Assistive Technology for Executive Function

Memory, Initiation, Control, Self-monitoring, Planning, Organization, & More

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Presenter

• RESNA Certified ATP
• M.S. in Rehabilitation Science and Technology
• Taught undergraduate and graduate level assistive technology courses at East Carolina University
• Developed an online graduate certificate program in AT for East Carolina University
• Director of Assistive Technology at Westminster Technologies
Objectives

• Discuss Executive Functioning

• Explore Apps to help with Executive Functioning

• Discover Wearable Technology

Executive Function
What is it?
What is Executive Function?

- Three main areas:
  - Working Memory
  - Flexible Thinking
  - Self-Control (Inhibition)

- Group of mental skills
  - Working memory
  - Planning
  - Organizing
  - Self-Control
  - Attention & Focus
  - Prioritizing
  - Initiating
  - Emotion Regulation

Development

- Development of executive functioning develops
  - Childhood
  - Mid-20's

- Causes
  - Brain development
  - Heredity
  - Environment
  - ADHD
  - Learning Disabilities
  - Slow Processing Speed
What does it look like?

• Trouble with task initiation
• Inability to complete tasks
• Can’t prioritize tasks
• Forget what they just learned or read
• Can’t sequence steps or follow directions
• Trouble switching between tasks

• Fixate on tasks or things
• Overly emotional
• Can’t organize thoughts
• Trouble organizing materials
• Difficulty managing time
• Anxiety over routines or rules are changed

Everyday Challenges

• Sorting & organizing mail, files, important papers
• Staying calm when something unexpected happens
• Keeping up with deadlines, chores, and everyday tasks
• Paying bills, sticking to a budget
• Starting new activities/projects
There's an app for that!

- Notability
- AudioNote
- OneNote
- GoodNotes
- iOS Notes
Working Memory 2

- Picture Scheduler
- Say&Go
- Just Press Record
- Cheatsheet Notes

Flexible Thinking

- 30/30
- Choiceworks
- VisTimer
- Time Timer
Task Initiation

- First Then Visual Schedule (FTVS)
- iPrompts
- Plan It, Do It, Check It Off

Task Initiation 2

- Due – Reminders & Timers
- MultiTimer
- Streaks
- Timewinder
Self-Monitoring

- Built-in Apps:
  - Reminders
  - Calendars
  - Alarms
- Screen Time
- Alarmed
- PhotoMind
- Supernotes

Plan & Prioritize

- Ayoa HD
- Launcher
- inClass
- Todoist
Organization

- BugMe! Stickies
- Due
- Google Keep
- MindNode
- Popplet

Google Keep

- Notetaking Tool
- Available on the web, or mobile devices through an app
- Tools include:
  - Text
  - Lists
  - Images
  - Audio
Emotional Control

- RealLifeChange
- Calm
- Relax Melodies
- At Ease

Wearable Technology

Take it wherever you go
Wearables

- Wearables
  - Manage
    - Schedules
    - Notifications
    - Information
  - Fitness Devices
  - Smartwatches
  - Focus Aids
  - Blind/Low-Vision watches
  - Tracking Tech

Fitness Bands

- Fitbit
- Garmin
Notifiers

- **Ditto**
  - Custom Vibration
  - Calls, Texts, Apps, Alarms, Email
  - Set up Favorites
  - Silent Alarms

- **Martian**
  - Analog smartwatch
  - Alerts & Notifications
    - Caller ID
    - Texts
    - Social Networking
    - Calendar
  - Voice Commands
  - Custom Vibration

Focus

- **ReVibe**
  - Vibration Reminders
  - Step Counting
  - Watch

- **Time Timer Watch**
  - Custom Timers
  - Analog or Digital Displays
  - Custom Alarms
Tactile

- **Dot**
  - Braille Watch
    - Time
    - Date
    - Alarm Clock
    - Timer
    - Stopwatch
  - Manage Calls
  - Text Messages
  - Organization
  - Social Networking

Object Finder

- **Tile**
  - Sticker
  - Slim
  - Pro
  - Mate
- **TrackR**
  - Pixel
  - Coin-sized
  - LED lights
  - Ringer
Smartwatch - Apple

• Apple Watch
  • Alarms
  • Reminders
  • Fantastical
  • Due
  • Just Press Record
  • OneNote
  • Clear (To Do Lists)
  • Breathe

Smartwatch - Android

• Android Wear
  • Todoist
  • Google Keep
  • Wear Audio Recorder
Smartwatch - Samsung

- Samsung Galaxy Watch
- Connects with favorite apps
  - Alarms
  - Reminders
  - Voice Memos
  - Tasks
Questions

Resources – App Finders

https://www.augsburg.edu/class/groves/assistive-technology/everyone/


https://search.bridgingapps.org/dashboard
Resources


Resources 2


## Any Questions after Webinar

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