out.
Since I feel bad things must be bad.
I'm a loser.
It's all my fault.
I'll never get over this.

Games

## Environmental Support: Initiate

- Highlight where to begin
- Simplify and "half start" the initial step
- Develop a start routine
- Help the person initiate and then begin to fade the prompts
- Encourage and reinforce anytime the person indepdendently initiates

Lim-Perez, C. (2013).

Environmental Supports: Initiate

- Break down tasks into smaller steps
- Provide checklists for daily routines (morning routine, lunch routine, afternoon routine) and long assignments
- Verbally prompt with an "individual invitation"
- Demonstrate the first problem

Environmental Supports: Initiate

- Work in pairs or small groups and have peers prompt
- Set a time limit and use a timer
- Refrain from labeling the student as "lazy" or "unmotivated" as this invites a power struggle
- Provide example or work sample.
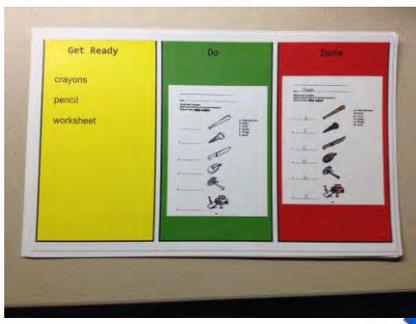
Skill Development: Initiate

- Teach idea generation strategies (brainstorming, advanced organizers)
- Provide "to do" lists
- Increase awareness of initiation difficulties
- Use hands on, active learning activities when possible for active student engagement
- Embed interests and preferences

Activity Plan

1. Get out a piece of paper
2. Put your name at the top of the paper.
3. Read the directions to the assignment
4. Complete the first question or problem
5. Raise hand and ask teacher for feedback
6. Complete remainder of questions or problems
   ECT....

Trello (Free)
https://play.google.com/store/apps/details?id=com.trello
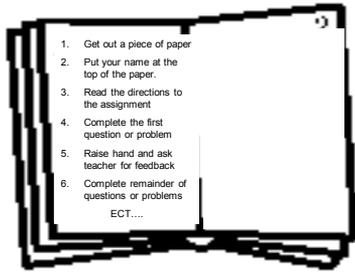
- Can make multiple lists on one screen.
- Can set due dates

Games

Gobblet encourages kids to employ strategic thinking and builds memory.

Executive Functioning

Behavior Regulation
- Inhibit
- Shift
- Emotional Control

Metacognition
- Initiate
- • Working Memory
- Plan/Organize
- Organization of Materials
- Monitor
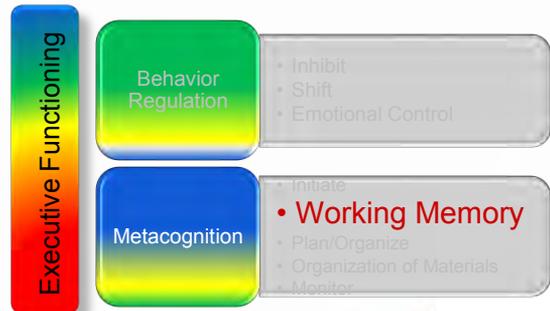
BRIEF rating scale Gioia et al,2000

Working Memory

https://www.youtube.com/watch?v=mcXMlgCntLU

Head, Toes, Knees, Shoulders Test

https://www.youtube.com/watch?v=CVT6FQ9czoc

Environmental Support: Working Memory

- Provide visual reminders
- Use visual organization
- Verbally remind prior to expectation
- Use simple language with gestures and/or visuals
- Use technology- alarms, timers, text messages, alerts on cell, computer, or tablet

Lim-Perez, C. (2013).

Working Memory: Apps

Memory! (.99) Memory! is very cute and funny memory matches game with many different colorful and vivid pair cards which your child will definitely love. This game is the best way to engage your kids and in parallel to train their memory and concentration ability. With three levels of difficulty the complexity of the game can be adjusted accordingly to the age and skills of your kid.

Monster Hunt. (Free) A brilliantly simple and fun memory improvement game that is great for all ages A winning combination of simplicity, creativity, and addictive gameplay make this the most enjoyable memory improvement game yet for the whole family.

Cogmed Working Memory Training. (Free) Cogmed Working Memory Training is an evidence-based intervention for improved attention. Based on the concept of neuroplasticity and with more published research behind it than any other cognitive training program, Cogmed is trusted by healthcare professionals and educators around the world.

Games

Play cards

Simon

http://www.freegames.ws/games/kidsgames/simon/simon.htm

http://www.spaceminespatrol.com/

LET'S DO AN ACTIVITY

Another Activity

Minion Memory Mission

Executive Functioning

Behavior Regulation
- Inhibit
- Shift
- Emotional Control

Metacognition
- Initiate
- Working Memory
- **Plan/Organize**
- Organization of Materials
- Monitor

BRIEF rating scale Gioia et al,2000

Environmental Support:
Plan/Organize

- Provide examples of a variety of ways to complete the same task
- Develop a binder or "cookbook" of steps for common routines and assignments
- Develop an overall plan for the day, week, month, and year with a calendar

Could use to show the passage of time for a preferred activity like a computer break – helps kids understand how time "feels"

Use to show the time frame for multiple jobs or activities – this is a morning arrival picture

Tracknets

Use visual cues on the clock to show the START time, the half-way checkpoint time, and the STOP time.

GREAT PRODUCT: Tracknets – magnets with these cue phrases available for purchase at www.executivefunctiontherapy.com ($24.99)

Available for Purchase at: www.executivefunctiontherapy.com

Environmental Support:
Plan/Organize

- Have the student verbalize a plan at the outset of any given task
- Break the plan into steps, arrange in sequential order and write down as a bulleted or numbered list
- Develop time lines for completing assignments or for longer assignments each step with check-ins with the teacher to ensure the student is keeping pace.

Color Coding

- Assign a color to each child
- Different-colored bags for different types of gear- soccer gear in red, ballet. Customize the bags if you want with a visual for added support.
- Color code the calendar with a different color for each child or subject
- Different colored bracelets for homework subject reminders

Color Coding

- Different colors or fonts for school notes vs home notes
- Different highlighted colors mean different things- yellow- vocab words, main topic –green, subtopic-pink
- Different colored sticky notes- priority tasks- red, things due next week- orange

Plan and Organize: Apps

Idea Sketch. (Free) Idea Sketch lets you easily draw a diagram - mind map, concept map, or flow chart - and convert it to a text outline, and vice versa. You can use Idea Sketch for anything, such as brainstorming new ideas, illustrating concepts, making lists and outlines, planning presentations, creating organizational charts, and more!

Evernote. (Free) Evernote is an easy-to-use, free app that helps you remember everything across all of the devices you use. Stay organized, save your ideas and improve your productivity. Evernote lets you take notes, snap photos, create to-do lists, scan business cards, record voice reminders--and it makes everything searchable, whether you are at home, at work, or on the go.

iPrompts. iTunes: $49.99 (Lite) $99.99 (Pro) iPrompts®, the original app for visual support, is used by special educators, therapists and parents of those benefiting from visual structure, including individuals with Autism.

VoCal. (.99) The original, best and most trusted personal reminder app available. Your reminders, in your voice, in your words, delivered on time, every time. Speak, don't type!

Minecraft

- Can be an excellent opportunity for developing both organization and planning skills
- For students who struggle when they have a long-term project or can't seem to plan out a simple play date with their peers, *Minecraft* can also be an opportunity to practice setting goals and following step-by-step approaches to problem-solving

Games

Ticket To Ride: Builds spatial planning, long term strategy, and patience

Dots and Boxes: Teaches strategy and planning

Executive Functioning

Behavior Regulation
- Inhibit
- Shift
- Emotional Control

Metacognition
- Initiate
- Working Memory
- Plan/Organize
- **Organization of Materials**
- Monitor

BRIEF rating scale Gioia et al,2000
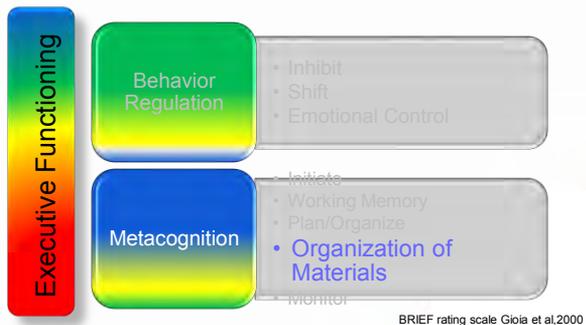
Environmental Support:
Organization of Materials

- Provide a communication between home and school to help stay on track with assignments (planning notebook, e-mail, phone)
- Keep an extra set of books at home
- Have satellited books at school (math in math room, etc.)

Environmental Support:
Organization of Materials

- Divide worksheets into smaller problem sets or divide on page with marker
- Teach planning and organizing and provide study skills classes for credit
- Triage with a designated teacher for organization assistance at the beginning and end of the day

Environmental Support:
Organization of Materials

- Provide a supervised study hall with organizational assistance
- Provide opportunities for small group work with more organized peer models
- Provide a checklist of needed materials to review at the beginning and end of the day/class

Environmental Support:
Organization of Materials

- Model good organizational habits and routines by explicitly calling attention to organizing behavior (e.g. organizing a desk or room)

- Before an organization task, have student verbalize the goal and plan for meeting that goal

Environmental Support:
Organization of Materials

- Provide organizational time at the beginning and ending of the day
- Develop an organizational notebook or planner system that fits the student's style and needs and provides flexibility (e.g. three ring binder)
- Type or write essential information and place in a plastic sleeve in the front of the planner for quick access

BRIEF rating scale Gioia et al,2000
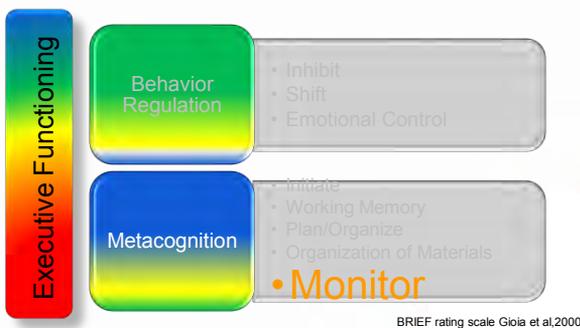
Environmental Support: Monitor

- Have student predict how well he/she will do on a particular task and compare prediction with actual outcome

- Chart or graph performance

- Videotape a task or activity and review together

_____'s Self-Monitoring Sheet

Date: _____

	I was Superflex!	I was Rockman	My Teacher Agrees
8:45-9:15			
9:15-9:45			
9:45-10:15			
10:15-10:45			
10:45-11:15			

Was I Paying Attention?

When you hear the beep, ask yourself if you are doing any of these things:
- writing answers
- eyes on materials
- asking or answering a question
- watching the teacher

If the answer is yes to any of these things, then place a check in the "Yes" column. If the answer is no, than place a check in the "No" column.

YES	NO

As compared to yesterday, rate how well you were paying attention today.

Excellent   Good   Average   Poor

What did you tell yourself that was positive about your performance?

CHART MOVE
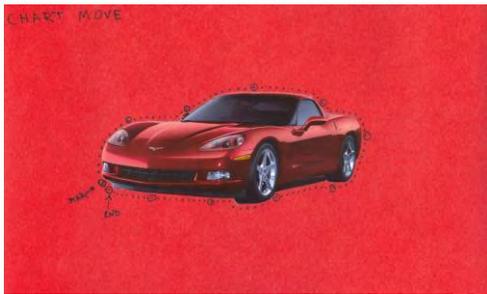
	Cool	So-So	Uncool
Opening	Cool	So-So	Uncool
Morning 1	Cool	So-So	Uncool
Morning 2	Cool	So-So	Uncool
PE	Cool	So-So	Uncool
Lunch	Cool	So-So	Uncool
Math	Cool	So-So	Uncool
Social Studies	Cool	So-So	Uncool
Science	Cool	So-So	Uncool
Overall	Cool	So-So	Uncool

Self-Monitoring Chart

SCHOOL NAME:_____

Student Name: _____   Date: _____

Teacher Name: _____

Classroom Rules	Morning				Afternoon			
Stayed in seat	1	2	3	4	1	2	3	4
Raised hand to ask question or get out of seat	1	2	3	4	1	2	3	4
Followed teacher directions	1	2	3	4	1	2	3	4
Respected fellow students	1	2	3	4	1	2	3	4
Worked on class assignments	1	2	3	4	1	2	3	4

Rating Scale – Circle a number.

1 = Needs Improvement   2 = Barely OK   3 = Average   4 = Great

If the teacher agrees with the student rating, put a line across the circled rating.

If the teacher does not agree with the student rating, put an "X" in the circle.

Comments:

Diana Browning Wright, M.S., L.E.P.

Social Behavior Mapping

(Michelle Garcia-Winner – www.socialthinking.com)

Social Behavior Map

- "Expected" vs. "Unexpected" Social Behaviors
- Perspectives of other people around you
- Outcomes you experience in the situation
- How you feel about yourself
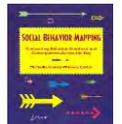
Description of Context

Unexpected/ Expected Behaviors	How They Make Others Feel	Consequences You Experience	How You Feel About Yourself

---

Problem Solving with SOCCSS

Situations
Options
Consequences
Choices
Strategies
Simulation

Problem Situation

Who	David and Tom
When	During passing period
What	David and Tom have lockers next to each other and while they were getting their books for the next class, Tom hit David.
Why	David was teasing Tom because he had been talking to a girl in class.

Options	Consequences	Choice
Ignore David's comments	David might continue to tease. David might stop when he doesn't get the reaction he is looking for.	✔
Avoid David during passing period but waiting until he was finished at the lockers before getting books.	Tom may be late to class.	
Tell David to stop and if he doesn't tell an adult.	David might stop. The teacher might tell David to stop but David might tell others that Tom is a baby or a tattle tale. The teacher might tell me to just ignore David.	
Say something mean back to David.	I might get in trouble. A teacher may not hear me and David and I would continue saying mean things to each...	

Strategy-Plan of Action

The next time that David says something mean to me, I will completely ignore him as I think he is looking for a reaction from me.

Simulation- Role Play

Repeat Timer (Free)

https://itunes.apple.com/us/app/repeat-timer-free-repeating/id481229967?mt=8

Can be set to play a tone at regular intervals from 1 second to 23 hours long and repeat up to 5 times.

MotivAider ($2.99)
https://itunes.apple.com/us/app/motivaider-for-mobile/id562217364?mt=8
Can be set to play a brief audible tone, vibration signal, or combination on either set or random intervals ranging from 1 second to 999 minutes.

Gymboss ($19.95)
http://www.gymboss.com/gymboss-classic/
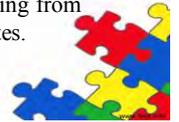
Device that can be clipped to your clothing and set to beep and/or vibrate at 1 or 2 intervals ranging from 2 seconds to 99 minutes. Alarm durations can be set from 1 to 9 seconds.
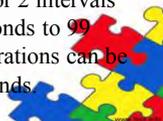
Hidden Curriculum for Adults and Adolescents

• Provides examples of unwritten social rules. Users can decide if the item will be useful to them or not


Developing A Plan

More to Remember

Interventions That Educators Can Control

Medication   Limited

Skill Instruction
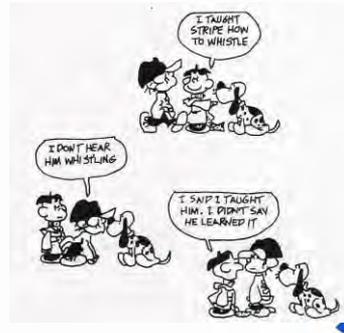
"Learning self-regulation happens within children's everyday experiences with trusted adults who regulate their own thinking, attention, emotions, behavior and motivation"

Ida Rose Florez

https://www.naeyc.org/files/yc/file/201107/Self-Regulation_Florez_OnlineJuly2011.pdf

If we have time:
Turning Some Ideas on Their Head – Adele Diamond

https://www.youtube.com/watch?v=StASHLru28s

Holding Strategy Codes

https://jillkuzma.files.wordpress.com/2012/12/holding-strategy-codes.pdf
Working Memory
https://jillkuzma.files.wordpress.com/2012/12/minions-memory-mission.pdf

Game for Working Memory
https://jillkuzma.files.wordpress.com/2012/12/suitcase-sendoff.pdf

Homework Planning Sheet
https://jillkuzma.files.wordpress.com/2012/12/homework-planning-sheet.pdf

Holding Strategy Cards
https://jillkuzma.files.wordpress.com/2012/12/holding-strategy-codes.pdf

Transition Docs
https://jillkuzma.files.wordpress.com/2012/12/transition-docs.pdf

Transition Self-Report
https://jillkuzma.files.wordpress.com/2012/12/transition-self-report.pdf

Places to go for additional app info

- www.autismpluggedin.com

Resources: Links

- http://www.b2kcoach.com/category/social-emotional-learning/

- http://csefel.vanderbilt.edu/

- http://challengingbehavior.fmhi.usf.edu/

- https://self-regulationintheclassroom.wikispaces.com/Games+and+Exercises

- https://www.pinterest.com/nancyot/

- https://www.pinterest.com/kprettif/self-regulation-across-the-lifespan/

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- Change Your Brain Change Your Life. Daniel Amen (1998)

- The Hidden Curriculum: Practical Solutions for Understanding Unstated Rules in Social Situations, Ronda L. Schelvan

- Social Stories and Comic Strip Conversations; Carol Gray

- Lim-Perez, C. (2013). *Executive Functioning: Skills Deficits and Strategies* [webinar handout] retrieved from www.oregonddcoalition.org.

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- "Executive Functioning"; James Chandler, MD FRCPC
- "Executive Function Fact Sheet", National Center for Learning Disabilities
- University of North Carolina, Division TEACCH
- Oregon Intervention System
- The Center for Collaborative Problem Solving: www.thinkkids.org
- www.webMD.com
- www.ncld.org
- www.apbs.com