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Strategies to Improve Executive Functioning Skills for School-Aged Girls with Fragile X

Geisinger

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Executive functioning is a set of skills

- Help us to interact with our world in a positive way

- Involved in:
  - Self-regulation and self-control
  - Completion of complex tasks
  - Understanding and monitoring our own behavior

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Components of Executive Functioning

- Inhibition - Impulse control – "edit" button
- Transition - between ideas, people, places, activities
- Emotional regulation – extreme reactions; connected to understanding judgment; perspective taking
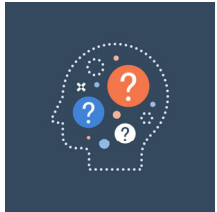- Initiation – begin – develop

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Components of Executive Functioning

- Working memory – "scratch pad" hold information related to task
- Planning and organization – think ahead; identify what is needed for task
- Organization of materials – systematic way to order/categorize needed materials
- Self monitoring- ability to monitor own performance; am I on track –with rules or standards (rubric)

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These skills matter for

- School success
- Positive Relationships
- Decision-making
- Regulating behaviors
  - Minimizing high-risk behavior
  - Improving health outcomes
- Independence
- Employment

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Diagnosis and Misdiagnosis

• Does the student meet criteria for more than one diagnosis?

• Does the student have ID, ASD, Anxiety, ADHD?

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Intellectual Disability (ID) and EF Deficits

• Children with ID will likely show EF ability that is closer to their developmental rather than their chronological age

• Can often be even more impaired than would be suggested by their developmental age

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Assessment

• Cognitive Assessment
  • Take note of test-taking behaviors
  • Working memory and processing speed subtests
• EF assessment - variety of direct and report-based measures
  • BRIEF – Behavior Rating Inventory of Executive Function
• Observation of EF functioning in multiple environments
  • Are there environmental aspects to the EF problems?
  • Are there situational-specific aspects to the EF problems?

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ADHD and EF

• Impulse control
• Disorganization
• Topic Shifting (can be both under- and over-focused)
• Time management problems
• Task incompletion
• Cannot plan ahead
• Do not know what is important or unimportant
• Trouble remembering verbal directions

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When should you suspect EF Deficits?

• "She makes silly mistakes."
• "I have to tell her 10 times before she gets started."
• "She starts the work, but never finishes it."
• "She doesn't follow directions."
• "She loses everything."
• "She gets frustrated if I give her too many things to do at one time."
• "She cannot remember the steps."

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Anxiety and EF

• May be able to use executive function skills well in a non-anxiety provoking situation

• Trouble managing anxious emotions to focus on tasks, test taking, social settings, projects, etc.

• Highly anxious females may be seen as "procrastinators"

• Anxiety interferes with decision making!
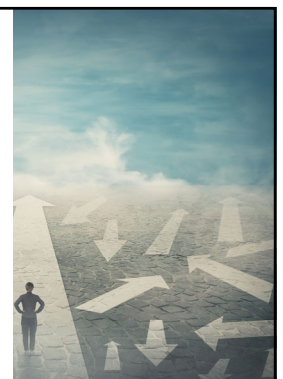
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Supports and Strategies: Teamwork

- Expect resistance
- Solicit input
- Identify reinforcers
- May have to "sell" the idea
- Perk it up – make it fun
- Model that it works

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General Strategies

Structure and routine	Clear, well-defined limits and boundaries	Visual schedules and supports
Avoid information overload	Minimize distractors	Minimize triggers

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General Strategies

Realistic expectations	"Just right" fit of support • Adult support and collaboration	"Under the radar" support works best for some students
Identify and build in reinforcers	Teach that supports will help achieve more independence	Celebrate success

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Motivation & Anxiety

- Ready to begin but don't have any idea how or where to start
- Feel overwhelmed
- Negative reinforcement
- Short term vs long term goals
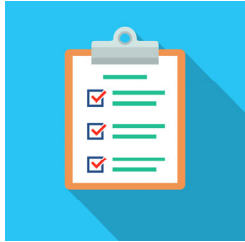
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Identify and build in Reinforcers

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Environment

- Have clear physical and visual boundaries
- Minimize visual and auditory distractions
  - Highly individual e.g., music
- Seating arrangements

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Organizational strategies and supports

- Timers, organizers
- To do lists, planners
- Teacher/instructional assistant monitor assignment book
- Collaboration
- Frequent check-ins
- Start with the "end" in mind

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Organizational strategies and supports

- Color code: subjects-folders-book covers
- School Locker - arrange binders by daily schedule or locker breaks
- "Office" at home for homework
- Desk map and tools both home and school
- Schedule with built in breaks and reinforcers

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Initiation

KEEP CALM
cause this is just the
BEGINNING

THE SECRET OF GETTING AHEAD IS GETTING STARTED
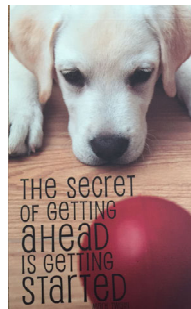
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Strategies - Initiation

- Prioritizing (1-2-3…)
- Chunking
- Visual planner
- Mantras and Social Stories
  - How do you eat an elephant?
  - How do you start a journey?

START

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Strategies – Initiation

- High (HiP) probability ~3 easy, positive easy tasks, previously reinforced behaviors right before more difficult, lowP (high demand) task
  - Feed class pet, sharpen your pencil, take a sip of your water and start worksheet

Action precedes motivation

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Strategies- Inhibition

- Teach strategies
  - marshmallow – walking in hallways
  - "pause" button or "volume control"
- Reminder of what is expected – prior to activity
- Visual reminder on desk
- "Talking stick" for turn taking
- Memo pad or post-its for jotting down ideas or questions
- Self monitoring or contract

keep calm!
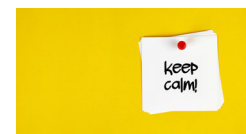
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Emotional Regulation Strategies

- Social Stories
- Rehearsal – role play - practice
  - Games, taking turns, losing or not being chosen
  - How to ask a friend over
  - How to handle when things aren't as expected
- Video modeling and positive
- Survey about triggers, frustrations, beliefs
- Adult support or proximity
- Variety of settings e.g., recess, lunch, study hall, clubs
- "Social engineering"

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Strategies – Shifting - Transition

- Visual Schedule
- Create jobs that move the student along e.g., taking attendance, bring in something for a class project
- Rehearse
- Plan and practice what to do when there's a change
- Preferred adult gives directions/requests when transitioning to a more challenging activity or environment
- Timers
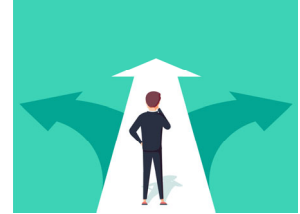
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Timers

www.timetimer.org

www.timetracker.org

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Types of Schedules

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These strategies often work because:

- Individualized for each person
- Applicable in a variety of settings
- Small steps decrease anxiety and feeling overwhelmed
- Visual supports decrease likelihood of information overload
- Collaboration and supports can be adjusted over time
- Success breeds success
- Provide predictability- avoids the "surprise element"
- Teach to visualize the "end"

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Resources – Schedules, Checklists, Social Skills

- www.do2learn.com

- www.interventioncentral.org

- www.carolgraysocialstories.com

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CONFERENCE

fragilex.org/conference

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Click to add text Fragile X Resource Center of Missouri

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NATIONAL FRAGILE X
FOUNDATION

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