



Self-Regulation Skills

For students with autism



Presented by

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Learning Targets

- Understand self-regulation and the role it plays in our daily lives
- Understand the characteristics of autism that relate to difficulty with self-regulation
- Learn what skills need to be taught to assist students with self-management
- Learn how to teach self-management skills
- Learn about programs that develop self-management skills



What is Self-Regulation?

“the art of maintaining enough control over our own physical behaviors to generate and implement a socially acceptable response to the situation we are presented with.”

- Moyer, 2009, p. 165



Why is Self-Regulation important?

- Self-regulation impacts every situation and activity in which we participate.
- Problem solving
- Modulation
- Self-monitoring and self-assessment
- Self-determination
- Employment
- Relationships



Characteristics of Autism

A. Persistent deficits in social communication and social interaction

- A. Deficits in social-emotional reciprocity
- B. Deficits in nonverbal communicative behaviors used for social interaction
- C. Deficits in developing, maintaining, and understanding relationships

A. Restricted, repetitive patterns of behavior, interests, or activities

- A. Stereotyped or repetitive motor movements, use of objects, or speech
- B. Insistence on sameness, inflexible adherence to routines, or ritualized patterns
- C. Highly restricted, fixated interests
- D. Hyper- or hypo-reactivity to sensory input



Developmental Self-regulation

- Self-regulation comes from frontal lobe and ties in with executive functioning skills and experiences with environment

Age	Self-Regulation Skills
0-3 months	Learning to achieve equilibrium given various stimulation
2-7 months	Formation of attachments
3-10 months	Differentiates people, less dependent on internal states
9-24 months	Develops capacity for learning and imitation
2 years and up	Develops response inhibition, delay of gratification, communication, intentionality, anticipating outcomes



Difficulty with self-regulation may be one of the earliest signs of autism



Why is Self-Regulation difficult?

- Self-Regulation involves:
 - Social thinking/judgment
 - Emotions
 - Sensory processing
 - Problem solving

How many of
these relate to
autism
characteristics?



Social Thinking

“Our social development encompasses far more than our ability to participate in conversations or other active pro-social relations.”

Garcia Winner, 2008, p.4



Social thinking

- Like social intelligence
- How we interpret and think about social situations
- Involves:
 - Social judgment
 - Perspective taking/Theory of Mind
 - Social knowledge underlying social skills
 - Why do we do what we do in a social situation?



Emotions

- Processing
- Interpreting
- Analyzing
- Identifying
- Regulating
- Responding



Things to teach

- Identifying emotions (this is more than labeling)
- Variety of emotions and emotional states
- Communicating about emotions
- Identifying what to do when we feel certain emotions



What makes me...

Happy	Sad	Mad










Sensory Processing

- Neurological difference in how they detect and use sensory information
- May cause them to:
 - Be uncomfortable
 - Escape/avoid situations
 - Lash out



Table 1.1
Location and Functions of the Sensory Systems

System	Location	Function
Tactile (touch) 	Skin – density of cell distribution varies throughout the body. Areas of greatest density include mouth, hands, and genitals.	Provides information about the environment and object qualities (touch, pressure, texture, hard, soft, sharp, dull, heat, cold, pain).
Vestibular (balance) 	Inner ear – stimulated by head movements and input from other senses, especially visual.	Provides information about where our body is in space, and whether or not we or our surroundings are moving. Tells about speed and direction of movement.
Proprioception (body awareness) 	Muscles and joints – activated by muscle contractions and movement.	Provides information about where a certain body part is and how it is moving.
Visual (sight) 	Retina of the eye – stimulated by light.	Provides information about objects and persons. Helps us define boundaries as we move through time and space.
Auditory (hearing) 	Inner ear – stimulated by air/sound waves.	Provides information about sounds in the environment (loud, soft, high, low, near, far).
Gustatory (taste) 	Chemical receptors in the tongue – closely entwined with the olfactory (smell) system.	Provides information about different types of taste (sweet, sour, bitter, salty, spicy).
Olfactory (smell) 	Chemical receptors in the nasal structure – closely associated with the gustatory system.	Provides information about different types of smell (musty, acrid, putrid, flowery, pungent).

From Smith Myles,
Cook, Miller, Rinner,
& Robbins, 2000



Sensory Processing

- Things to teach
 - Understand different senses and their functions
 - Understand how their senses affect their behavior
 - Demonstrate ways to deal with sensory differences
 - Learn ways to self calm

Be a sensory
detective!



Unique characteristics of HFA that relate to Problem Solving

- Difficulties with attribution
- Impaired abstract thinking
- Difficulty with theory of mind
- Impaired mental flexibility
- No understanding of the hidden curriculum



Attribution

- Inability to attribute or assess circumstances
 - Attribution is the ability to understand cause/effect related to another person's thoughts, words, and actions
 - Related to theory of mind
 - Leads to misunderstandings during social interactions
 - "If you believe that your experiences have been largely unsuccessful or negative, you learn to assume that your future may not be any different" (Moyer, 2009, p. 33).



Types of Attribution

- Locus of causality
 - Internal/external
- Stability
 - Stable/unstable
- Controllability
 - Controllable/uncontrollable



Parameters of Attribution

Internal	External	Controllable	Uncontrollable	Stable	Unstable
The fact that you would rather wear sandals so your feet don't get hot	A rule that you must be 5 feet to ride the roller coaster	How loudly you speak in a library	The weather on the day of the picnic	The rule that your room must be clean before you go outside	A thunderstorm knocking down the power lines leaving you in the dark.



Attribution

- Things to teach
 - Assessing situations (internal/external causality)
 - Controllability (ability to influence outcomes)
 - Determining how situations can or may change



Controllable

Uncontrollable



Abstract Thinking

- Impaired abstract thinking
 - “Ability to take the details of an idea, situation, or item and put them together to create a complete picture in our heads” (Moyer, 2009, p. 55).
 - Relates to narrow interests and restricted thinking
 - Affects problem solving and reasoning
 - Also related to expectations



Abstract thinking

- Things to teach
 - Identifying key details of situations
 - Brainstorming abstract ideas
 - Creating expectations of a situation
 - Plan an activity using abstract concepts
 - Big problem/little problem



	Must Have	Nice to Have	Don't Really Need
Planting a garden			
Having a party			
Going camping			
Add your own			



Mental Flexibility

- Impaired shifting or mental flexibility
 - “Ability to move from one idea to the next fluidly in your head” (Moyer, 2009, p. 82).
 - Sometimes manifested as “transition problems” because they cannot move to another activity
 - Can be shifting between thoughts, discussions, activities, or places
 - Also relates to understanding that there is more than one way to solve a problem



Mental Flexibility

- Things to teach
 - Hidden curriculum
- Identify transitions and changes
 - Transitioning/shifting

Practice transitions!
Set up stations and
a timer. Rotate
through the stations.



Theory of Mind

- Impaired theory of mind
 - Ability to understand what other people are thinking/feeling
 - Leads to misinterpretations of social situations
 - Relates to impaired eye contact and joint attention



Theory of Mind



- Things to teach
 - Understand what goes on in people's heads (mental states, emotions, thoughts, etc.)
 - Learn to determine mental states of others (read body language, facial expressions, other cues)
 - Learn to respond appropriately based on others' mental states



Theory of Mind=
What are they thinking?

Attribution=
Why are they thinking it?



Hidden Curriculum

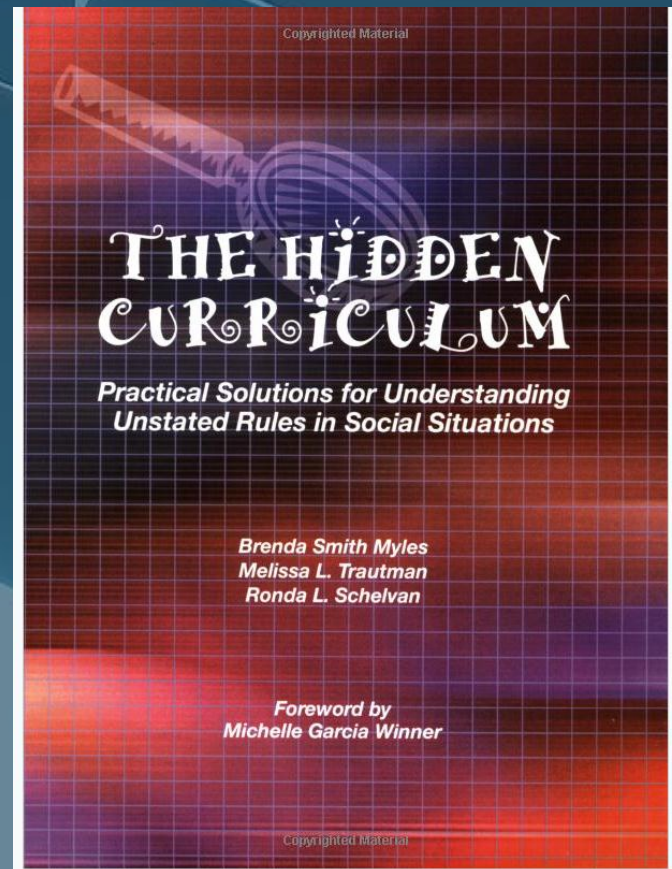
- No understanding of hidden curriculum
 - Rules and expectations of life that are not necessarily taught or discussed
 - Requires recognizing social cues and interpreting them to know how to act



Hidden Curriculum

- Understand how to learn the hidden social expectations in situations
- Understand how hidden curriculum affects how we should act in given situations

Keep a hidden curriculum diary.





What would happen if I didn't know that...	Consequences	I would regulate my behavior by doing this...
Boys don't hug each other anymore in middle school, but might give a high five or fist pump.	Boys may laugh at me or not want to hang around with me.	Not hugging, apologize if I forget, laugh it off
Girls in high school don't like to talk about Barbies		
I should not talk about Grandma's stinky perfume in front of her.		



Summary:

What's required daily?

- Assess situation through attribution process
 - Internal/external, controllable/uncontrollable, stable/unstable
- Generate and evaluate alternative solutions
 - Use theory of mind, flexible thinking, mental shifting
- Select and implement the chosen solution
 - Consider hidden curriculum, monitor other's behavior
- Maintain self-regulation and monitor own behaviors
 - Manage senses, self-calm when needed



**How do any of us
make it through
the day??**



Self regulation

- Things to teach
 - Identify own physical cues
 - Understand modulation (rating scale)
 - Identify strategies to self-regulate

How serious is it?	Situation	My first response	A more appropriate response
1	Loud Assembly		
2	Substitute Teacher		
3	Lose video game		



Self-management, the intervention used for self-regulation, is an evidence based practice!

National Professional Development Center for Autism
<http://autismpdc.fpg.unc.edu/content/self-management>



Self-Management

- Self-monitoring
- Self-evaluation
- Self-observation
- Self-reinforcement
- Self-instruction
- Self-recording
- Self-assessment

Lee, Simpson, & Shogren, 2007



How do we teach self-management?

- Prepare the system
 - Teach the system
 - Provide adult support
 - Promote learner independence
-
- National Professional Development Center for Autism, 2009
 - Entire handout is on the website



Every successful behavioral intervention plan starts with a good functional behavior assessment (FBA).

Note: School Psychologist or BCBA should be involved.



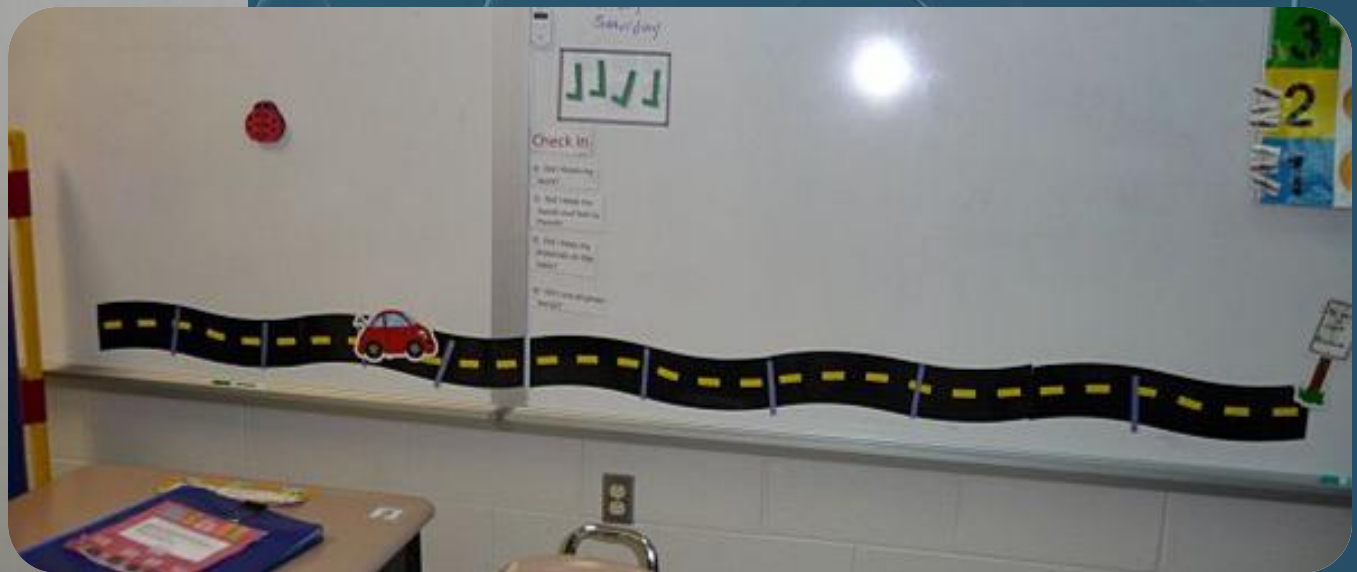
Intervention Methods

- ABA Principles/Behavior Strategies
 - Token economy
 - Differential Reinforcement
 - Variety of reinforcement
 - Calm area (guess what, you have to TEACH this!)
 - Discrete Trials
 - Video modeling
 - Self monitoring

Check in

Check in

- 1) Did I finish my work?
- 2) Did I keep my hands and feet to myself?
- 3) Did I keep my materials on the table?
- 4) Did I use all green words?

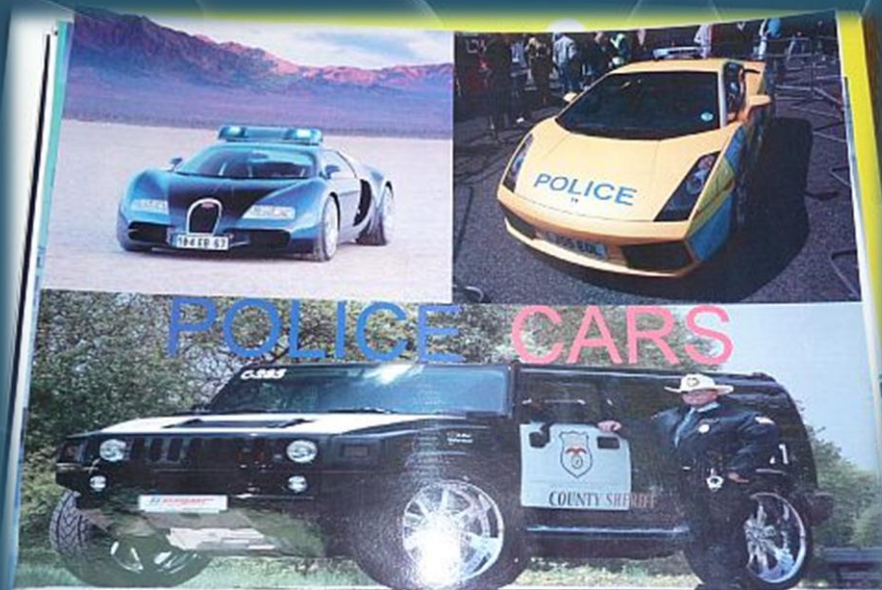
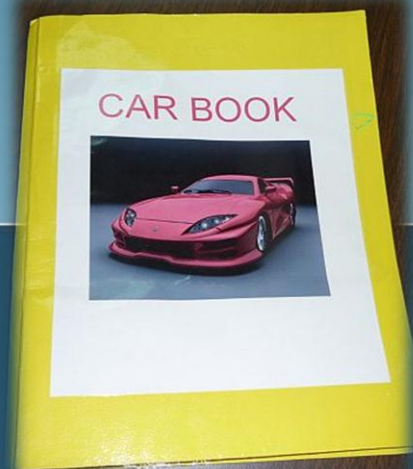




Calm Area



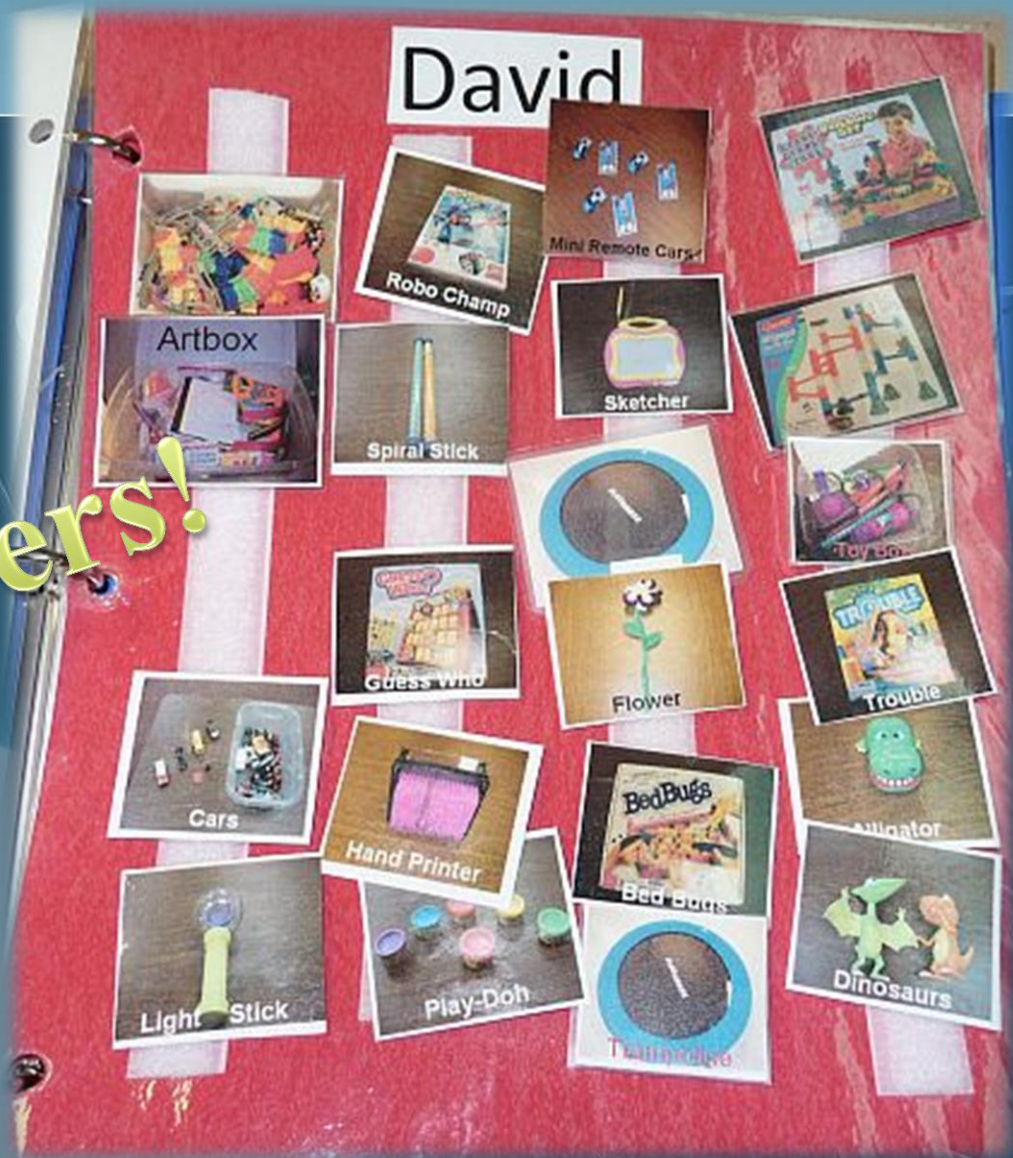
Home Base
www.autisminternetmodules.org

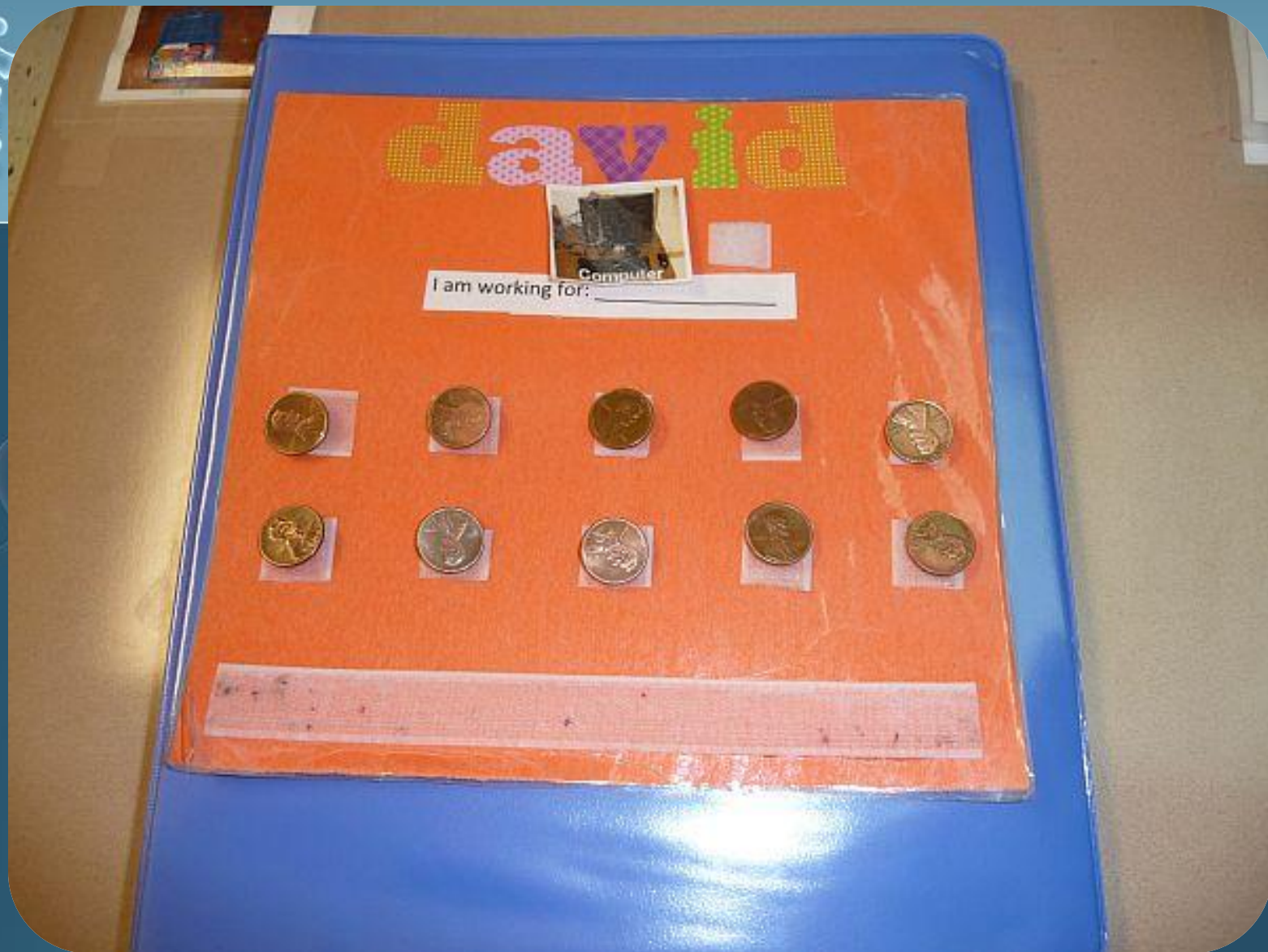


This is a car book for the calm area. It provides positive reinforcement for choosing the calm area, but not too much activity. This book is **ONLY** used in the calm area.



Reinforcers!















I will follow my directions

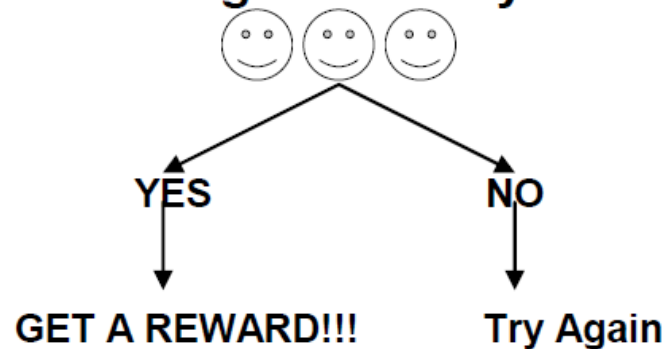
I will do my work

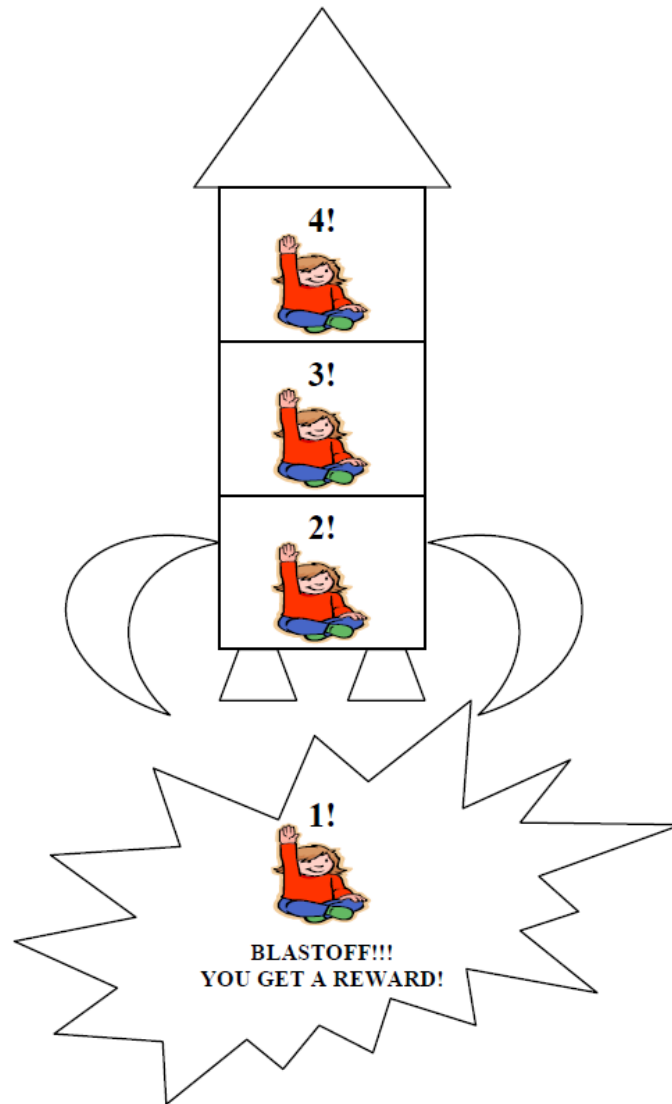


Did I stay and play with my friends?

1	2	3	4	5
 	 	 	 	 
YES NO	YES NO	YES NO	YES NO	YES NO

Did I get 3 Smileys?






National Professional Development
Center for Autism, 2009



Interventions continued

- Social/Communication
 - Scripts
 - Role plays
 - Direct instruction
 - Social stories
 - Visual supports
 - Modeling



Asking for help

If I don't know what to do I can ask for help

I can use my hand or my help card

Asking for help is good when I don't know the answer

If I know the answer I should not ask for help.

When I ask for help my teachers can teach me how to do my work.

When I ask for help my teachers can teach me how to do my work.

1) Ask the question



2) Say the person's name



3) Wait for them to finish answering



4) Make a statement

a. "That's cool!"

b. "Me too!"

c. "That's interesting, I like that also"

d. "Cool! My favorite is..."





Raise my hand when I know the answer.



Sit quiet, only talk when the teacher says "Dale"



It is ok if the teacher doesn't call on me.
I should not call the answer out.



If it is too loud I can use my headphones

LUNCH RULES



1) WALK



2) USE NICE HANDS & FEET



3) USE A CALM VOICE



4) RAISE MY HAND IF I HAVE
A PROBLEM OR NEED SOMETHING

I figure it out!



I'm going to a party



it's my birthday



I get a present



I go on a vacation



it's the holidays



I play on the playground



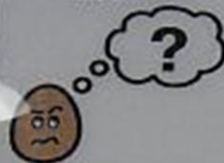
My parents love me



Now you think of one....

I feel **EXCITED** when.....

I can't remember
the answer



I can't decide



I HAVE TO have help



People won't leave
me alone



I HAVE TO wait.



I CAN'T keep playing.



HAVE TO do something
that I don't want to



I can't fix a problem



Now you think of one....

I feel **FRUSTRATED** when.....

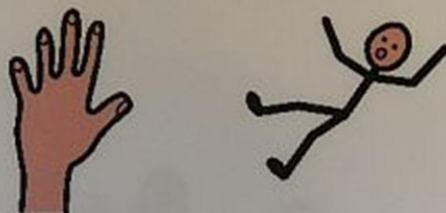
Tag

It is fun to play tag on the playground!

If someone tags me then I am it.



When we tag our friends we use soft hands, pushing is not fun!



It is ok to be "it" because then I get to tag someone and then they are "it".

If I don't feel like playing I can tell my friends "I don't want to play any more".



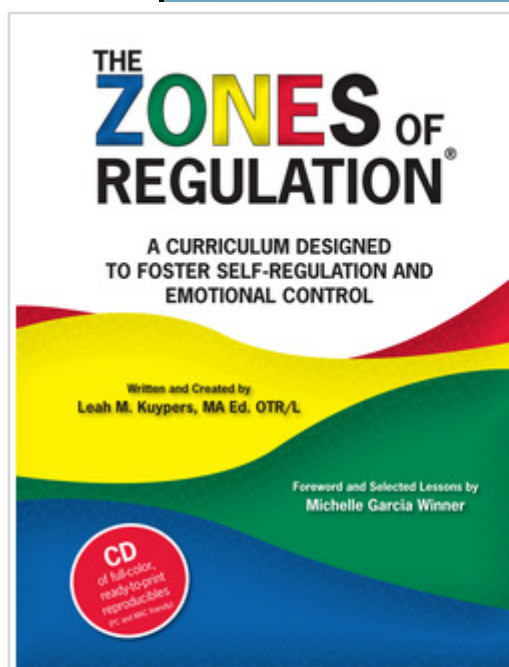
We should ALWAYS listen to our friends when they don't want to play.

If we don't want to play any more then we are finished with tag for the rest of recess.





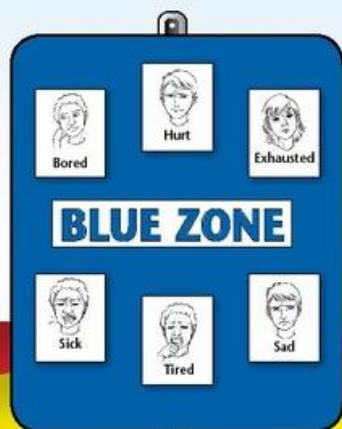
Packaged Curriculum



The Zones of Regulation®, (2011, Social Thinking Publishing) is a curriculum comprised of lessons and activities designed by Leah Kuypers, M. A. Ed., OTR/L to help students gain skills in the area of self-regulation. The lessons and learning activities are designed to help the students recognize when they are in the different Zones (states of alertness/moods) as well as learn how to use strategies (including sensory supports, calming techniques, and thinking strategies) to regulate the Zone they are in.

In addition to addressing self-regulation, the students will be gaining an increased vocabulary of emotional terms, skills in reading facial expressions, perspective on how others see and react to their behavior, insight on events that trigger their behavior, calming and alerting strategies, problem solving skills and much more.

THE ZONES OF REGULATION®



Blue Zone Tools

Stretch

Green Zone Tools

Drink water

Yellow Zone Tools


Deep breaths



Red Zone Tools



Take a break





Understanding Different Perspectives

When I am in the **GREEN ZONE** and it is expected...

Other kids might feel  around me.

Other kids might be thinking  or 

Other kids might say  or 

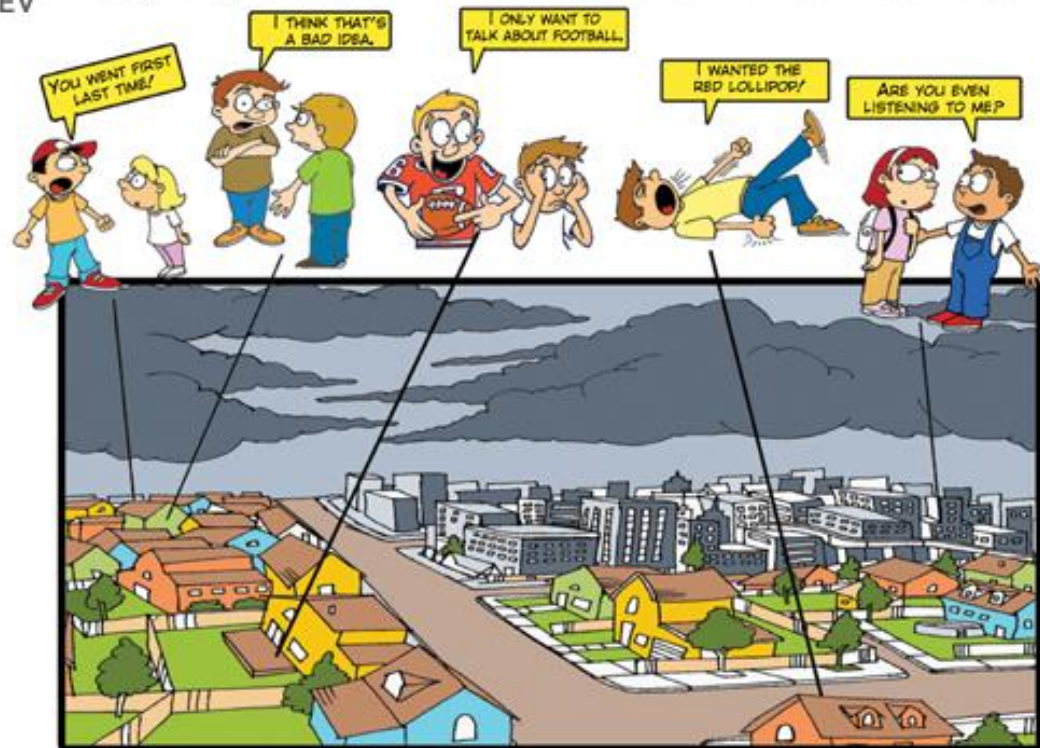




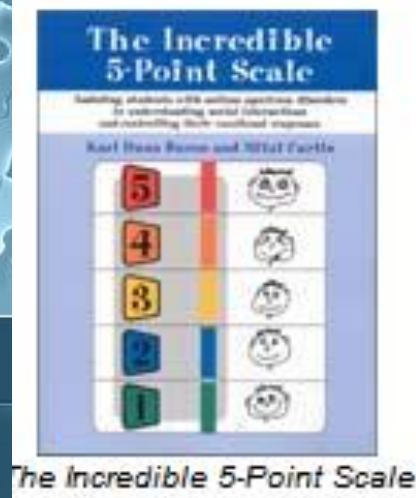
Michelle Garcia Winner
www.socialthinking.com

Social Town has become a dark, dark place since the disappearance of Superflex, one of the most popular superheroes to ever walk the planet. Without Superflex to help defeat the Team Of Unthinkables, humans everywhere are forgetting how to act and think about others around Social Town.

PREV



1



The Incredible 5 Point Scale

www.5pointscale.com

http://www.autisminternetmodules.org/mod_view.php?nav_id=181

#	How does this feel?	What makes me feel this way?	How can I tell?
5	I could lose control!	When loud talking and laughing keep going. School bells and the smell of fish.	Too late!! I am screaming! Emergency!! Stop talking. Close eyes. Deep breaths.
4	This can really upset me	When the boys all laugh at one time. When I can't do my work. When I make a mistake.	I start swearing out loud. I say mean things to other people. I tear up my work. Take a walk out of the room!
3	This can make me nervous	When I hear the boys talking louder. When the chairs or desks scrape on the floor. When someone laughs out loud.	I say shut up real quietly. I start staring at the boys. My brain starts thinking about the boys too much! Take card to teacher
2	This sometimes bothers me	The sound of rain on the roof. When I can't have my turn right away. Walking on the power walk.	My stomach kind of hurts. I think things aren't fair. I start repeating the TV Guide schedule.
1	This never bothers me	Doing my work. Reading teen magazines. Looking at ads in the paper. Watching TV.	My brain is relaxed. I am smiling. My mouth is relaxed. I am happy.



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