

Executive Function Skills: Processing Speed

Struggles:

- Require significantly more time to respond to stimulus (i.e. cue, prompt, request, demand etc . . .)
- Keeping up with conversations, especially when multiple people are involved
- Require significantly longer time to complete an activity or work
- Requires more time to connect/orient thoughts in an organized method
- Loses track or gets stuck when trying to find the correct words or answers
- Reading for comprehension
- Listening/reading ***and*** taking notes
- Understanding and follow multi-step directions or instruction
- Completion of multi-step assignments or problems
- Easily overwhelmed with too much information or too many instructions
- Impaired ability to make quick decisions
- What may LOOK like a lack of effort may be SLOW PROCESSING!

Intervention options:










- Use of [visual schedules](#) or to do lists to reduce anxiety
 - Defines expectations, breaks up assignments, helps with sequencing difficulties
- Teach, coach and practice organizational skills ([See Executive Functioning Skills: Organization handout](#))
- Allow wait time/[time delay](#) with directions, instructions, requests to perform
- Allow additional time for tests or longer written assignments or tasks ([Time Delay](#))
 - Allow oral responses, offer a word bank, eliminate penalties for spelling errors
 - Eliminate timed tests
- Use [visual](#) timers
- Break down larger assignments and develop a [visual list](#) of tasks/activities to do and pair with a due date or time frame
- Provide note taking assistance –
 - allow student to have a copy of notes and have the student highlight important information
 - Allow student to record lectures
 - Provide partial notes
- Prime/pre-teach lessons or activities: ([antecedent based intervention](#))
 - Provide an outline of the lesson prior to class
 - Provide an example of the finished product for assignments or tasks
- Get Ready , Do, Done model
 - Provide a sample of the final product
 - Create the list of things to “DO”

- Create the list of materials needed
- Give the student a **visual prompt** before they are called upon to answer, preferably a visual such as the number of the question you are going to give the student
- Limit repetitious practice once mastery of the skills is demonstrated
 - Or have the student set an individualized baseline goal, then the goal is to improve that baseline time, not beat a randomly established time
 - Or have set dates to review mastered skills for maintenance purposes
- Eliminate or reduce penalties for spelling on written assignments
 - Use text to speech software or apps
- Allow one re-do per assignment giving the student the opportunity to improve grades (this also allows for more time to process the work)
- Teach and coach time management and pair with **POSITIVE REINFORCEMENT**
 - Set small timed or chunked goals for the student and pair meeting these goals with positive reinforcement
- Emphasize quality versus quantity
- **Teach social scripts** for self-advocacy (Don't just create one and give it to the student)
 - I need more time . . .
 - Can you come back to me . . .
 - Could you say that again please . . .
 - Can you give me a clue/hint . . .
 - I don't understand the question . . .
 - Please show me an example . . .
- Provide student with a **social narrative** covering: What do I do when I don't know what to do?
Or What do I do when . . .
 - I can't get into my locker
 - I don't understand my homework
 - I don't feel well
 - I have lost something
 - I forgot my lunch
 - I don't have money in my lunch account
- Model, teach, coach and REINFORCE think aloud procedural steps
 - Use mnemonic devices
 - Use motor movement or motions

Resources:

- [SSJCSS Links to graphic organizers arranged by subject/category](#)
- [Online Visual Timers](#)
- [How to use post-it notes on your windows desktop for lists](#)
- [SSJCSS sensory resources](#)
- [PBIS World – Breaking Down assignments](#)
- [PBIS World – Reinforcement/Reward Systems](#)
- [PBIS World – Data tracking resources](#)
- [Forced Choice Reinforcement Survey](#)

Apps:

-  [First Then Visual Schedule \(\\$9.99\)](#) - visual schedules/to do lists
-  [First Then \(\\$2.99\)](#) - visual schedules/to do lists
-  [Story Creator \(\\$1.99\)](#) – social narratives/scripts
-  [Shadow Puppet – \(Free\)](#) – Create quick social narratives/scripts
-  [R+Remind – \(\\$0.99\)](#) – Reinforcement
-  [This for That \(free\)](#) – visual schedules
-  [Idea Sketch \(Free\)](#) – this app allows students to create flow charts, mind/concept maps and then converts these files into an outline. This helps with planning projects and the outlines can be emailed to teachers.
-  [Fit Brains Trainer \(Free\)](#) – this is a brain training and fitness app that designed to enhance memory, processing speed, concentration, visual processing skills and problem solving.
-  [Lumosity \(free – upgrades with subscriptions\)](#) – touted as a brain training app with data collection to show individual progress.

References:

- Smith-Myles, B. (2016) Individuals with ASD who present with behavior and executive function challenges: practical solutions. [training handout]. *Indiana Resource Center for Autism: Indiana Institute on Disability and Community. Bloomington, IN.*
- Kelly, K. (2015). Processing speed: What you need to know. Retrieved 4/25/2016 from: <https://www.understood.org/en/learning-attention-issues/child-learning-disabilities/information-processing-issues/processing-speed-what-you-need-to-know>
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