



Easy to Access Assistive Technology and Apps for Individual Success

By Mary DiBiase and David Hoff

Due to the COVID-19 pandemic, day and employment service providers have had to quickly determine how best to provide supports for people they serve. For many this means transitioning to services and supports that can be provided remotely. This brief is one in a series developed to help community providers continue to provide services to those who are currently working, seeking employment, or engaged in community-based day supports.

During this time, we are all learning how to best support the people we serve. We welcome your feedback and ideas as we all work together to provide services that help people to continue to work towards their goals while staying safe and healthy.

ICI COVID-19 resources: covid19.communityinclusion.org

The last several years have seen significant growth in the use of assistive technology (AT) and apps for supporting individuals with disabilities in employment, community activities, and related areas. Personal devices such as smartphones can serve as AT tools to support individuals with establishing and supporting personal goals as well as with employment supports.

This brief focuses on the various AT options that can be accessed through smartphones and tablets, often for free, to support employment, personal, and independent-living goals. Much of the technology discussed in this publication can also be accessed via desktop and laptop computers.

The COVID-19 pandemic presents an opportunity to spend time with individuals exploring and learning to use different AT and apps that can be used now and in the future. This includes technology and apps that can assist them to be more self-sufficient on the job and in the community. In addition, there are apps that can help with exploring employment options and conducting a successful job search, and that support individuals in community participation. There are also apps that individuals can use now to support personal wellness, and deal with stress and anxiety, as well as learn new skills such as money management.

For individuals who are working during the pandemic, at a time when in-person supports from a job coach may be limited or not available, AT and apps can increase their ability to self-manage on the job. Through use of technology, job coaching services can also be provided remotely. (See the other publication in this series [Using Technology for Remote Support, Self-Management, and Success in Employment and the Community](#), for how the types of assistive technology and apps discussed in this publication can be utilized to enhance success in employment and the community, and provide supports remotely.)

Identifying Appropriate Technology

While it is easy to get enamored by the latest app or piece of technology, it is important to use a methodical step-by-step process for deciding what technology works best for a specific need. The following are steps to be done in partnership with the individual:

1. Identify the issue to be addressed.
2. Determine if AT has the potential to address the issue.
3. Review the individual's skills and needs and impact on technology options.
4. Determine the factors in the environment where the technology will be used that need to be considered.
5. Using the information developed, identify potential technology tools.
6. Conduct trial use of the identified technology.
7. Based on this trial, determine if the technology is appropriate and feasible to address the issue identified.
8. Develop a plan to implement the technology, including training the individual and accessing necessary supports.
9. Evaluate the effectiveness of the technology on an ongoing basis.

It is important to view technology as an individualized tool. What works for one person may not be appropriate or helpful for another person.

Embedded Technology and Apps: Tips and Guidelines

Embedded technology and pre-installed apps, as well as other apps for smartphones and tablets, can improve skills and supports for employment success, financial well-being, and personal wellness.

Built-in assistive technology

Before looking at new apps to download or purchase, first become familiar with AT and apps that are built into smart devices and tablets.

Some of these include:

- ▶ Text to Speech: Reads out loud selected text. Some devices allow you to choose the voice.
- ▶ Dictation (Speech to Text): Allows you to “write” using your voice
- ▶ Assistive Touch: Lets you customize hand gestures (such as for zooming in and out)
- ▶ Built-in calendar: Keeps track of appointments, daily activities and personal responsibilities, with alarms as reminders
- ▶ Maps: For driving, walking, transit, and biking
- ▶ Clocks, alarms, stopwatch and timers
- ▶ To do and reminder lists
- ▶ Camera, video, and photos
- ▶ Contacts
- ▶ Word prediction

Adding additional apps

While pre-installed apps are a good starting point, there are many additional apps for free or purchase that add a variety of tools and features. When looking into these apps, keep in mind the following:

Determine the goal and device access

- ▶ First, consider what you want to accomplish with the app, then look for options. It is easy to be distracted by all of the variety and multitude of choices.
- ▶ Evaluate what access the user has to a device: if the device belongs to the individual or if it is borrowed. If borrowed, how often and regularly is it available for use?
- ▶ What is the device operating system? Some apps are designed for Apple or Android products and may only be available for those platforms. There are generally similar products in the other platform, even if they are called something different.

Research app options

- ▶ Search for potential apps that will meet the identified need. Look for apps that are a good match for the specific abilities and needs of the individual.
- ▶ Evaluate the app’s accessibility and if the user will be able to use the app as it is intended and on the device that is available to them. Apps vary in their complexity. Some require extensive technical and reading skills while others do not.
- ▶ Many apps are free. Take some extra time in looking at what is available so you can avoid apps that either come with a significant upfront cost or are free to load but have embedded fees to continue using them. At the same time, an app that is costly but of high value may be worth investing in. Many apps are sold with a “No Refund” policy, so it pays to research before buying.
- ▶ Evaluate if the app contains any privacy concerns and if it requires the user to disclose any personal information.
- ▶ Read the reviews carefully before purchasing an app (both those at the app store and other reviews online). You can get helpful information on the usefulness of an app from those reviews.
- ▶ Many apps are created but then are not maintained, and ultimately disappear. Try to find apps with a track record and a significant number of users, which means they are more likely to be available on an ongoing basis and updated. Look at the date the app was last updated. If there have been no updates in the past year, question the purchase. Also, check to see if the developer can be reached. If the website no longer works, if no email is given, or if you reach out and the email isn’t returned, there may be little to no tech support.

After identifying an app

- ▶ Pilot-test the app to see if it works for the intended purpose.
- ▶ Train the individual on how to use the app.
- ▶ If the individual will need support in using the app (e.g., from co-workers), be sure they are also trained.

Apps for Employment and Community Supports

Additional guidelines

- ▶ Be careful of malicious apps. These are apps that contain viruses or have malware and can steal data. Only download apps from official app stores (Apple App Store, Google Play, etc.), which generally vet apps for safety and security. An online search will also typically tell you if an app is problematic in terms of malware and viruses.
- ▶ Don't be afraid to delete an app if it seems like a bad purchase or doesn't meet the individual's needs.
- ▶ Make sure apps are age appropriate. Avoid using apps with graphics and language intended for children with adults, even if they seem to have useful features.
- ▶ While people are most familiar with apps that download to your device, there is an increasing trend towards web-based apps, which are essentially an app on a web page. Web-based apps can be used on all devices and are automatically updated. However, they also require that the individual has an internet connection, while many installed apps do not.

Assistive technology and apps are not only a great asset for assisting people with disabilities with a variety of tasks and issues, but they also open a wide world of possibilities in terms of increased independence, and full integration and inclusion in workplaces and the community.

The following is a sampling and representation of apps to assist in supporting individuals in employment and the community, as well as types of apps to research. It does not in any way represent a complete list of available technology supports through apps. The hope is that this list will give ideas for other similar apps you can research and explore. The resources listed are strictly for informational purposes and are not an endorsement of any product or device.

Employment Connections & Professional Development

App categories

- ▶ Soft skills development/improvement
- ▶ Communication (voice to text, text to voice, augmentative communication, etc.)
- ▶ Mock interviewing
- ▶ Task sequencing
- ▶ Picture, visual and/or voice scheduler
- ▶ Career exploration, interest inventories, and job search
- ▶ Transportation (mapping apps, apps for specific transportation systems/companies)
- ▶ Organization, reminders, and other on-the-job supports

Examples of employment & professional development apps

1. **Work Autonomy:** Supports people with disabilities to be more independent in the workplace in terms of communication, tracking tasks and schedules, and accessing workplace information. [See detailed videos on Able Opportunities, Inc. website.](#)
2. **CanWork:** Supports people with cognitive challenges in completing work-related tasks successfully through task sequencing, scheduling and shift notifications. Includes options for picture and/or video modeling. Another option: *MeMinder*
3. **Micro Expressions:** Teaches visual cues for reading another person's expressions and understand what mood they may be in.
4. **Any.Do:** Includes the ability to set up task managers, agendas and daily reminders, all in one app. Similar app: *Reminder, Reminders with Voice*
5. **Career OneStop App:** Developed by the U.S. Department of Labor. Contains interest inventories, tools for career exploration (including videos) and job search connections/ideas.
6. **Most Asked Job Interview Questions and Answers:** Ideas for interview responses. There are many similar apps, including *Job Interview Question-Answer*
7. **Job Pro:** Sim Coach games including *My Life, Get Prepared!, Get Hired!, Get Hired Construction, and Get Dressed.*

Community Engagement, Recreation, and Self-Care

App categories

- ▶ Exercise apps (yoga, step tracking, stretches, etc.)
- ▶ Managing anxiety (mindfulness and meditation)
- ▶ Financial well-being (budgeting, credit trackers, financial education)
- ▶ Community organizations and resources
- ▶ Volunteering

Examples of self-care and recreation apps

- ▶ **Stop, Breathe & Think: Meditation & Mindfulness:** Support in managing anxiety, anger and depression
- ▶ **Down Dog:** Yoga app for all levels
- ▶ **Pedometer Step Counter**
- ▶ **Goodbudget:** Budget and finance app. Another option: *Spending Tracker*
- ▶ **Golden:** Finds volunteer opportunities

Where to Find Apps

Sites that list apps to assist people with disabilities

- ▶ [AbleData](#)
- ▶ ADAPTECH Research Network
 - [Apple OS apps](#)
 - [Android OS apps](#)
- ▶ [ARC Tech Toolbox](#)
- ▶ [AssistiveWare](#)
- ▶ [BridgingApps](#)
- ▶ [Job Accommodation Network](#)

General sites/stores for apps (to avoid malicious apps, downloading apps from these sites is recommended):

- ▶ [Google Play](#)
- ▶ [Apple App Store](#)

ADDITIONAL RESOURCES

- ▶ [ADAPTECH Research Network](#)
Database of various types of adaptive technology and apps for different operating systems (OS), as well as the built-in accessibility features for each OS.
- ▶ [National Assistive Technology Act Technical Assistance and Training \(AT3\) Center](#)
Resources on AT and links to each state's AT program.
- ▶ **Pacer Center**
 - ▶ [Simon Technology Center](#)
Wide variety of information and resources on AT for adults and children, including videos and publications
 - ▶ [Webinars](#)
Includes webinars on AT
- ▶ [W.I.S.E. - Washington Initiative on Supported Employment - Assistive Technology Resources](#)
Variety of resources including listing of apps (Assistive Apps)
- ▶ [Arc of Westchester - Tech Supports](#)
Variety of resources on AT, including listing of apps and instructional webinars

Editorial assistance for this publication provided by Jessica Keenoy and Anya Weber.

This COVID-19 publication was produced by the Institute for Community Inclusion at UMass Boston and funded in part by the Massachusetts Department of Developmental Services (DDS) as part of the DDS Employment First initiative, and the Missouri Department of Mental Health as part of the Division of Developmental Disabilities Employment First initiative.

For more information: David Hoff | david.hoff@umb.edu



www.communityinclusion.org | www.employmentfirstMA.org | www.employmentfirstMO.org