

# Assistive Technology Training Guide

Assistive Technology Unit  
Texas Workforce Commission  
Vocational Rehabilitation Services  
Office of Blind Services and Support  
Revised/reviewed November 2023

Chapter 1: Overview of the Assistive Technology Training Guide .....	4
Chapter 2: Computer Skills and Mobile Operating Systems Skills Baseline Assessments .....	5
2.1 Computer Skills Baseline Assessment.....	5
2.2 Performance Objectives and Measurements.....	5
2.3 Mobile Operating Systems Skills Baseline Assessment.....	6
2.4 Performance Objectives and Measurements.....	6
Chapter 3: Keyboard Skills Training.....	7
3.1 Keyboard Skills Training.....	7
3.2 The QWERTY Keyboard .....	7
3.3 Performance Objectives and Measurements.....	7
3.4 The Extended Keyboard .....	7
3.5 Performance Objectives and Measurements.....	7
Chapter 4: Setting Up the Workstation .....	8
4.1 Setting Up the Workstation .....	8
4.2 Performance Objectives and Measurements.....	8
Chapter 5: Operating System Features, Functions, and Maintenance.....	9
5.1 Understanding the Structure of the Operating System.....	9
5.2 Performance Objectives and Measurements.....	9
5.3 Operating System Options, Features, and Maintenance .....	10
5.4 Performance Objectives and Measurements.....	10
Chapter 6: Screen Readers, Screen Magnification, Braille Access, and Speech Recognition Access.....	11
6.1 Screen Readers.....	11
6.2 Performance Objectives and Measurements.....	11
6.3 Screen Magnification .....	11
6.4 Performance Objectives and Measurements.....	12

6.5 Braille Access with Braille Displays .....	12
6.6 Performance Objectives and Measurements .....	13
6.7 Speech Recognition Access .....	13
6.8 Performance Objectives and Measurements .....	13
Chapter 7: The Word Processor .....	14
7.1 Introduction to Word Processing .....	14
7.2 Performance Objectives and Measurements .....	14
7.3 Intermediate Word Processing .....	15
7.4 Performance Objectives and Measurements .....	15
7.5 Advanced Word Processing .....	16
7.6 Performance Objectives and Measurements .....	16
Chapter 8: The Internet and the World Wide Web .....	17
8.1 Getting Started on the Internet and World Wide Web .....	17
8.2 Performance Objectives and Measurements .....	17
8.3 Communicating by Email and Using a Calendar .....	17
8.4 Performance Objectives and Measurements .....	17
8.5 Exploring the World Wide Web .....	18
8.6 Performance Objectives and Measurements .....	18
Chapter 9: Viewing and Creating Microsoft PowerPoint Presentations.....	20
9.1 Viewing and Creating Presentations with Microsoft PowerPoint.....	20
9.2 Training Objectives and Measurements .....	20
Chapter 10: Viewing and Creating Spreadsheets Using Microsoft Excel.....	21
10.1 Introduction to Microsoft Excel .....	21
10.2 Performance Objectives and Measurements .....	21
Chapter 11: OCR Software with Scanners/Cameras, Stand-Alone OCR Devices, and Braille Translation Software with Braille Embossers .....	22
11.1 Optical Character Recognition (OCR) Software with a Scanner Connected to a Computer .....	22
11.2 Performance Objectives and Measurements .....	22
11.3 Stand-Alone OCR Scanners.....	22
11.4 Performance Objectives and Measurements .....	23
11.5 Using Braille Translation Software with a Braille Embosser .....	23

11.6 Performance Objectives and Measurements .....	23
Chapter 12: Braille Notetakers.....	24
12.1 Introduction to Braille Note Takers.....	24
12.2 Performance Objectives and Measurements.....	24
12.3 Advanced Functions of Braille Notetakers .....	25
12.4 Performance Objectives and Measurements.....	25
Chapter 13: Mobile Operating Systems .....	26
13.1 Introduction to Mobile Operating Systems with Assistive Technology.....	26
13.2 Performance Objectives and Measurements.....	26
13.3 Mobile Operating System Features and Functions.....	26
13.4 Performance Objectives and Measurements.....	27
13.5 Mobile Text Input and Manipulation.....	27
13.6 Performance Objectives and Measurements.....	27
13.7 Mobile Operating Systems Email .....	27
13.8 Performance Objectives and Measurements.....	28
13.9 Mobile Operating Systems Web Navigation .....	28
13.10 Performance Objectives and Measurements .....	28
13.11 Mobile Operating Systems Calendars and Reminders .....	28
13.12 Performance Objectives and Measurements .....	28
13.13 Downloading Mobile Operating Systems Apps .....	29
13.14 Performance Objectives and Measurements .....	29
13.15 Braille Access for Mobile Operating Systems.....	29
Chapter 14: Computer Skills and Mobile Operating Systems Skills	
Post-Training Assessments.....	30
14.1 Elements of the Computer Skills Post-Training Assessment.....	30
14.2 Elements of the Mobile Operating System Skills Post-Training Assessment.....	30
Questions.....	30

## **Chapter 1: Overview of the Assistive Technology Training Guide**

The Assistive Technology Training Guide (ATTG) is not a policy manual and does not replace the Standards for Providers or any other official guidance from TWC. A trainer must follow policy in the Standards for Providers as a term of the AT contract. The ATTG is a training resource to help the trainer calculate the number of hours a customer might need to obtain proficiency in a training subject, identify training goals, and benchmarks to measure customer success.

ATU created and maintains the Assistive Technology Training Guide (ATTG) to provide guidance to trainers and VR counselors about AT training subjects. AT training subjects change frequently as AT products upgrade, improve, become obsolete, or get discontinued by product manufacturers. The Assistive Technology Unit (ATU) updates the ATTG, the Approved Products List (APL), and the Approved Trainers List (ATG) to keep up with the changes.

The ATTG is divided into chapters by training subject. Each chapter provides a suggested number of training hours a customer might need to obtain proficiency in a subject, subject matter objectives and benchmarks for measurement. To achieve training goals, a customer might need more or fewer hours depending on training conditions and the customer's baseline skills. Tailor training methods to meet customer needs. Keep the counselor updated on customer progress for best results.

The Assistive Technology Unit (ATU) welcomes feedback from trainers. If you have suggestions to improve the ATTG, contact ATU so we can consider it. If any information in the ATTG appears to contradict TWC policy, always follow the policy, not the guide.

## Chapter 2: Computer Skills and Mobile Operating Systems Skills Baseline Assessments

### 2.1 Computer Skills Baseline Assessment

If the VRC has requested the AT trainer complete a Computer Skills baseline assessment, answer the following questions during the assessment:

1. What is the customer's primary purpose for learning about computers and computing?
2. What is the customer's level of computer literacy?
3. What does the customer know about computer hardware?
4. What does the customer know about input devices, such as keyboards, braille displays (if applicable) and mice (if applicable)?
5. Does the customer have keyboarding skills?
  - a. Can the customer touch type?
  - b. Does the customer show competency in touch typing?
  - c. Is the customer familiar with the layout of the QWERTY keyboard?
  - d. Is the customer familiar with the layout of the numeric keypad?
  - e. What does the customer know about extended keys, such as backslash, CTRL, ALT, function keys, etc.?
6. If applicable, is the customer proficient using the mouse?
7. What computer software can the customer use? Note: To determine a customer's competency level, ask the customer to perform certain tasks, such as creating and saving a Microsoft Word document, sending an email message with Microsoft Outlook, or using a search engine to locate a Web site. Record the tasks and how well the customer performed each one;(for example, the customer performed the task without difficulty, the customer performed the task with difficulty, or the customer could not perform the task.
8. What functions does the customer feel are essential to complete required tasks?
9. What are the three most important objectives the customer wishes to accomplish? For example:
  - a. Learn computer access with a screen reader, screen magnifier, or both
  - b. Become proficient at word processing
  - c. Use PowerPoint, Excel, or some other business application (Record the specific applications)
  - d. Efficiently use the operating system and necessary applications
10. On a scale of one to five (five being expert), what does the customer consider to be his or her level of competency in each of those three areas of interest?

### 2.2 Performance Objectives and Measurements

Measure the following during the baseline assessment:

1. The customer can define and identify computer hardware, such as monitor, CPU, disk drives (if applicable), and removable media—Yes or No.
2. The customer understands software types, such as word processors, Web browsers, screen readers, screen magnifiers, and adaptive software—Yes or No.
3. The customer can identify the important elements of the extended keyboard, such as the numeric keypad, the six-pack keypad, Ctrl keys, Alt keys, and Windows logo key—Yes or No.
4. The customer can touch type with competency—Yes or no.

5. The customer understands the concept of multi-key commands, such as those involving alt, tab, Shift, Ctrl, and function keys—Yes or No.

### **2.3 Mobile Operating Systems Skills Baseline Assessment**

If the VRC has requested the AT trainer complete a Mobile Operating Systems Skills baseline assessment, answer the following questions during the assessment:

1. What is the customer's primary purpose for learning about mobile operating systems?
2. What is the customer's level of mobile operating systems literacy?
3. What mobile operating system is the customer using, iOS, iPadOS, Android, or other mobile OS?
4. What device is the customer using—iPhone, Android phone, iPad, iPod Touch, Android smart phone, Android tablet, or other tablet or smart phone?
5. What access method is the customer using—screen reader, screen magnifier, or both?
6. What is the customer's level of mobile operating systems competency? Note: To determine a customer's competency level, ask the customer to perform certain tasks, such as typing an email, conducting a Web search, or downloading an app. Record the tasks and how well the customer performed each one; for example, the customer performed the task without difficulty, the customer performed the task with difficulty, or the customer could not perform the task.
7. What input method does the customer use—typing on the on-screen keyboard, dictation, Bluetooth keyboard, braille display, or another alternative text entry method?
8. Which functions does the customer feel are essential to complete required tasks?
9. What are the three most important objectives the consumer wishes to accomplish? For example:
  - a. To learn to use a mobile operating systems screen reader, such as VoiceOver or TalkBack
  - b. To become a proficient typist with the on-screen keyboard
  - c. To become proficient with an email app or other business- related or education-related app (List all apps the customer mentions).
  - d. to efficiently use the mobile operating system and necessary apps
  - e. To control the device with voice commands and dictation only.

### **2.4 Performance Objectives and Measurements**

Measure the following during the Mobile Operating Systems Skills baseline assessment:

1. The customer can identify the external ports and controls of his or her mobile device—Yes or no.
2. The customer can power his or her device on and off—Yes or no.
3. The customer can lock and unlock the device screen—Yes or no.
4. The customer knows what operating system and which version of that operating system he or she is using—Yes or no.
5. The customer understands the difference between a screen reader, such as VoiceOver or TalkBack, and a digital assistant, such as Siri or Google Assistant, if applicable—Yes or no.
6. The customer can enable and disable their access method, such as turning the screen reader or screen magnifier on and off—Yes or no.
7. The customer is proficient with his or her input method of choice—Yes or no.

## **Chapter 3: Keyboard Skills Training**

### **3.1 Keyboard Skills Training**

Keyboard skills are defined as the ability to touch-type with a QWERTY keyboard, including using the extended keyboard and function keys.

The time required to complete the keyboard skills section depends on the customer's level of manual dexterity and familiarity with the keyboard.

### **3.2 The QWERTY Keyboard**

#### **Suggested hours: Up to 25**

Teach QWERTY keyboard skills using the following steps:

1. Test customers to determine their speed and accuracy on the keyboard.
2. Provide instruction and exercises to develop customers' speed and accuracy on the QWERTY keyboard, including
  - a. teaching general layout of the keyboard by touch
  - b. using a blindfold, if appropriate, to develop touch-typing techniques
  - c. teaching the home row position
  - d. teaching how to locate and use the Shift keys, Tab, forward and back slashes, Return, and Backspace

### **3.3 Performance Objectives and Measurements**

Measure the following during keyboarding skills training:

1. The customer can competently touch type with accuracy—Yes or No.
2. The customer can set tabs, use capitals correctly, find the slash keys, and can use Backspace to make corrections—Yes or No.
3. The customer understands the function of the Return or Enter key—Yes or No.

### **3.4 The Extended Keyboard**

#### **Suggested hours: Up to 15**

Teach extended keyboard skills using the following steps:

1. Review the previous section, (The QWERTY Keyboard.)
2. Provide instruction and practice on the numeric keypad function of the Num-Lock key.
3. Provide instruction on the editing and navigation capabilities of the numeric keypad.
4. Provide practice in locating and using the function keys, arrow keys, and, if applicable, the six-pack keypad next to the numeric keypad.
5. Provide instruction in locating and using the Alt keys, Ctrl keys, and Windows logo key.
6. Provide drills and exercises in using multikey commands, such as alt tab, Ctrl+Alt+Delete, etc.

### **3.5 Performance Objectives and Measurements**

Measure the following during extended keyboard training:

1. The customer can locate and use the arrow keys, Page Up and Page Down keys, Home and End keys, and plus and minus keys on the numeric keypad—Yes or No.
2. The customer can use the delete key to remove text; move from the top to the bottom of the file and vice versa; and use the six-pack keypad next to the numeric keypad—Yes or No.
3. The customer can use multi-key commands, such as those involving Shift, Ctrl, and function keys to accomplish various tasks—Yes or No.
4. Unless exempted, the customer can competently and efficiently touch type -Yes or no.

## **Chapter 4: Setting Up the Workstation**

### **4.1 Setting Up the Workstation**

#### **Suggested hours: Up to 6**

Teach setting up the workstation using the following steps:

1. Determine the most effective way for the customer to take notes.
2. Provide instruction on the CPU, including
  - a. Turning the computer on and off using Windows power options
  - b. Restarting the system
  - c. Performing a cold reboot and explaining how this is a last resort
  - d. If applicable, connecting and testing computer peripherals, such as scanners and printers
3. Provide instruction on organizing the workstation, including
  - a. Emphasizing the importance of good lighting, if applicable
  - b. Discussing the most efficient arrangement of peripherals
  - c. Labeling important keys on the computer keyboard, if necessary
4. Provide instruction on organizing tech support phone numbers for relevant software and hardware and how to call tech support when needed.

### **4.2 Performance Objectives and Measurements**

Measure the following during workstation set-up training:

1. The customer can power the computer on and off correctly—Yes or no.
2. The customer can connect necessary peripherals to the computer—Yes or No.
3. The customer can identify a problem, contact tech support, and provide a clear, concise description of the problem—Yes or No.



## Chapter 5: Operating System Features, Functions, and Maintenance

This section trains customers to understand the operating system environment and use it to accomplish various tasks.

### 5.1 Understanding the Structure of the Operating System

#### Suggested hours: Up to 40 (Per operating system)

Teach operating system structure using the following steps:

1. If applicable, review the previous section, “Setting Up the Workstation.”
2. Explore the operating system software environment.
3. Provide instruction on navigating the desktop, start menu, system tray, notification area, and task bar. If training a customer on the Mac operating system, provide instruction on the correlated Mac operating system features and functions. Include operating system accessibility features such as magnification, screen reader, and high contrast settings.
4. Provide instruction on and practice using dialog boxes and controls, including
  - a. Identifying, moving between, and utilizing dialog box controls, such as edit boxes, combo/edit combo boxes, edit spin/spin boxes, radio buttons, check boxes, and list boxes
  - b. If applicable, using a screen reader to read the entire dialog box, current control, and default button
  - c. Using multi-page dialog boxes
5. Provide instruction on and practice using File Explorer/Finder to locate documents, files, folders, directories, and paths including
  - a. Distinguishing between the tree view and list view
  - b. Reading through tree views and list views
  - c. Locating removable storage, local disk drives, CD or DVD drives, and safely removing devices
6. Provide instruction on and practice using program windows and the structure of such windows, including
  - a. Switching between application windows
  - b. Using keystrokes to access the components of a program window (ribbon or menu bar, status bar, document, etc.)
  - c. Using status and scroll bars
  - d. Understanding the difference between program windows and dialog boxes
  - e. Minimizing, maximizing, moving, and restoring windows
7. Provide instruction on keyboard commands for operating system functions, such as searching for files, folders, and operating system settings.
8. Provide instruction on getting help online and in the operating system.

### 5.2 Performance Objectives and Measurements

Measure the following during operating system structure training:

1. The customer can easily move between the desktop, start menu, and running applications (or Mac equivalents)—Yes or No.
2. The customer can minimize, maximize, and restore applications, as well as open and close windows—Yes or No.

3. The customer can use operating system keyboard commands to access and exit menu bars, ribbons, and tool bars—Yes or No.
4. The customer can open default folders and locate documents, libraries, etc.—Yes or No.
5. The customer can locate and explore computer contents as well as files saved on external storage devices—Yes or No.
6. The customer can navigate through tree views, list views/boxes, and interact with dialog boxes and dialog box controls—Yes or No.

### **5.3 Operating System Options, Features, and Maintenance**

#### **Suggested hours: Up to 30 (per operating system)**

Teach operating system options, features, and maintenance using the following steps:

1. If necessary, review the previous section, (Understanding the Structure of the Operating System.)
2. Explore the operating system settings, including
  - a. Navigating within the settings window
  - b. Establishing a wireless connection with Wi-Fi or Bluetooth
  - c. Updating the operating system
  - d. Changing accessibility settings, such as making text larger or enabling dark/high contrast mode, if applicable
3. If applicable to the operating system, provide instruction on using system tools, including
  - a. Disk Cleanup
  - b. Disk Defragmenter
4. Provide instruction on working with files, including
  - a. Creating a new folder
  - b. Moving or copying files into a folder using cut/copy/paste keyboard commands
  - c. Selecting a single file/folder or multiple files/folders
  - d. Renaming files and folders
  - e. Deleting files and folders
  - f. Copying files from removable storage to a folder on the local hard drive and vice versa
5. If applicable, provide instruction on setting up a firewall and security options.
6. Provide instruction on operating system and user file backup.
7. Provide instruction on getting help online and in the operating system.

### **5.4 Performance Objectives and Measurements**

Measure the following during operating system options, features, and maintenance training:

1. The customer can locate and adjust system settings—Yes or No.
2. The customer can connect to Wi-Fi and use Bluetooth, if applicable—Yes or no.
3. The customer can open folders and files on the local hard drive—Yes or No.
4. The customer can rename files and folders—Yes or no.
5. The customer can use cut, copy, and paste commands to move and copy files in the local hard drive, as well as between the local hard drive and removable storage devices—Yes or No.
6. If applicable, the customer can perform basic system maintenance, such as disk cleanup and disk defragmentation—Yes or No.
7. The customer can use system restore, if applicable—Yes or No.

## **Chapter 6: Screen Readers, Screen Magnification, Braille Access, and Speech Recognition Access**

This section trains customers to access the computer using screen reading, screen magnification, and speech recognition programs, as well as braille devices to access the computer.

### **6.1 Screen Readers**

#### **Suggested hours: Up to 20**

Teach the use of screen readers using the following steps:

1. If applicable, provide instruction on installing screen reading software.
2. Provide instruction on changing default screen reader configurations, including modifying screen reader voice, pitch, and speed, as well as other speech-related settings.
3. Explain the screen reader cursor, as well as additional cursors available when using the screen reader.
4. Provide instruction on and practice using screen reader keyboard commands to read by character, word, line, sentence, paragraph, and read-all.
5. Provide instruction on and practice with screen reader keystrokes to read font attributes and cursor status
6. Provide instruction on and practice using screen reader keystrokes to read the active control and current window title.
7. Provide instruction on getting help online and in the screen reading software, including all forms of built-in help.
8. If applicable, provide instruction on installing drivers for braille displays.
9. If training on Fusion/JAWS, provide instruction on using Windows Narrator as a backup.

### **6.2 Performance Objectives and Measurements**

Measure the following during Screen Reader training:

1. The customer can load and unload the appropriate screen reading software and modify default settings to suit personal preference—Yes or No.
2. The customer can modify verbosity options for each application—Yes or No.
3. The customer can explain and demonstrate the use of the available screen reader cursors—Yes or no.
4. the customer can use screen reader keystrokes to read by character, word, sentence, line, and paragraph—Yes or No.
5. The customer can use screen reader commands to read font attributes and cursor position—Yes or no.
6. The customer can use screen reader keystrokes to read the current control and current window title—Yes or no.
7. If applicable, the customer can install drivers for braille displays—Yes or no.

### **6.3 Screen Magnification**

#### **Suggested hours: Up to 18**

Teach the use of screen magnification programs using the following steps:

1. If applicable, review the previous section, "Screen Readers."
2. Provide instruction on starting and shutting down the screen magnification software.
3. Provide instruction on customizing the magnifier, including
  - a. Setting the size, window option, and contrast

- b. Customizing the cursor and mouse attributes
  - c. Saving changes to the default settings
- 4. Provide instruction and practice on setting up and saving application-specific settings for word processors, Web browsers, etc.
- 5. Provide instruction on and practice panning the screen using keyboard commands.
- 6. Provide instruction on and practice using screen magnification with speech support, including
  - a. Disabling and enabling the speech component
  - b. Changing the rate, pitch, or voice in the speech settings
  - c. Using continuous reading tools
  - d. Setting mouse echo options
  - e. Setting program verbosity
- 7. Provide instruction on advanced features, such as using built-in screen reading commands.
- 8. Provide instruction on getting help online, including using the online User's Guide.
- 9. If training on Fusion/ZoomText, train on use of Windows Magnifier as a backup.

## **6.4 Performance Objectives and Measurements**

Measure the following during screen magnification training:

1. The customer can load and unload the screen magnification software—Yes or no.
2. The customer can set visual and speech settings according to preference when desired and set as default—Yes or No.
3. The customer can magnify the whole screen or a selected portion of the screen—Yes or No.
4. The customer can use continuous reading tools to access a document or Web page—Yes or No.
5. The customer can access the appropriate Web site for software information and help—Yes or No.

## **6.5 Braille Access with Braille Displays**

### **Suggested hours: Up to 16**

Teach braille access with braille displays using the following steps:

1. If applicable, review the "Screen Readers" section.
2. Provide instruction on how the braille display interacts with the screen reader.
3. Practice customizing the screen reader and braille display to work with or without screen reader speech.
4. Provide instruction on the input capability of braille displays, including using the Perkins-style keyboard.
5. Provide instruction on and practice using navigation keys and features of the braille display.
6. Provide instruction on the different methods of cursor and focus movement and location, including
  - a. practice navigating through operating system components, such as the desktop, menus, and dialog boxes.
  - b. Controlling the cursor with the cursor routing keys
  - c. Using the computer keyboard and braille display controls to move the braille cursor
7. Provide instruction on different techniques for reading with the braille display, including
  - a. Reading through documents and Web pages, and using the panning features of the display
  - b. Reading through a document using auto-advance scroll mode

## 6.6 Performance Objectives and Measurements

Measure the following during braille access with Braille Displays training:

1. The customer can operate his or her computer system using a braille display with or without screen reader speech feedback—Yes or No.
2. The customer can identify the need for drivers to be loaded for the display to work (if applicable)—Yes or No.
3. The customer can operate all keys and navigation controls on the braille display—Yes or No.
4. The customer can move the cursor and use cursor routing keys—Yes or No.
5. The customer can read a document or Web page using various braille display access methods—Yes or No.

## 6.7 Speech Recognition Access

### Suggested hours: Up to 80

Teach speech recognition access using the following steps:

1. Provide instruction on how to integrate the screen reader and/or screen magnification software with the voice-recognition software.
2. Provide instruction on and practice training the speech recognition software for individualized voice recognition, including
  - a. Improving the recognition of the customer's voice over time
  - b. Saving voice files when the best response is achieved
3. Provide instruction on and practice using operating system features with speech recognition software, including the desktop, Start Menu, task bar, dialog boxes, menus and the Microsoft Office Ribbon—or Mac equivalents.
4. Provide practice entering text into a word processing file using the speech recognition software.
5. Provide instruction on manipulating text within a document, including
  - a. Using reading commands to read words, lines, and paragraphs
  - b. Editing and formatting text
6. Provide instruction on and practice using the speech recognition software with a Web browser to locate information on the World Wide Web.
7. Provide practice using speech input to get help within the speech recognition software.

## 6.8 Performance Objectives and Measurements

Measure the following during speech recognition access training:

1. The customer understands the integration of the speech recognition and/or screen reader and screen magnification software—Yes or No.
2. The customer can train the speech recognition software and save voice files—Yes or No.
3. The customer can enter, read, and edit text—Yes or No.
4. The customer can browse the Web using speech recognition software—Yes or no.
5. The customer can get application help using speech input—Yes or No.

## **Chapter 7: The Word Processor**

### **7.1 Introduction to Word Processing**

#### **Suggested hours: Up to 15**

Introduce word processing using the following steps:

1. If applicable, review the “Screen Readers” or “Screen Magnification “sections.
2. Introduce the function of word processors.
3. Provide practice navigating and accessing the following items using operating system commands and screen reader and/or screen magnification commands:
  - a. The Microsoft Office Ribbon, including the upper and lower ribbon
  - b. The title bar, status bar, Quick Access menu, and the document pane.
4. Provide instruction on and practice using operating system and screen reader/screen magnification commands to do the following:
  - a. Move by word, sentence, line, and paragraph
  - b. Navigate by page
5. Provide practice using operating system and screen reader/screen magnification commands to move to the beginning and end of a line and a document.
6. Provide instruction on and practice selecting text, including selecting characters, words, lines, paragraphs, and an entire document.
7. Provide instruction and practice formatting text, including
  - a. Selecting text by word, line, paragraph, and document
  - b. Changing font attributes, including font face, font style, size, color, underline, highlighting, etc.
  - c. Cutting, copying, pasting, and deleting text
8. Provide instruction on and practice inserting a line break, a paragraph break, and a page break.
9. Provide instruction on working with documents, including
  - a. Creating a new document
  - b. Opening an existing document
  - c. Saving a document to the default folder
  - d. Saving a document to a folder other than the default folder
  - e. Changing view; for example: draft, print, or outline
  - f. Switching between open documents
  - g. Closing all open documents or only one document
10. If applicable, provide instruction on printing options and print preview, including practice printing a single page, the current page, and more than one copy of a document.
11. Provide practice finding word processor help using various methods. If applicable, provide instruction on retrieving program-specific help from the assistive software help menu.

### **7.2 Performance Objectives and Measurements**

Measure the following during introduction to word processing training:

1. The customer can launch and close the word processor—Yes or No.
2. The customer can open a new document and an existing document—Yes or No.
3. The customer can move the cursor within a document—Yes or No.
4. The customer can navigate by character, word, line, paragraph, and page—Yes or No.

5. The customer can select text by character, word, line, paragraph, and entire document—Yes or no.
6. The customer can format text, including font attributes, such as font face, style, underline, and color—Yes or no.
7. The customer can explain and use document viewing options—Yes or No.
8. If applicable, the customer can print documents—Yes or No.
9. The customer can access the help screen and locate the appropriate information—Yes or No.

### **7.3 Intermediate Word Processing**

#### **Suggested hours: Up to 15**

Teach intermediate word processing using the following steps:

1. If necessary, Review the previous section, “Introduction to Word Processing.”
2. Provide instruction on formatting within the word processor, including
  - a. Changing the page margins
  - b. Changing page orientation
  - c. Changing paragraph alignment and justification
  - d. Changing line and paragraph spacing
3. Review and practice formatting text, including changing font attributes.
4. Introduce the Spelling and Grammar Check pane, including
  - a. Opening it from the Review tab and by using the F7 keystroke
  - b. exploring and using the Spelling and Grammar check pane, including keystrokes to accept default suggestion, change, change all, ignore, ignore all, and add to dictionary
  - c. Identifying types of errors, such as misspelled words, extra spaces, missing spaces, and capitalization errors.
  - d. Practice making corrections within the Spelling and Grammar Pane
  - e. Resetting options to recheck document
5. Provide instructions on and practice Accessing word count using the Word count dialog box and the status bar
6. Provide instruction on using the Find feature to locate specific words and phrases within a document, including using the page up and page down keystrokes when in the document pane to locate the next and previous instances of the search word or phrase. Customers should practice this skill within a document they have not created.
7. Provide instructions on and practice using the Find and Replace tool to replace specific words and phrases in a document.
8. After covering the Find feature, provide instruction Using the Go-To feature to go to a specific page. Instruct customers on how this can allow the customer to once again use the page up and down keystrokes to go to the next and previous pages, instead of the next and previous search results.

### **7.4 Performance Objectives and Measurements**

Measure the following during intermediate word processing training:

1. The customer can change the page margins and orientation—Yes or No.
2. The customer can change paragraph alignment—Yes or no.
3. The customer can change font attributes, such as font face and size—Yes or No.
4. The customer can change line and paragraph spacing—Yes or No.

5. The customer can check spelling and grammar within a document—Yes or No.
6. The customer can use the Find, Find and Replace, and Go-To features—Yes or no.

## **7.5 Advanced Word Processing**

### **Suggested hours: Up to 12**

Teach advanced word processing using the following steps:

1. Provide instruction on advanced editing functions, including styles, sections, and columns
2. Provide instruction on inserting, editing, and deleting page numbers, headers, and footers.
3. Provide instruction on and practice working with tables, including
  - a. Reading a table, including moving the cursor within columns and rows
  - b. Inserting, editing, and deleting text within a table
  - c. Creating and editing a table, including
  - d. Adding additional single cells, columns and rows to an existing table
  - e. Deleting single cells, columns and rows
  - f. Deleting an entire table
  - g. Selecting a single cell, column, or row
  - h. Merging table cells
  - i. Adding a pre-set style to a table
  - j. Copying a table from a document and Web page and pasting into a new document
  - k. converting a table to text and text to a table
4. Practice working with lists, including
  - a. Creating a bulleted list
  - b. Creating a numbered list
  - c. Creating a multi-level list
  - d. Changing list style; for example, changing a numbered list to a bulleted list

Provide instruction on and practice inserting, editing, and deleting photos and pictures, including adding alternative (alt) text and changing size.

5. Provide instruction on and practice inserting, accessing, editing, and deleting footnotes, endnotes, and comments.

## **7.6 Performance Objectives and Measurements**

Measure the following during advanced word processing training:

1. The customer can set page numbers—Yes or No.
2. The customer can insert, access, select, and delete lists, tables, headers, footers, footnotes, endnotes, and comments within a document—Yes or No.
3. The customer can insert, edit, and delete photos in a document—Yes or no.



## **Chapter 8: The Internet and the World Wide Web**

### **8.1 Getting Started on the Internet and World Wide Web**

#### **Suggested hours: Up to 4**

Introduce the Internet and World Wide Web using the following steps.

1. Explain how the World Wide Web is part of the Internet.
2. Provide instruction on connecting to the Internet, which may include using a dial-up, broadband, or Wi-Fi connection.
3. Explain the purpose of an Internet Service Provider (ISP).
4. If applicable, provide instruction and practice entering and changing Internet connection passwords.
5. Explain the purpose of Web browsers.
6. Provide instruction on using, changing, and saving assistive technology settings related to the Internet and WWW.

### **8.2 Performance Objectives and Measurements**

Measure the following during Getting Started on the Internet and World Wide Web Training:

1. If applicable, the customer can select an Internet service provider—Yes or No.
2. The customer can set up an Internet connection, if applicable—Yes or No.
3. The customer can successfully connect to and disconnect from the Internet, if applicable—Yes or No.

If applicable, the customer can change an ISP password—Yes or No.

4. The customer can use, change, and save assistive technology settings related to the Internet and WWW—Yes or No.

### **8.3 Communicating by Email and Using a Calendar**

#### **Suggested hours: Up to 16**

Teach communicating by email and Using a Calendar by following the steps listed here:

1. If applicable, review the previous section, "Getting Started on the Internet."
2. Provide instruction on choosing email software and setting up an email account, including
  - a. Creating an address book
  - b. Using, changing, and saving email program settings
3. Provide practice using email, including
  - a. Sending and receiving messages; including sending to multiple recipients; using reply and reply all; using the CC and BCC fields; attaching and downloading attachments
  - b. Saving, deleting, and archiving messages
4. Provide instruction on setting up and managing personal folders.
5. Provide instruction on and practice using a calendar, including
  - a. Navigating the calendar and locating specific dates, times, meetings, and appointments
  - b. Changing calendar view
  - c. Creating, editing, and deleting calendar appointments
  - d. Creating, editing, and deleting calendar meetings
  - e. Accepting or rejecting calendar meeting invitations

### **8.4 Performance Objectives and Measurements**

Measure the following during communicating by email and using a calendar training:

1. The customer can set up an email account and address book—Yes or No.

2. The customer can send, delete, archive, save, and forward messages as well as attach files—Yes or No.
3. The customer can set up and manage personal folders—Yes or No.
4. The customer can use, change, and save email program settings—Yes or No.
5. The customer can navigate to and within the calendar to locate specific dates, times, and appointments/meetings—Yes or no.
6. The customer can create, edit, and delete calendar appointments—Yes or no.
7. The customer can create, edit, and delete calendar meetings—Yes or no.
8. The customer can accept or reject calendar meeting invitations—Yes or no.

## **8.5 Exploring the World Wide Web**

### **Suggested hours: Up to 20**

Teach exploring the World Wide Web using the following steps:

1. Explain the difference between the Internet and the World Wide Web and how they are interrelated.
2. If applicable, provide instruction on selecting an Internet service provider.
3. Provide instruction on and practice connecting to and disconnecting from a Wi-Fi connection.
4. Provide instruction on changing Internet Service Provider passwords, if applicable.
5. Provide instruction on and practice using, changing, and saving assistive technology software settings related to the World Wide Web.
6. Explain the use of Web browsers and how each one may or may not work with assistive technologies.
7. Provide instruction and practice on navigating the WWW, including
  - a. Using assistive software keystrokes to locate and navigate links, headings, form fields/controls, etc.
  - b. Filling out forms
8. Provide instruction on and practice using a search engine to locate desired information.
9. Provide instruction on and practice downloading files.
10. Explain how the tab key can be used to navigate by links and form controls but emphasize that if the customer only navigates by using the tab key, he or she will miss most of the content on Web pages.
11. Provide instruction on and practice saving, accessing, and deleting bookmarks/favorites in the Web browser.

## **8.6 Performance Objectives and Measurements**

Measure the following during World Wide Web training:

1. The customer can select an Internet service provider, if necessary—Yes or no.
2. The customer can change an ISP password, if necessary—Yes or no.
3. The customer can connect to and disconnect from a Wi-Fi network—Yes or no.
4. The customer can use, change, and save assistive technology settings related to the WWW—Yes or no.
5. The customer can locate a Web site and navigate it efficiently using assistive technology—Yes or no.
6. The customer can utilize links, headings, buttons, and other form controls—Yes or no.
7. The customer can locate desired information using a search engine—Yes or no.

8. The customer can download files from the WWW to a desired location on the hard drive—Yes or no.
9. The customer can add, access, and delete bookmarks/favorites—Yes or no.

## **Chapter 9: Viewing and Creating Microsoft PowerPoint Presentations**

### **9.1 Viewing and Creating Presentations with Microsoft PowerPoint**

#### **Suggested hours: Up to 16**

Teach viewing and creating Microsoft PowerPoint presentations using the following steps:

1. Introduce customers to the function of the Microsoft PowerPoint program.
2. If applicable, review navigating within the Microsoft Office ribbon.
3. Provide instruction and practice navigating within the PowerPoint window, including navigating to the slide area and the slide thumbnails area.
4. Provide instruction on and practice playing presentations, including moving backward and forward through slides and reading speaker's notes.
5. Provide instruction on and practice navigating within a slide that is being edited/created.
6. Provide instruction on and practice inserting, editing, selecting, and deleting slide data.
7. Provide instruction on and practice formatting slide data, including changing font color, style, and size.
8. Provide instruction on and practice inserting slides into the presentation.
9. Provide instruction on and practice deleting slides.
10. Provide instruction on and practice changing slide order within the presentation.
11. Provide instruction on and practice inserting data tables, graphics, and pictures, including adding alternative (alt) text.

### **9.2 Training Objectives and Measurements**

Measure the following during Microsoft PowerPoint training:

1. The customer can play presentations, including moving backward and forward through slides and reading speaker's notes—Yes or no.
2. The customer can insert, edit, select, and delete slide data—Yes or no.
3. The customer can format slide data, including changing font color, style, and size—Yes or no.
4. The customer can insert slides into the presentation—Yes or no.
5. The customer can delete slides—Yes or no.
6. The customer can change slide order within the presentation—Yes or no.
7. The customer can insert data tables, graphics, and pictures, including adding alternative (alt) text—Yes or no.

## **Chapter 10: Viewing and Creating Spreadsheets Using Microsoft Excel**

### **10.1 Introduction to Microsoft Excel**

#### **Suggested hours: Up to 20**

Introduce customers to Microsoft Excel using the following steps:

1. Explain the purpose and uses of Microsoft Excel.
2. Provide an overview of the Microsoft Excel window, including applicable keystrokes for navigating to various elements of the screen.
3. Provide instruction on and practice navigating columns, rows, worksheets, and workbooks.
4. Provide instruction on and practice entering, editing, selecting and deleting cell data.
5. Provide instruction on and practice formatting cell data.
6. Provide instruction on and practice Inserting and deleting columns, rows, and worksheets.
7. Provide instruction on naming/renaming worksheets.
8. Provide instruction on and practice writing and utilizing simple formulas.
9. Provide instruction on and practice writing and using complex formulas and functions, such as the SUM function.
10. Provide instruction on and practice creating a simple database, such as an address book.
11. Provide instruction on and practice creating a weekly or monthly budget.

### **10.2 Performance Objectives and Measurements**

Measure the following during Microsoft Excel training:

1. The customer can Explain the purpose and uses of Microsoft Excel—Yes or no.
2. The customer can navigate within the Microsoft Excel window—Yes or no.
3. The customer can navigate columns, rows, worksheets, and workbooks—Yes or no.
4. The customer can enter, edit, select, and delete cell data—Yes or no.
5. The customer can format cell data—Yes or no.
6. The customer can insert and delete columns, rows, and worksheets—Yes or no.
7. The customer can name and rename worksheets—Yes or no.
8. The customer can write and utilize simple formulas—Yes or no.
9. The customer can write and use complex formulas and functions, such as the SUM function—Yes or no.
10. The customer can create a simple database, such as an address book—Yes or no.
11. The customer can create a weekly or monthly budget—Yes or no.

## **Chapter 11: OCR Software with Scanners/Cameras, Stand-Alone OCR Devices, and Braille Translation Software with Braille Embossers**

### **11.1 Optical Character Recognition (OCR) Software with a Scanner Connected to a Computer**

#### **Suggested hours: Up to 10**

Teach assistive OCR (optical character recognition) software with a scanner or camera connected to a computer using the following steps:

1. Explain the relationship between the speech components of the OCR software and the screen reader.
2. Practice customizing the speech output in the OCR software.
3. Explore the scanning functions within the OCR software, including
  - a. Scanning documents, including single-page documents and multi-page documents
  - b. Reading by word, line, and paragraph
  - c. Scanning in the background
  - d. Advanced reading and scanning options
4. Provide instruction on and Practice saving non-edited scan results and editing a document, including
  - a. Saving non-edited scan results
  - b. Saving scan results that have been edited
  - c. Importing and exporting documents, including importing PDFs
5. If applicable, provide instruction on modifying and setting the screen magnification options in the OCR software.

### **11.2 Performance Objectives and Measurements**

Measure the following during OCR software training:

1. The customer can control speech output and understands how the OCR software and screen reader work together—Yes or No.
2. The customer can select different scanning options within the OCR software—Yes or no.
3. The customer can scan documents and save scan results to different folders and file types—Yes or No.
4. The customer can use OCR software commands to read scanned documents by character, word, line, and paragraph—Yes or No.
5. If applicable, the customer can change visual settings—Yes or no.

### **11.3 Stand-Alone OCR Scanners**

#### **Suggested hours: Up to 6**

Teach scanning with a stand-alone OCR scanner using the following steps:

1. Provide instruction on using the control panel or keypad on the stand-alone OCR scanner, including
  - a. Practice using the scanning and reading functions of the keypad
  - b. Practice setting the voice options, including speed, pitch, rate, and voice
2. Provide instruction on how to retrieve files and save files to a folder on the stand-alone OCR scanner or removable storage device.

## 11.4 Performance Objectives and Measurements

Measure the following during stand-alone scanner training:

1. Using the stand-alone OCR device's keypad or controls, the customer can read through scanned text by character, word, line, and paragraph—Yes or No.
2. The customer can save scanned text as a file to a folder on the stand-alone OCR device and/or removable storage device—Yes or No.
3. The customer can retrieve and read files from a folder on the stand-alone OCR device and/or a removable storage device—Yes or No.

## 11.5 Using Braille Translation Software with a Braille Embosser

### Suggested hours: Up to 20

Teach braille translation software and braille embossing using the following steps:

1. If applicable, provide instruction on installing braille embosser drivers.
2. Provide instruction on orienting to the braille embosser.
3. Provide instruction on operating the keypad or control panel on the embosser, as well as using embosser menus (if applicable).
4. Provide practice loading paper into the embosser and choosing single- or double-sided mode.
5. Provide instruction on setting the top of the form.
6. If applicable, provide instruction on installing braille translation software.
7. Explain the uses of braille translation software.
8. Provide instruction on and practice using the braille translation software menus.
9. Provide instruction on and practice creating a new document.
10. Provide instruction on editing a document, including
  - a. Importing a document
  - b. Editing the text version
  - c. Editing the braille version
11. Provide instruction on and practice formatting, translating, and embossing a document, including
  - a. Formatting a document using codes and styles, menus and keystrokes
  - b. Translating a document to uncontracted braille and contracted braille using the braille translation software menus and keystrokes
  - c. Embossing a braille document using the braille translation software menus and keystrokes

## 11.6 Performance Objectives and Measurements

Measure the following during Braille translation software/embosser training:

1. The customer can program the braille embosser using the embosser's keypad, controls, and internal menus (if applicable)—Yes or no.
2. The customer can use the braille translation software to load a text document, edit, format, and translate it to uncontracted or contracted braille for embossing—Yes or No.
3. The customer can emboss a correctly formatted braille document—Yes or no.

## **Chapter 12: Braille Notetakers**

### **12.1 Introduction to Braille Note Takers**

#### **Suggested hours: Up to 20**

Introduce braille notetakers using the following steps:

1. Provide instruction on the external features of the device, including ports, jacks, navigational controls and buttons, and the Perkins-style keyboard.
2. Explain the architecture of the notetaker operating system/systems software.
3. Provide instruction and practice navigating the built-in operating system/systems, including navigating menus, etc.
4. Provide instruction on changing speech settings.
5. Provide instruction on accessing and using built-in help systems.
6. Provide instruction on file management, including
  - a. Opening existing files and folders
  - b. Creating new files and folders
  - c. Renaming, copying, moving, and deleting files and folders
7. Provide instruction and practice reading and editing files, including
  - a. Locating the braille cursor
  - b. Using the cursor routing keys/buttons
  - c. Entering, selecting, cutting, copying, and deleting text
  - d. Applying attributes to text, such as bold, underline, etc.
  - e. Using the spell checker
  - f. Using find and replace
8. Provide instruction and practice on built-in apps, such as the Web browser, email, and book reader.

### **12.2 Performance Objectives and Measurements**

Measure the following during Introduction to Braille Notetakers training:

1. The customer can use the external ports, jacks, navigational controls and buttons, as well as the Perkins-style keyboard—Yes or no.
2. The customer can navigate the note taker's operating system/systems—Yes or no.
3. The customer can customize speech settings—Yes or no.
4. The customer can use built-in help systems—Yes or no.
5. The customer can use the braille display to read documents and utilize the cursor routing keys—Yes or no.
6. The customer can navigate the internal File Manager---Yes or no.
7. The customer can create, edit, and save new documents—Yes or no.
8. The customer can enter, select, cut, copy, and delete text—Yes or no.
9. The customer can apply basic formatting to text—Yes or no.
10. The customer can edit and rename existing documents —Yes or no.
11. The customer can create new folders, rename and delete existing folders—Yes or no.
12. The customer can use the basic functions of built-in apps, such as the Web browser, email, and book reader—Yes or no.



## **12.3 Advanced Functions of Braille Notetakers**

### **Suggested hours: Up to 10**

Teach the following during Advanced Functions of Braille Notetaker training:

1. If applicable, review the previous lesson, “Introduction to Notetakers.”
2. Provide instruction on using removable media with the notetaker, including
  - a. Saving files to and retrieving files from removable media
  - b. Backing up files to removable media
  - c. Saving files in braille, text, or other format supported by the braille notetaker
3. If applicable, provide instruction and practice on connecting the braille notetaker to other devices via USB and Bluetooth connections, including Computers and mobile devices.
4. If applicable, provide instruction and practice on sending files to a printer and/or embosser.
5. Provide instruction on miscellaneous functions of the notetaker, including setting the time and date, using the calculator, calendar, contacts/address book, etc.

## **12.4 Performance Objectives and Measurements**

Measure the following during Advanced Braille Notetaker Functions training:

1. The customer can save to and retrieve from removable media—Yes or No.
2. If applicable, the customer can connect and effectively operate the braille notetaker with a computer, mobile device, printer, or embosser—Yes or No.
3. The customer can set the date and time, operate the calculator, and enter contact information into the address book—Yes or No.

## **Chapter 13: Mobile Operating Systems**

### **13.1 Introduction to Mobile Operating Systems with Assistive Technology**

#### **Suggested hours: Up to 4**

Introduce the customer to mobile operating systems with assistive technology using the following steps:

1. Explain the type of mobile operating system the customer is using; e.g., iOS, iPadOS, Android, etc.
2. Orient the customer to the external ports, jacks, and controls of the mobile device.
3. Explain the function of the assistive technology the customer will be using, such as a screen reader, screen magnifier, bold text, or inverted colors.
4. Provide instruction on and practice locking and unlocking the mobile device.
5. If applicable, provide instruction on connecting a Bluetooth braille display to the mobile device.

### **13.2 Performance Objectives and Measurements**

Measure the following during Introduction to Mobile Operating Systems with Assistive Technology training:

1. The customer understands which type of mobile operating system runs on his or her mobile device—Yes or no.
2. The customer can explain and use external ports, jacks, and controls of the mobile device—Yes or no.
3. The customer understands what type of assistive technology he or she will be using with his or her mobile device—Yes or no.
4. The customer can lock and unlock the mobile device—Yes or no.
5. If applicable, the customer can connect a Bluetooth-enabled braille display to the mobile device—Yes or no.

### **13.3 Mobile Operating System Features and Functions**

#### **Suggested hours: Up to 20**

Teach mobile operating system features and functions using the following steps:

1. Explore the mobile operating system environment. Provide instruction on the following items:
  - a. Navigation through the pages of the operating system, including apps and status/notification areas
  - b. Opening and closing apps
  - c. Switching between open apps
  - d. Locking the orientation of the screen, if applicable.
2. If applicable, provide instruction on gestures for reading text with a screen reader, including the read all, read from current cursor position, and start and stop voice feedback.
3. If applicable, provide instruction on zoom gestures, including gestures for zooming in and out and returning to the non-zoomed screen, manipulating system controls, such as buttons, switchers, sliders, and pickers, etc., searching for apps with the search function, and connecting to Wi-Fi networks and Bluetooth devices.
4. If applicable, explain the difference between the screen reader and the virtual assistant.
5. Provide instruction on using a digital assistant, such as Siri or Google Assistant, to perform tasks, such as opening apps, sending email, setting calendar appointments, and answering questions.
6. Provide instruction on and practice accessing gesture, keyboard, and online help, if applicable.

7. Provide instruction on updating the mobile operating system to the latest version.

### **13.4 Performance Objectives and Measurements**

Measure the following during mobile operating system features and functions training:

1. The customer can easily navigate through the mobile operating system, including between apps and status/notification areas—Yes or no.
2. The customer can open and close apps—Yes or no.
3. The customer can switch between mobile operating system screens, as well as switch between open apps—Yes or no.
4. The customer can access the notification and control areas—Yes or no.
5. The customer can lock the screen orientation, if applicable—Yes or no.
6. The customer can manipulate system controls, such as buttons, switchers, sliders, and pickers—Yes or no.
7. The customer can set desired Accessibility settings—Yes or no.
8. The customer can use the search function to find apps—Yes or no.
9. The customer can connect to Wi-Fi networks and Bluetooth devices, if applicable—Yes or no.
10. The customer can read text with a screen reader, if applicable—Yes or no.
11. The customer can use the zoom feature to zoom in and out and return the screen to normal view, if applicable—Yes or no.
12. The customer can use a digital assistant to carry out tasks—Yes or no.
13. The customer can get help when needed, whether it be gesture, keyboard, or online help—Yes or no.
14. The customer can update the mobile operating system—Yes or no.

### **13.5 Mobile Text Input and Manipulation**

#### **Suggested hours: Up to 6**

Teach mobile operating systems text input and manipulation methods using the following steps:

1. Explore the on-screen keyboard.
2. Provide instruction on switching between letters, numbers, symbols, and special characters.
3. If applicable, offer instruction on the different input methods for the on-screen keyboard.
4. Deliver instruction and practice on text navigation and editing.
5. Provide instruction on and practice selecting, cutting, copying, and pasting text.
6. Give instruction on and practice with text entry via dictation.
7. Provide instruction on and practice using alternative text entry methods, if applicable.

### **13.6 Performance Objectives and Measurements**

Measure the following during text input and manipulation training:

1. The customer can proficiently type with the on-screen keyboard, including switching between letters, numbers, symbols, and special characters—Yes or no.
2. The customer can edit text—Yes or no.
3. The customer can select, cut, copy, and paste text—Yes or no.
4. The customer can input text using dictation—Yes or no.
5. If applicable, the customer can enter text using alternative entry methods—Yes or no.

### **13.7 Mobile Operating Systems Email**

#### **Suggested hours: Up to 4**

Teach mobile operating systems email using the following steps:

1. Introduce the customer to the email app, including the inbox, sent items, and trash/junk folders.
2. Give instruction on and practice reading messages in the inbox.
3. Provide instruction on and practice replying to, forwarding, and deleting messages in the inbox.
4. Provide instruction on and practice composing new email messages, including messages to multiple recipients.

### **13.8 Performance Objectives and Measurements**

Measure the following during mobile operating systems email training:

1. The customer can efficiently navigate the email app, including the inbox, sent items, and trash/junk folders—Yes or no.
2. The customer can read email messages—Yes or no.
3. The customer can reply, forward, and delete email messages—Yes or no.
4. The customer can compose an email message, including a message to multiple recipients—Yes or no.

### **13.9 Mobile Operating Systems Web Navigation**

#### **Suggested hours: Up to 4**

Teach mobile operating systems Web navigation using the following steps:

1. Introduce the customer to the Web browser, including instruction on and practice accessing the address bar, and any other app components, such as favorites or history.
2. If the customer uses a screen reader, give instructions on and allow practice on navigating by headings, buttons, and other form controls.
3. Provide instructions on searching the Web with a search engine, such as Google or DuckDuckGo.

### **13.10 Performance Objectives and Measurements**

Measure the following during mobile operating systems Web navigation training:

1. The customer can navigate the Web browser, including accessing the address bar and any other app components, such as favorites or history—Yes or no.
2. The customer can navigate by headings, buttons, and other form controls, if applicable—Yes or no.
3. The customer can search the Web using a search engine—Yes or no.

### **13.11 Mobile Operating Systems Calendars and Reminders**

#### **Suggested hours: Up to 4**

Teach the use of mobile operating systems calendars and reminders using the following steps:

Introduce the customer to the calendar or reminder app.

1. Give instruction on and practice accessing reminders and calendar appointments.
2. Give instruction on and practice creating, editing, and deleting calendar appointments and reminders.

### **13.12 Performance Objectives and Measurements**

Measure the following during mobile operating systems calendar and reminders training:

1. The customer can efficiently navigate the calendar app—Yes or no.
2. The customer can efficiently navigate the reminders app, if applicable—Yes or no.
3. The customer can locate a specific calendar appointment—Yes or no.
4. The customer can locate a specific reminder—Yes or no.

5. The customer can create, edit, and delete new calendar appointments—Yes or no.
6. The customer can create, edit, and delete new reminders, if applicable.

### **13.13 Downloading Mobile Operating Systems Apps**

#### **Suggested hours: Up to 2**

Teach customers how to download mobile operating systems apps using the following steps:

1. Introduce the customer to the mobile operating system app store, including the use of the different app categories/tabs.
2. Instruct the customer how to search for a specific app and allow the customer to practice searching for apps.
3. Provide instruction and practice time for downloading the app, including entering a password, if necessary.
4. Provide instructions on updating apps and potential problems associated with application updates.

### **13.14 Performance Objectives and Measurements**

Measure the following during mobile operating systems app download training:

1. The customer can navigate the mobile operating system app store—Yes or no.
2. The customer can search for and locate a specific app—Yes or no.
3. The customer can download an app—Yes or no.
4. The customer can update apps and understands the benefits and risks of updating apps—Yes or no.

### **13.15 Braille Access for Mobile Operating Systems**

If a customer requires the use of a braille display, ensure that the steps in section 6.5 are also followed.

## **Chapter 14: Computer Skills and Mobile Operating Systems Skills Post-Training Assessments**

### **14.1 Elements of the Computer Skills Post-Training Assessment**

The following should be included in the Computer Skills post-training assessment:

1. Review the customer's training objectives and goals.
2. Conduct performance tests on the training sections that have been covered.
3. Evaluate the customer's performance on educational- and/or employment -related applications using assistive technology.
4. Verify that the customer can identify software and hardware problems and communicate the problems to the appropriate technical support.
5. Verify that reports document the customer's overall competencies including, but not limited to, the following skills:
  - a. The customer can identify and define hardware such as monitors, CPU, disk drives, and removable media
  - b. The customer understands software types such as word processors, screen readers, screen magnifiers, and assistive software
  - c. The customer can identify the important elements of the extended keyboard, including the ESC key, function keys, numeric keypad, six-pack keypad, Ctrl keys, Alt keys, and Windows logo key.
  - d. The customer can execute multikey commands using Shift, Ctrl, Alt, and function keys.
  - e. The customer consistently and competently touch types.

### **14.2 Elements of the Mobile Operating System Skills Post-Training Assessment**

The following should be included in the Mobile Operating Systems Skills post-training assessment:

1. Review the customer's Mobile Operating Systems Skills training objectives and goals.
2. Conduct performance tests on the training sections that have been covered.
3. Evaluate the customer's performance on educational- and/or employment -related mobile operating systems apps using assistive technology.
4. Verify that the customer can identify software and hardware problems and communicate the problems to the appropriate technical support.
5. Verify that reports document the customer's overall competencies including, but not limited to the following skills:
  - a. The customer understands which version of mobile operating system runs on his or her mobile device.
  - b. The customer can identify and define hardware, such as the ports, jacks, and controls of the mobile device
  - c. The customer can efficiently navigate and operate the mobile operating system.
  - d. The customer can input and manipulate text using the on-screen keyboard.
  - e. The customer can access and utilize available help methods

## **Questions**

Contact the Assistive Technology Unit at [vr.atu@twc.state.tx.us](mailto:vr.atu@twc.state.tx.us).