Executive Function Skills at Work: How Technology Can Help

Center on Technology and Disability

Assistive and Instructional Technology Supporting Learners with Disabilities
Ever wondered how the brain knows how to think and do all of the amazing things it does? The “control panel” that manages these tasks is called the brain’s executive functions. Examples of executive function skills include:

- Completing tasks
- Focusing
- Initiating
- Making decisions
- Managing time
- Multi-tasking
- Organizing
- Planning
- Self-monitoring
- Self-regulation
- Solving problems

Skills like these are a part of nearly any work place or career and are used daily to complete work. For individuals with disabilities, the skills listed above may require extra effort or different strategies and accommodations to be completed successfully. Fortunately, there’s a variety of technology and strategies that individuals with disabilities can use to support their executive function skills in the workplace. This brief information sheet explores some of the executive function skills that impact tasks on the job and how technology can help.

**Arrive to Work and Appointments on Time**

One of the first tasks of the workday is arriving to work on time. This requires planning ahead and managing time well. Consider reserving a block of time on the calendar a day or more in advance to plan and prepare for work. Creating checklists can help with remembering what's needed for work. This list can be written on paper or created digitally using an app for a smartphone like Wunderlist, which includes a digital calendar or task list with alerts for reminders. Checklists can also be used to prepare needed materials and to-dos before leaving for work. Creating a “getting ready for work” routine in an app like Timewinder provides a timer for each task or activity on the list to help keep on track.

The traditional way of interacting with time is by looking at a clock with our eyes, but there are other ways that can help when our eyes are preoccupied with a task. For example:
• Hearing an indicator of the time, such as a clock that speaks the time aloud.
• Moving to interact with a reminder, such as alarms or timers that require a physical action. Clocky is an example of an alarm clock with wheels that zips around the room and requires movement from the user to turn it off.

Completing Tasks as Directed

One of the first steps in completing a task is understanding what is expected. It can be helpful to ask for the directions in writing or to audio record the instructions from a supervisor, although it’s important to request permission before audio recording. Audio recording devices that sync (bring together in one place) written or typed notes with tools such as AudioNote or a Smartpen can be helpful. Asking for clarification or help breaking tasks into smaller steps can ensure tasks are completed as directed. Once what to be done is understood the next step is to plan the work to be completed:

• Break the task down into smaller steps.
• Put them in order by deciding what is most important or by listing the order in which they need to be completed.
• Estimate how much time each step will take.
• Assign deadlines for each step to help stay on track. Digital calendars, task lists, and reminders can help keep track of these steps.
• Include detailed notes next to items on your calendar or task list.

Once a plan is established, it is time to begin! If getting started is a challenge, it can be helpful to do some type of transition activity — for example, calming music, nature sounds, or some type of meditation. Structuring work time to include short breaks for physical activity, and using a timer to keep on task can aid focus. Other tools that can help with focusing include:

• Fidgets (small toys or objects to play with while doing an activity)
• Active seating and positioning (such as standing or using a balance ball)
• Background sounds

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• Lighting (some lights and colors of lights help people feel more alert)
• Alerting devices (a pre-programmed alert at regular intervals)
• Distraction-free environment (a location where attention is not pulled away by other things going on)
• Aromatherapy (using the smell from natural oils might be helpful to focus attention)

Organize Space, Materials, and Information

The benefit of having an organized environment, whether physical or digital is the ability to find what is needed. Being organized helps with time management, since time is not lost looking for missing items. Organization also helps with staying focused by limiting distractions that can happen when searching for things. Consider these strategies:

• Eliminate clutter and items not used on a frequent basis.
• Label where items belong (color coding, text labels, or visual pictures).
• Schedule times on a calendar with reminders to organize the work environment.
• Take photos of the workspace when it is well-organized to remember where to put things later.

Tools for saving digital notes (e.g., Evernote, OneNote) provide a way to save various formats of information such as text notes, web clippings, files, photos, and audio files. These tools often have a search feature to help find notes later. Choosing only one or two locations where notes are saved makes them easier to find later. These locations are also a good place to save ideas and things to remember later.
Next Steps

Persons with disabilities have a right to receive reasonable accommodations under the Americans with Disabilities Act (ADA), and tools like these that make a job more manageable can be reasonable accommodations. It’s up to the individual with a disability to request accommodations, disclose relevant information about their disability, and explain their need for the requested accommodation.


The brain is a complex and amazing operation of executive functions and there are many tools that can help support executive function skills on the job.