Getting Started: Executive Function Skills at Work

CTD Center on Technology and Disability

Assistive and Instructional Technology Supporting Learners with Disabilities

PACER CENTER CHAMPIONS FOR CHILDREN WITH DISABILITIES
Every day, the brain performs an amazing dance between different thoughts, actions and to-do’s in order to complete a job. The brain’s ability to juggle multiple thoughts and actions is referred to as its executive functions. Executive functions help people focus on the here and now, anticipate the future, and take action. Executive function skills and activities include memory, attention, self-control, time management, decision making, the ability to start and finish tasks, and many other skills. Skills like these are a part of nearly any work place or career and are used daily to complete work. For individuals with disabilities, these 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 increase their executive function skills in the workplace.

This document discusses executive function skills often used at work and suggests technology and strategies that can help.

Time Management

Developing an awareness of how much time it takes to complete work helps with scheduling a realistic amount of time to do the work. In addition, developing strategies to address distractions is an important part of managing time wisely. Here are some strategies to improve time management skills:

- Practice guessing how much time an activity or task will take, and time the activity or task. Keeping a log of how much time different activities take to complete will increase awareness of how time during the day is spent.

- Try different ways of keeping track of the passing of time. Options range from a low-tech egg timer to tablet and smartphone apps designed expressly for time management.
  - Try using a visual timer or a countdown timer app to “see” time passing. (e.g. Time Timer and Timewinder (app))
  - An audible alarm, such as a talking clock that speaks the time aloud during set intervals (i.e. every ten minutes) or a talking countdown timer. Visual messages (text or images) and auditory alerts can
also be paired together. (e.g. **Talking Clock for iPhone** (app))

- Vibrating alarms can provide a tactile or “feeling” sense of time and fit well in quiet work environments. (e.g. **Shake-N-Wake**)

- Kinesthetic approaches that require one to get up and move to respond to the alarm are available in specialized alarm clocks and apps. (e.g. **Clocky**)

### Task Completion

The skills and their accompanying strategies outlined below provide support from beginning to finishing tasks at work.

#### Motivation

A person’s level of motivation greatly impacts their ability to work efficiently. Here are a few strategies to remain motivated while working:

- Work in short bursts. Work for a short amount of time, do an alternate activity or take a break and then resume working. Even if one chooses to work a longer amount of time, taking an occasional break with an energizing or motivating activity can be helpful.

- Remove any distractions from the work environment. For more about this, check out the information under the header “Focus and Attention” on page 6.

#### Mental Transition

Many different tasks are completed during the workday that requires the mind to quickly change its thinking and focus. These tips help the mind transition from what it was doing to what it needs to do next:

- To help prepare for work, creating a “transition activity” to do that helps to shut one’s brain off before moving on to a new task. Some things like preparing the workstation, meditation, listening to music, or a short exercise routine can be helpful.

- Create a “think about it later” written list of what shouldn’t be forgotten before moving on to the next
activity. Once these ideas are written down it helps the mind move on to the next task.

Feeling Overwhelmed

If a task feels overwhelming, it can be hard to get started. Dividing the activity into smaller, manageable steps is often times a helpful way to make progress. Individuals with disabilities can use their self-advocacy skills to ask someone knowledgeable for support, such as a parent, teacher, supervisor, tutor, or mentor. Actively seeking the support when needed is a key to avoid feeling overwhelmed.

Following Directions

Skipping a step, forgetting the instructions, or not understanding them can make completing work tasks difficult. These tips may be helpful:

- Video or audio record the instructions, or take a video of someone else completing the task. Video and audio record are common features on many devices.
- Take pictures or ask for pictures of each step of the task. Many phones and devices feature a built-in camera.
- List instructions in order with check boxes to mark as each step is completed.
- Ask for written instructions, and if necessary, ask to have them explained further for clarity and certainty.

Organization

Organizing Workspace and Supplies

It’s easier to find things when they are in their place. It can be challenging however to put items away in their right place or even to decide where the items belong. Placing everything in a large pile, then grouping similar items together can be a great first step towards better organization. Remove duplicates and items not often used. Consider using pictures, words, or colors to identify where different items belong in a work area. Setting reminders to put items where they belong can help keep a workstation consistently organized.

Organizing Information

Sometimes it can be as difficult to find saved information as it is to find physical objects. It can be helpful to group work
materials on digital files to make them easier to find. One of the benefits of saving information digitally (on a phone, tablet, or computer) is that it can be found using a search feature and the right keywords. A few of the digital tools that provide a search capability are: Evernote, Google Drive, and OneNote.

Memory

**Remembering Appointments**

It is important to remember both the time of your appointment and to prepare for it in advance. Setting alarms and notifications on calendar apps, on smartphones, or on tablets can help with remembering and preparing for appointments and events. Reminders can also help someone to periodically review their calendar for upcoming events or appointments so that they are prepared.

**Remembering Tasks**

Reminders on electronic devices send notifications, such as a text message, to ensure important tasks and events are not forgotten. Scheduling a task directly on a calendar rather than adding it to a task list, can help make sure it’s completed by a deadline.

For tasks that need to be completed at a specific location (such as signing into work when you arrive) Location-based reminders (available through services such as Apple’s Siri) can provide reminders upon arrival at a specific location.

**Remembering Directions and Memos**

Memos, requests, comments, or questions from a supervisor or co-workers can easily be forgotten or lost since these tend to be brief and on-the-go interactions. Some of the tools listed under the header “Task Completion: Following Directions,” starting on page 3, may also be useful here. Saving everything you want to remember in one location makes finding and using this information easier. Items can be saved using a notebook, an audio recording tool, a digital notebook (like Evernote or OneNote), or word processing tool (like Google Drive, Microsoft Word, or Apple Pages). Consider scheduling a time and setting an alarm to remember to check notes and create action plans based on them.
Focus and Attention

The ability to focus on a task is essential to keeping up with work and contributing to the workplace. There are many factors that can affect focus, for example the five senses (hearing, vision, smell, oral/taste, and touch), as well as your body’s physical movement. The environment someone works in can greatly impact their ability to focus on the task at hand. Discovering what’s distracting in a work environment (such as conversation from surrounding co-workers) as well as what helps with focus (such as working in an area where others are out of view) helps in understanding what can be changed to help with focus. Can distractions be removed or blocked? What strategy can be used to increase attention such as listening to music, a physical barrier to block visual distractions, or moving to a less distracting environment? Trying different options helps people discover what works best for them.

In addition, movement can have a powerful impact on attention. Depending on tasks and work environment, some movement may require breaks from work, such as taking a walk away from a desk, while other movement can be achieved while doing work such as sitting on a balance ball. Some people need more movement than others. Paying attention to individual needs helps people discover how much and what kind of movement they need.

Learn More

If tools and strategies like these help someone with a disability do their job well, they have a right to receive reasonable accommodations under the Americans with Disabilities Act (ADA). It is up to the person with a disability to request any accommodations, and which may include disclosing relevant information about their disability, which may involve explaining why they need the specific accommodation.

Resources

- Association of Assistive Technology Act Programs — [www.ataporg.org](http://www.ataporg.org)
- Center on Technology and Disability — [www.ctdinstitute.org](http://www.ctdinstitute.org)
- Clocky — [www.nandahome.com](http://www.nandahome.com)
- Evernote — [www.evernote.com](http://www.evernote.com)
- Google Drive — [www.google.com/drive](http://www.google.com/drive)
- Microsoft Word — [www.microsoft.com](http://www.microsoft.com)
- One Note — [www.onenote.com](http://www.onenote.com)
- PACER Center — [www.PACER.org](http://www.PACER.org)
- Shake n Wake - [www.tinyurl.com/shakenwake](http://www.tinyurl.com/shakenwake)
- Talking Clock for iPhone - [www.tinyurl.com/talkingclock4iphone](http://www.tinyurl.com/talkingclock4iphone)
- TechMatrix — [www.techmatrix.org](http://www.techmatrix.org)
- Time Timer — [www.timetimer.com](http://www.timetimer.com)
- Timewinder — [www.widgetrevolt.com](http://www.widgetrevolt.com)

Research and Evidence


