# Strategies to Improve Executive Functioning in Students with ASD Part II



## **Executive Functioning**

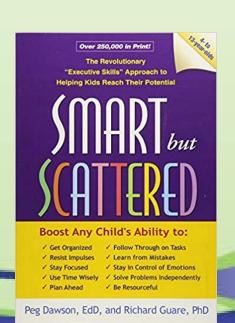
is the TOOLBOX that allows us to effectively use split second, multisignal processing, planning and responding.

Individuals who can see all the details but can't organize or relate to them will become overwhelmed, retreat and demonstrate anxiety.

Garcia Winner (2013)

Dawson and Guare use a developmental progression to identify what should be expected at each age through eleven skills. A child has to think differently to behave differently; so a child must have adequate **THINKING** (cognitive) skills first to incorporate /choose the **DOING** (behavior) skills in a given situation.

- Response inhibition
- Working memory
- Emotional control
- Sustained attention
- Task initiation
- Planning /prioritization
- Organization
- Time management
- Goal-directed persistence
- Flexibility
- Metacognition



## **Skills to Develop**

In part one of Strategies to Improve
 Executive Functioning in Students with
 ASD, we learned about the behavior skill of
 sustained attention and the cognitive
 skills of planning and organization.

 Now we will look at Working Memory,
 Task Initiation, Time Management and Flexibility

# **Working Memory**



Working memory is the capacity to hold information in mind while performing complex tasks. We rely on our working memory ALL THE TIME!

\*It's when we run to the store and remember to buy everything needed without a list; remembering the phone number long enough to dial it without looking at it again; remembering the names of people who were just introduced.

# **Building Working Memory**

- Request eye contact before giving directions
- Keep external distractions to a minimum
- Have student reiterate the directions
- Use written reminders (schedules & lists)
- Rehearse what is expected before the situation occurs
- Use technology (cell phones, text, instant message)



Distractions to a minimum

Instead of Saying	Say or Do This Instead
"Clean up the science lab"	"Put the microscopes back on the shelf"
"Work on your project"	"Write down all the resources you will need for
	your social studies paper."
"Get out your literature book, turn to page 57, get	Write the instructions on the whiteboard and call
out your pencil and paper."	students' attention to them
"Remember, when you go to the library, you can	"Remember, when you go to the library, you can
catch more flies with honey than vinegar."	catch more flies with honey than vinegar. That
	means you are more likely to get what you want or
	need if you are polite."
"Write a report on Flowers by next Friday."	Write on the whiteboard and say to student:
	<ul> <li>Write a two-page report on Flowers</li> </ul>
	<ul> <li>The report is due on Monday, March 14.</li> </ul>
	<ul> <li>Reports should be neatly handwritten or</li> </ul>
	typed.
	Grammar, spelling, and organization of the
	report will all be counted when assigning a
	grade
	Examples of reports are located
	Include a timeline

Map out how to move in the classroom



### Rehearse what is expected

# Teach Students to be Their Own Time Cops

CHILL Zone: to rest, relax, and rejuvenate



OBLIGATED Zone:

school, morning routine, bedtime routine, drive time, etc.

PRODUCTIVE Zone:

you have to produce something from your time spent

Anticipate the "Goes With" and the "Maybe's"

### Rehearse what is expected

### **Task Initiation**

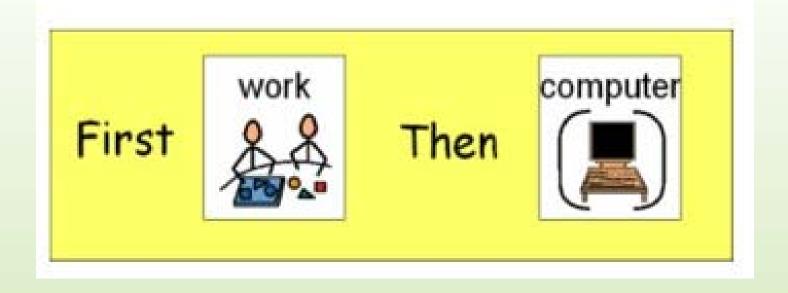


Task Initiation is the ability to begin projects or activities without undue procrastination, in an efficient time manner.

\*Task initiation applies to only the task we find unpleasant, aversive or tedious... things we have to make ourselves do. It helps to teach children that there are times we have to set aside what we **want** to do in favor of what **needs** to get done.

# Teaching Task Initiation in Everyday Situations

- Prompt the student to begin a task with reinforcement
- Provide a visual cue
- Break overwhelming tasks into smaller, more manageable pieces
- Make a plan for when and how to complete a project
- Encourage ownership over the process by deciding how they wanted cued



Prompt the student to begin a task with reinforcement



Quiet



Sitting



Working



In the Hallway, I am

Quiet



Walking



With my hands to myself



Provide a visual cue



### **Directions / Task Analysis**

### how to complete a project

### SCIENCE CLASS



Watch the teacher to get directions for class





#### Remember to

- Have a pencil to record information 1.
- Observe when there is an experiment
- Use your senses to get answers 3.
- Use measuring equipment to get information 4.
- Write down your answers on assignment paper 5.











# **Time Management**

Time management is the capacity to estimate how much time one has, how to allocate it, and how to stay within time limits and deadlines. It also involves that a sense of time is important.

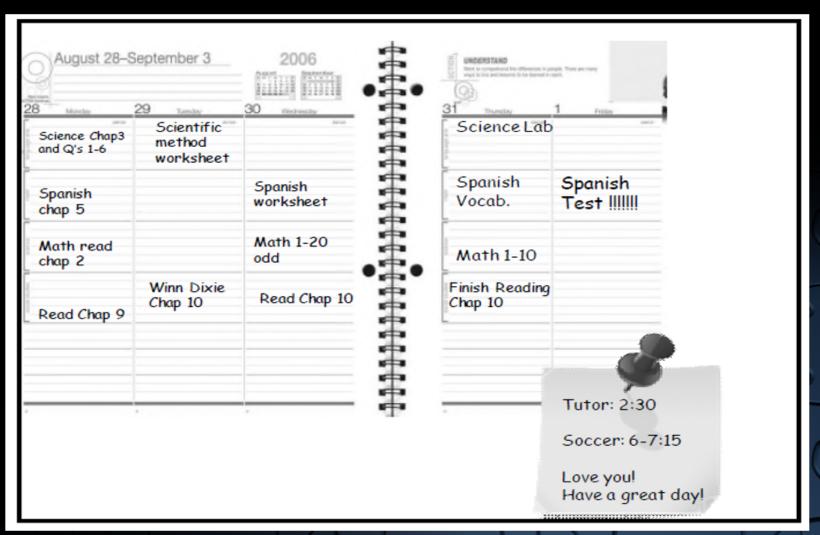
\*Adults manage time for children through prompting and scheduling. Gradually the responsibility shifts to the youth as they learn to tell time, navigate homework, complete chores and schedule social/recreation activities. Usually by high school, the youth is more adept at juggling their schedule and multi-tasking.

# Strategies for Improving Time Management

- Maintain a predictable daily routine
- Talk about how long it takes to do things
- Plan an activity that takes several steps
- Use calendars and schedules
- Purchase a commercially available clock

#### how long it takes to do things

### **Timelines**



### Feel Time Filling Up!

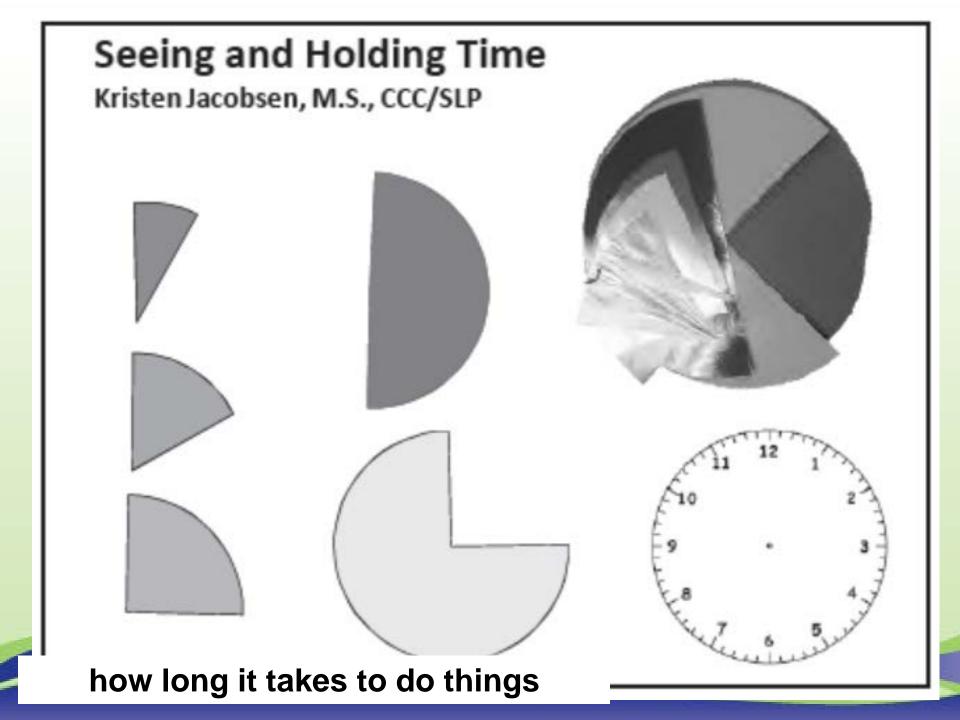


#### how long it takes to do things

#### **Drawing Time: Create Time Zones**

- Draw How Much Time the student Has
- Create Time Markers
- 3. Identify/sketch the "Future Picture Image": if everything goes your way what will it look like?
- Make sure to state over and over:
   "Factor in time for \_\_\_\_\_\_" (gathering materials, the computer to boot, to find your equipment, etc.)
- 5. Mark the start time and the stop time.
- 6. Mark a "time check" at the ½ way point.

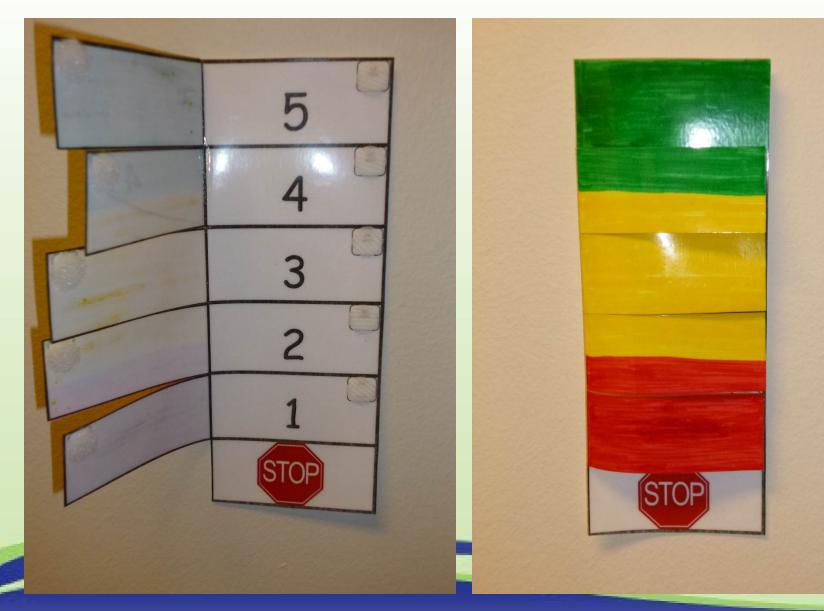




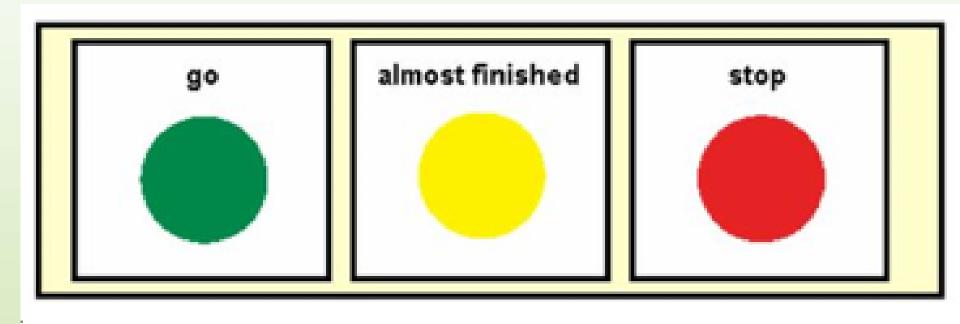
# Elapsed-Time Timers help students self-monitor activities



### **Countdown Strip**



### Finishing an activity



# **Flexibility**



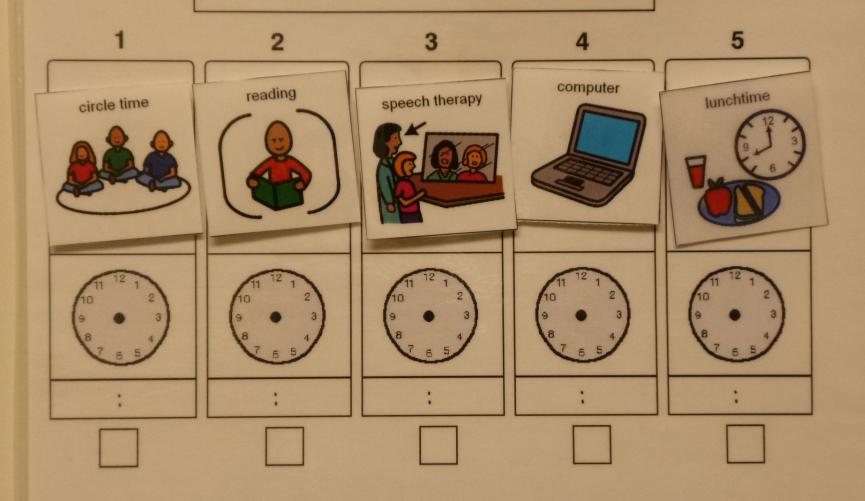
Flexibility is the ability to revise plans in the face of obstacles, setbacks, new information, or mistakes. It relates to adaptability to changing conditions.

\*When you are able to "go with the flow", as plans change at the last minute due to circumstance beyond one's control. An individual can adjust quickly, problem solve and manage their emotions when something unexpected happens.

# **Encouraging Flexibility in Everyday Situations**

- Reduce the novelty of the situation by not introducing change all at once
- Keeping to schedules and routines
- Providing advanced warning for whatever is coming up
- Using scripts to rehearse a situation in advance
- Reduce the complexity of the task break tasks down
- Allow for choices to provide opportunities for control

### Morning Assignments



Keeping to schedules and routines

### **Prep Card**

### **Going Bowling**

We are going bowling tomorrow.

We will take a van to the bowling alleys.

Everyone will ask the man at the desk for a pair of bowling shoes.

Everyone will choose a ball from the racks.

You will have a bowling partner. You will share a lane with them for 2 games. Stay with your partner for both games.

- You and your bowling partner will take turns after each frame.
- After you have taken a turn, sit down.
- The game is over after 12 frames.

#### Using scripts to rehearse a situation in advance

#### Social Script

### Going Bowling



Stephen and Derrick will be your bowling partners. You will share a lane with them for as 2 games. Stay with your partners for both games.

Ask the man at the desk for a pair of size 9 shoes. Remember to say "I need size 9 shoes, please." When he gives them to you, say "Thanks".

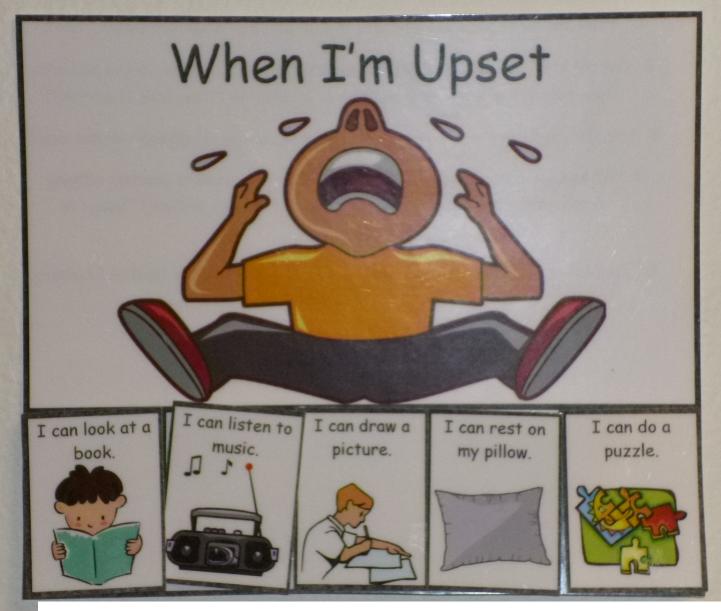
You will need to decide with Stephen and Derrick who will bowl first, then second and third. The bowling order doesn't matter, because you will each get a turn.

After you have taken a turn, say "Awesome!!" and sit down.

After Stephen takes a turn, say "That was cool, Stephen!" After Derrick takes a turn, say "You da' man, Derrick!"

The bowler with the highest score at the end of 12 frames is the winner.

### Using scripts to rehearse a situation in advance



choices to provide opportunities for control

# **Expected / Unexpected Behavior**

- There are expected and unexpected behaviors associated with each situation
- If people do expected behaviors they tend to make observers feel more positively
- The opposite happens when people produce a lot of unexpected behaviors, which tend to make people who observe the behaviors feel more negatively toward that person

Garcia Winner, 2013



Things kids do or say that other kids think are friendly, helpful, and respectful to others.









Things kids do or say that
other kids think are
not friendly, hurtful,
unusual, and disrespectful
to others.







Garcia Winner,2013

### **Social Narratives**

- Developed to help change a social behavior
- Use language appropriate for learner's age and comprehension
- Use first or second person with consistency
- Use visuals if it enhances the comprehension
- Implement into the learner's daily routine

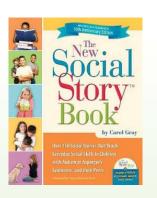
National Professional Development Center on ASD (2010).

# Identifying When My Emotions Turn to Anger

I feel embarrassed when I hear or see others laugh. I often think they are laughing at me. I become angry when I think others are laughing at me. It's OK to question what someone is laughing at. I can ask what's funny. I might find it funny too!



# Building a Social Story



- Descriptive sentences involve who, what, where, and why a situation occurs
- Perspective sentences describe the reactions and feelings of others
- Directive/Coaching sentences describe a suggested response or a choice of responses
- Affirmation sentences express a commonly shared cultural value or opinion

Gray (1991, revision 2010)

# What to Think, Do & Say if a Gift is Disappointing

Someday, I may open a disappointing gift. It may be my birthday. It may be during the holidays. Most people are disappointed by a gift now and then.

When a gift is disappointing, knowing what to think may help. A disappointing gift is still a gift. Someone gave it to me. That person is hoping that I will like it. This is important to remember.

Gray (1991, revision 2010)

When a gift is disappointing, knowing what to do may help. Disappointment is a feeling that is best kept under control. That way, I can be careful with the feelings of others. I will try to take control of my disappointment, and keep the feelings of others safe.

When a gift is disappointing, knowing what to say may help. I will try to say "thank you." Thanking someone for a gift – even if it's disappointing – is polite.

Some gifts are disappointing. Learning what to think, do, and say can help me get control of disappointment. With practice, I may be able to open a disappointing gift and keep the feelings of others safe at the same time.

# Thank you!!







Center for Autism and Related Disabilities
Florida Center for Inclusive Communities
University of South Florida

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

813-974-2535

1-800-333-4530