How Do You Support Executive Functioning During Online Learning?

Laura Anthony, Ph.D.

Pediatric Mental Health Institute

Associate Professor, University of Colorado Denver

Tri-State Autism Collaborative

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Children's Hospital Colorado
Here, it's different.

Affiliated with
CU
School of Medicine
UNIVERSITY OF COLORADO
ANSCHUTZ MEDICAL CAMPUS

Contact Info

laura.anthony@cuanschutz.edu
Facebook
UnstuckandOnTarget.com

Conflicts of Interest

Funding

How to teach EF skills and accommodate EF weaknesses in online teaching
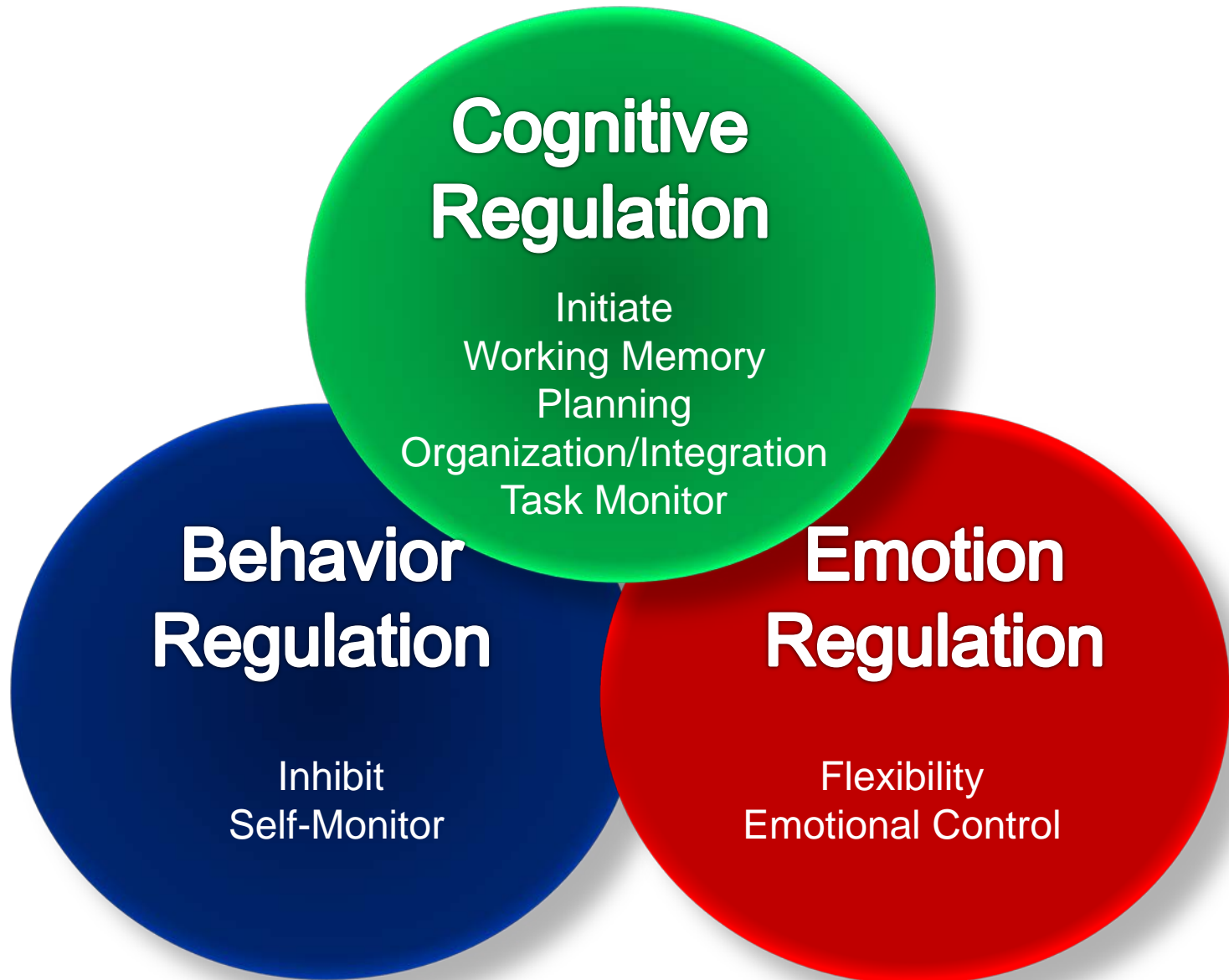
Learner Objectives:

- Participants will understand the extra EF challenges in online learning.

- Participants will problem-solve around how to make a tool for fun into a tool for online learning.

- Participants will be able to make some small changes in virtual teaching to get better effects.

Pandemic reality check: How can you balance teaching from home, with maybe being a full-time parent and maybe even a full-time teacher to your own kids?

You can't!!!!!

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What are Executive Functions?

Cognitive Regulation

Initiate
Working Memory
Planning
Organization/Integration
Task Monitor

Behavior Regulation

Inhibit
Self-Monitor

Emotion Regulation

Flexibility
Emotional Control

Teuber, 1972; Gioia, et al 2002; 2016; Friedman & Miyake, 2017

What are the extra EF demands of online school?

- ***<u>Independence/Autonomy</u>***

- Initiation

- Inhibition

- Emotional control

- Task monitoring/attention regulation

- Working memory demands

- No peer modeling

- Less support

- More planning

Executive Function: Hot and Cool

- **COOL** = decontextualized, meta-cognitive tasks
- **HOT** = socially, motivationally, emotionally salient
  - Real world decision-making
  - Defer gratification, be flexible and follow plans when there are strong social expectations and feelings involved

Zelazo & Cunningham, 2007; Zelazo & Müller, 2002; Zelazo, Qu, & Müller, 2005; Prencipe et al,

Executive Function: Hot and Cool
Which is it for online learning?

COOL = decontextualized, meta-cognitive tasks

HOT = socially, motivationally, emotionally salient

"Zoom Fatigue"

Zoom Fatigue Solutions

Always have an agenda

Schedule breaks

Make meetings shorter

Hide self-view
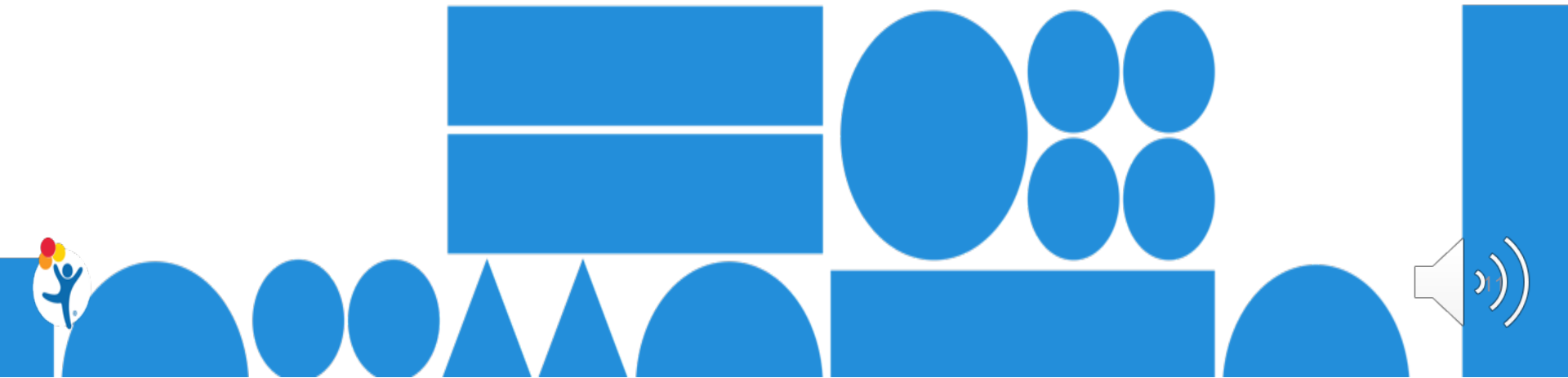
Turn off your camera

Don't multitask!!!!

Phones still work too!

Flexibility

"Asperger's is like a vise on your brain. And each unexpected event is like another turn on the vise…it just keeps building until you feel like you're going to explode. Sometimes when you explode, it comes out the wrong way."

- A young student with ASD

(Rumsey, 1985; Hill, 2004, Kenworthy et al, 2008)

Inflexibility Risks and Accommodations

Inflexibility Risks ↑

Inflexibility Accommodations ↓

Difficulty with violation of expectations

Schedules

Routines

Predict change

Flexible adult

Schopler, Mesibov & Hearsey, 1995

Inflexibility Risks and Accommodations

Inflexibility Risks

Inflexibility Accommodations

Repetitive or intense interests or behaviors

Incorporate them into the online platform

Flexible adult

Schopler, Mesibov & Hearsey, 1995

Inflexibility Risks and Accommodations

Overwhelming intense feelings

Breaks

Downtime

Flexible, safe adult

Inflexibility Risks

Inflexibility Accommodations

Schopler, Mesibov & Hearsey, 1995

Tips from our Youth Action Board: How to Check in on Your Students' Mental Health

- How are you feeling today, really? Physically and mentally.

- What's taking up most of your headspace right now?

- What did you do today that made you feel good?

- What's something you're looking forward to in the next few days?

- What's something you can do today that would make you feel good?

- What are you grateful for right now?
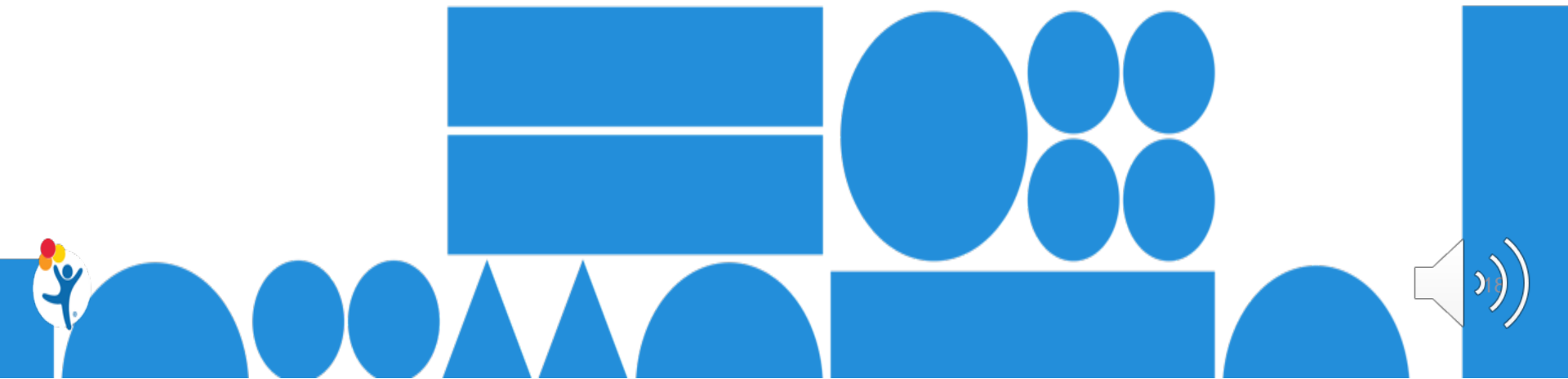
- Rose-thorn

Inflexibility Strengths

- Inflexibility is *adaptive:* It limits unexpected, overloading events

- Respect routines that don't interfere

- Create new routines for online learning

Planning/Organizing

Disorganization Risks and Accommodations

Disorganization Risks

Disorganization Accommodations

Keeping track of so many details can lead to overload or what looks like a lack of awareness

Structure

Reduce the details

Use one online platform!!!

Schopler, Mesibov & Hearsey, 1995

Disorganization Risks and Accommodations

Disorganization Risks and Accommodations

Disorganization Risks

Disorganization Accommodations

Lack of generalization

Put new info in familiar context

Explicitly review inferences, nuances

Structure

Schopler, Mesibov & Hearsey, 1995

Disorganization Risks and Accommodations

Disorganization Risks

Disorganization Accommodations

Don't show what they know

Call and response instead of tests and homework

Quick polls

Game shows

Schopler, Mesibov & Hearsey, 1995

Disorganization Risks and Accommodations

Disorganization Risks (↑)

Disorganization Accommodations (↓)

Getting stuck on details

Or, difficulty knowing what is most important

Emphasis on goals

Break things down

Explicit short rules, checklists and routines

Structure

Schopler, Mesibov & Hearsey, 1995

Planning/Inner Speech/Working Memory Risks and Accommodations

Planning Risks

Planning Accommodations

Doesn't follow directions

Talk less, write more

Communicate via chat/text/white board

Socratic method

Schopler, Mesibov & Hearsey, 1995

Planning/Inner Speech/Working Memory Risks and Accommodations

Planning Risks

Planning Accommodations

Can't work independently

Work on motivation

Break tasks down

SHORT instruction

Break out groups

Schopler, Mesibov & Hearsey, 1995

How can you tell?

Is it a can't?

Is it a won't?

If It's a Can't, Scaffold

Understand

Accommodate

Teach new skills
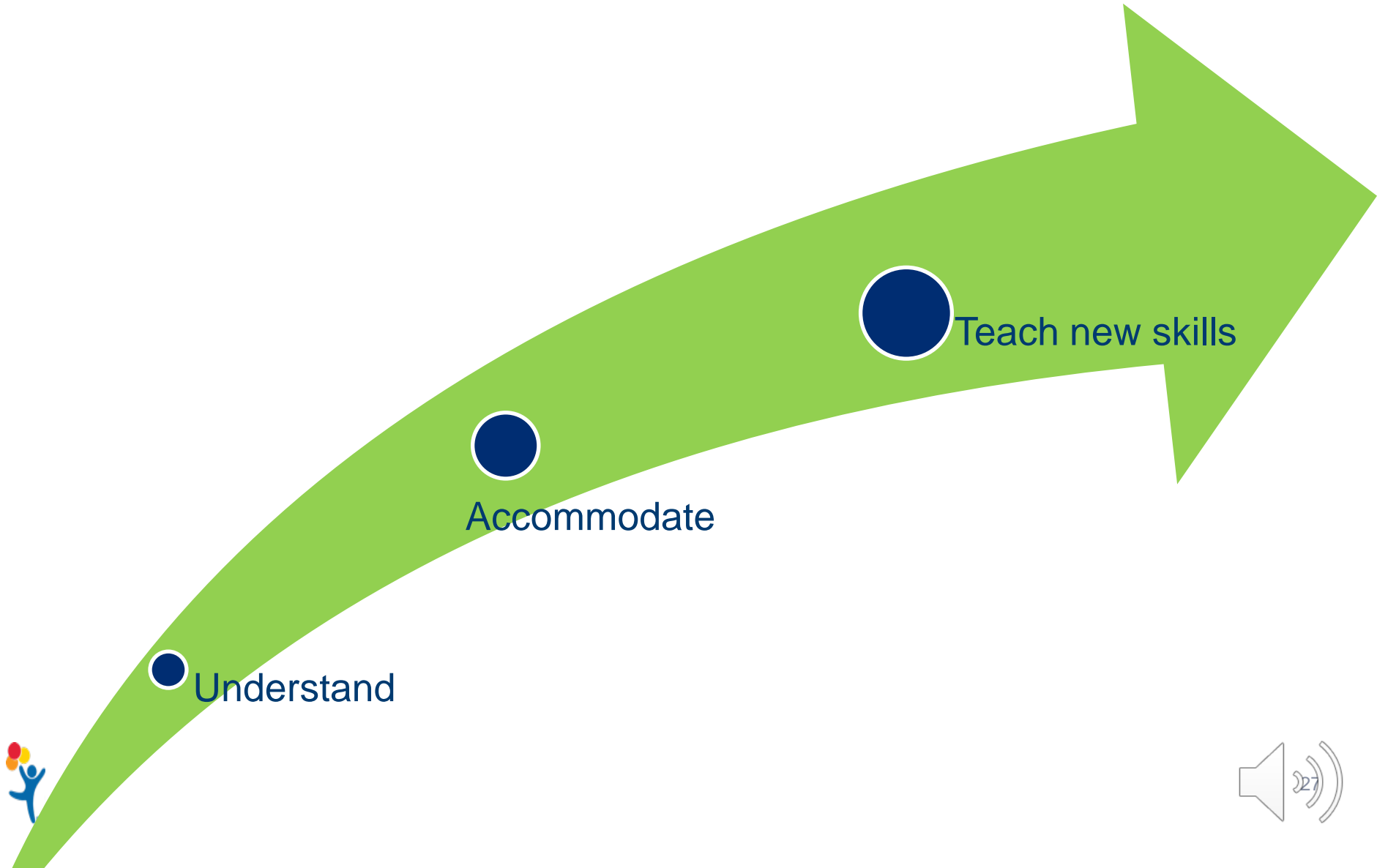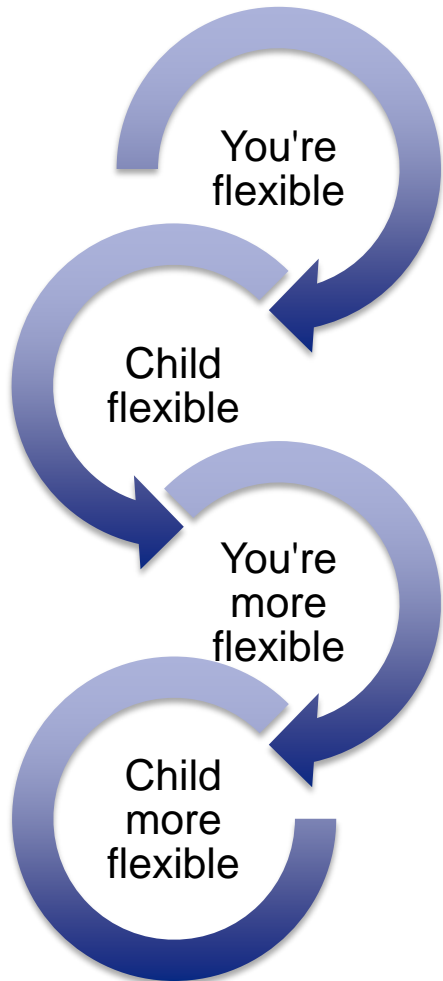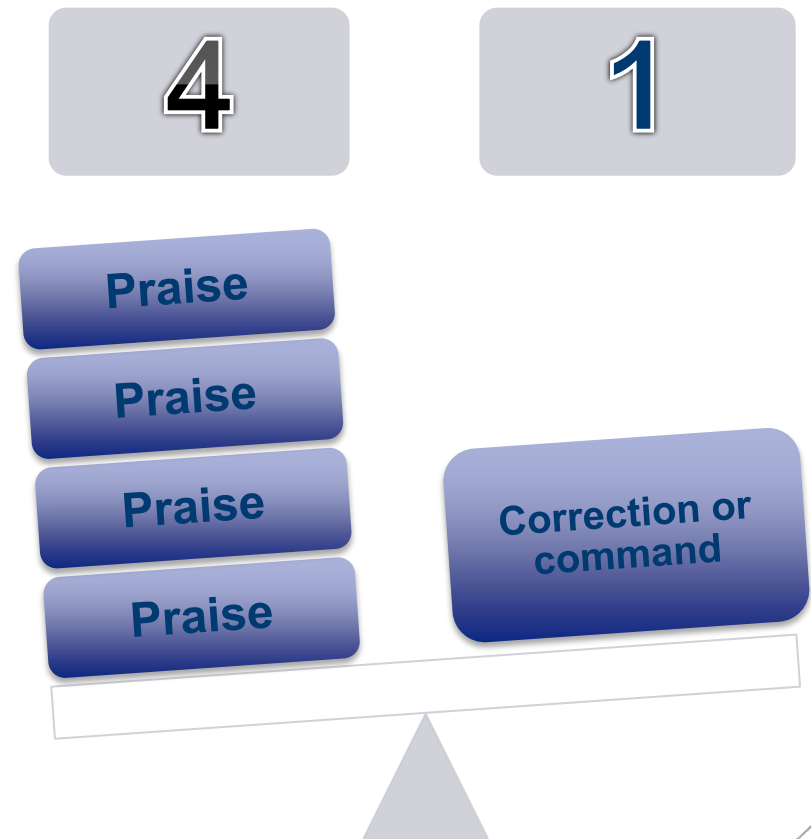
The most important accommodations of them all:
Be Flexible and Keep it Positive!!

Emotions are Contagious …and Flexibility is too

You're flexible

Child flexible

You're more flexible

Child more flexible

Reinforcement Breaks a Negative Cycle

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Praise

Praise

Praise

Praise

Correction or command

Need Some Help with Motivation?

- Embed positive time
  - Quick games, "talk time," show me your favorite meme, embed your own memes, short videos (pet collective, fainting goats, unlikely animal best friends), breathing break

- Use special interests to hold attention
  - Video game music playing the the background
  - Writing assignments embedded in interest

- Change the format of quizzes
  - Jeopardy, Family Feud, etc

Resources:
https://researchautism.org/COVID-19/

FEATURED: ASD TOOLKITS

Title	Type	Source	Release Date
Supporting Individuals with Autism through Uncertain Times	Comprehensive Toolkit that includes social stories, visual schedules, and resources	School of Education and Frank Porter Graham Child Development Institute, UNC-Chapel Hill	March 19, 2020
Coping during the COVID-19 Pandemic: Yale's Guide for Families with Children with Autism Spectrum Disorder	Comprehensive guidebook that includes a collection of helpful, targeted resources for parents	Yale Child Study Center	March 31, 2020