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
 - o Defines expectations, breaks up assignments, helps with sequencing difficulties
- Teach, coach and practice organizational skills (<u>See Executive Functioning Skills: Organization</u> handout)
- Allow wait time/time delay with directions, instructions, requests to perform
- Allow additional time for tests or longer written assignments or tasks (<u>Time Delay</u>)
 - 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 <u>visual list</u> 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)
 - o 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
 - o Provide a sample of the final product
 - Create the list of things to "DO"

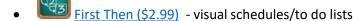
- Create the list of materials needed
- Give the student a <u>visual prompt</u> before they are called upon to answer, preferably a visual such as the number of the question you are going to give the student
- Limit repetitious practice once mastery of the skills is demonstrated
 - Or have the student set an individualized baseline goal, then the goal is to improve that baseline time, not beat a randomly established time
 - o 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)
 - o I need more time . . .
 - o Can you come back to me . . .
 - Could you say that again please . . .
 - o Can you give me a clue/hint . . .
 - I don't understand the guestion . . .
 - o Please show me an example . . .
- Provide student with a <u>social narrative</u> 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:







<u>Shadow Puppet – (Free)</u> – Create quick social narratives/scripts



• This for That (free) – visual schedules

• Idea Sketch (Free) – this app allows students to create flow charts, mind/concept maps and then coverts these files into an outline. This helps with planning projects and the outlines can be emailed to teachers.

• <u>Fit Brains Trainer (Free)</u> – this is a brain training and fitness app that designed to enhance memory, processing speed, concentration, visual processing skills and problem solving.

• <u>Lumosity (free – upgrades with subscriptions)</u> – 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 Elementary Teachers' Federation of Ontario (n.d.) Processing Speed. Retrieved 4/25/2016 from: http://www.etfo.ca/Multimedia/Webcasts/SpecialEducation/Pages/Processing%20Speed.aspx