Hands-On with Technology: An Accessibility Primer Eura Szuwalski — e.g.ryan@gmail.com

Microsoft Computers

- Permanently change settings: Control Panel, Appearance and Personalization link, and then choosing Display.
- Temporary methods:
 - Ctrl plus +/-
 - In **Office** Programs, View tab and Zoom and Zoom slider at bottom right.
 - All programs: Hold down ctrl and scroll wheel on mouse.

Ease of Access—Control Panel, click Ease of Access, and then click Ease of Access Center.

- Magnifier
- Narrator
- Many other tools to assist with use of computer



		X
Control Panel	Ease of Access > Ease of Access Center	Q
Control Panel Home	Make your computer easier to use	
😽 Change administrative settings	Quick access to common tools	
	You can use the tools in this section to help you get started.	
	Windows can read and scan this list automatically. Press the SPACEBAR to select the highlighted tool.	
	Always read this section aloud Always scan this section	
	Start Magnifier Start Narrator	
	Start On-Screen Keyboard 🔹 Set up High Contrast	
	Where to start? Get recommendations to make your computer easier to use	
	Explore all settings When you select these settings, they will automatically start each time you log on.	
	Use the computer without a display	
	Optimize for blindness	
	Make the computer easier to see Optimize visual display	
	 Use the computer without a mouse or keyboard 	
	Set up alternative input devices	-

Windows 7 Magnifier Keyboard Shortcuts

6 1					
Use this keyboard shortcut	To do this				
Windows logo key + Plus Sign or Minus Sign	Zoom in or out				
Control + Alt + Spacebar	Preview desktop in full-screen mode				
Control + Alt + F	Switch to full-screen mode				
Control + Alt + L	Switch to lens mode				
Control + Alt + D	Switch to docked mode				
Control + Alt + I	Invert colors				
Control + Alt + arrow keys	Pan in the direction of the arrow keys				
Control + Alt + R	Resize the lens				
Windows logo key + Esc	Exit Magnifier				

Windows 7 Narrator Keyboard Shortcuts

Use this keyboard	To do this					
shortcut						
Windows Key, type	To open Narrator					
narrator						
Ctrl+Shift+Enter	Get information about the current item					
Ctrl+Shift+Spacebar	Read the entire selected window					
Ctrl+Alt+Spacebar	Read the items that are selected in the current window					
Insert+Ctrl+G	Read a description of the items that appear next to the					
	currently selected element					
Ctrl	Stop Narrator from reading text					
Insert+Q	Move the cursor backward to the beginning of any pre-					
	ceding text that has different formatting. For example,					
	the cursor moves from a bold word to the beginning of					
	a non-bold word that precedes it.					
Insert+W	Move the cursor to the beginning of any text that fol-					
	lows it that has different formatting. For example, the					
	cursor moves from a bold word to the beginning of a					
	non-bold word that follows it.					
Insert+E	Move the cursor back to the beginning of any text that					
	has the same formatting. For example, the cursor					
	moves from the middle of a bold word to the begin-					
	ning of that word.					
Insert+R	Move the cursor to the end of any text that has the					
	same formatting. For example, the cursor moves from					
	the middle of a bold word to the end of that word.					
Insert+F2	Select all of the text that has the same formatting as					
	the character at the cursor					
Insert+F3	Read the current character					
Insert+F4	Read the current word					
Insert+F5	Read the current line					
Insert+F6	Read the current paragraph					
Insert+F7	Read the current page					
Insert+F8	Read the current document					

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Vicrosoft Narrator					
File Preferences Help					
Narrator will read aloud what is on-screen as you navigate using the keyboard.					
Main Narrator Settings					
Cho User's Keystrokes					
Announce System Messages					
Announce Scroll Notifications					
Start Narrator Minimized					
Control whether Narrator starts when I log on					
Quick Help Voice Settings Exit					

Apple Computers

VoiceOver

- Turn on: Command-f5 and in Universal Access
- Basics: VO keys are Control plus Option

Zoom

- Turn on: Option-Cmd-8 and in Universal Access.
- Zoom in and Out— Command-option-plus (+)/minus (-)



					System F	references		_		
			Show All					9		
		Personal								
	Capture W	Appearance	Desktop & Screen Saver	Dock	Exposé & Spaces	Language & Text	Security	Spotlight		Show All
About This Mac Software Update Mac OS X Software		Hardware	Displays	Energy	Ink	Keyboard	Mouse	Trackpad	Print & Fax	When using this computer, I would like assistance with: Seeing Hearing Keyboard Mouse & Trackpad VoiceOver: Turn VoiceOver on or off: 8F5
System Preferences				Saver						On Off Open VoiceOver Utility
Dock		Sound								Zoom: Turn zoom on or off: % ℃8
Recent Items	•	Internet &	Wireless							On ⊛Off Zoom in: %℃= Zoom out: %℃- Options
Force Quit	7.#O		()	8						Display: Switch to white-on-black: %\78
Sleep	∵∺≜	MobileMe	Network	Bluetooth	Sharing					Black on White Use grayscale White on Black
Restart Shut Down		System	G	<u>k</u> ,	٥	₽		۵		Enhance contrast: Normal Maximum Reduce contrast: % ∑^,
Log Out screencast	ዕ <mark></mark> ଞQ	Accounts	Date & Time	Parental Controls	Software Update	Speech	Startup Disk	Time Machine	Universal Access	Increase contrast: #T^. (?)
		Other								Enable access for assistive devices
7		Activboard	Flip4Mac	Mouse	Version Cue					

Apple VO Shortcuts (brief)				
Use this keyboard shortcut	To do this			
VO + A	Start reading			
Control (Ctrl)	Stop Reading			
$VO + \rightarrow$	Read next item			
V0 + ←	Read previous item			
VO + P	Read paragraph			
VO + S	Read sentence			
VO + W	Read word (press W multiple times to spell words alphabetically and phoneti- cally)			
VO + B	Read from top to current location			
VO + Home	Jump to top of page (on laptop keyboards, fn + \leftarrow is Home)			
VO + End	Jump to bottom of page (on laptop keyboards, fn + \rightarrow is End)			
VO + command + \leftarrow / \rightarrow	Select speech setting option (speaking rate, voice, pitch, etc.). Use VO + command + \uparrow / \downarrow to modify the selected speech setting			
VO + u	Web Item Rotor: use \leftarrow / \rightarrow to move between lists of links, headings, form controls, tables, web spaces, and ARIA landmarks. Move up and down list with \uparrow / \downarrow and press Enter to go to the list item on the webpage.			

<u>iPad, iPod touch, iPhone</u>

- Settings—General—Accessibility
 - VoiceOver (screen reader) and Zoom (magnifier)
 - VoiceOver—touch to hear item, double tap to open.



Apple VO Gestures (brief)						
Use this keyboard shortcut	To do this					
Тар	Speak item.					
Flick right or left	Select the next or previous item.					
Flick up or down	The effect varies depending on the Rotor Control setting.					
Two-finger tap	Stop speaking the current item.					
Two-finger flick up	Read all, from the top of the screen.					
Two-finger flick down	Read all, from the current position.					
Three-finger flick up or down	Scroll one page at a time.					
Three-finger flick right or left	Go to the next or previous page (for example, on the Home screen or in Safari).					
Three-finger tap	Speak the scroll status (which page or rows are visible).					
Four-finger flick up or down	Go to the first or last element on a page.					
Four-finger flick right or left	Go to the next or previous section (for example, on a webpage).					
Select and Activate						
Double-tap	Activate selected item.					
Touch an item with one finger, tap the screen with another finger ("split-tapping")	Activate item.					
Double-tap and hold (1 second) + stan- dard gesture	Use a standard gesture.					
ture as standard. For example, you can	The double-tap and hold gesture tells iPad to interpret the subse- quent gesture as standard. For example, you can double-tap and hold, and then without lifting your finger, drag your finger to slide a switch.					
You can use standard gestures when VoiceOver is turned on, by double- tapping and holding your finger on the screen. A series of tones indicates that normal gestures are in force. They re- main in effect until you lift your finger, then VoiceOver gestures resume.	You can use standard gestures when VoiceOver is turned on, by dou- ble-tapping and holding your finger on the screen. A series of tones indicates that normal gestures are in force. They remain in effect un- til you lift your finger, then VoiceOver gestures resume.					
Two-finger double tap	Play or pause in iPod, YouTube, or Photos. Start or stop the stop- watch.					
Three-finger double tap	Mute or unmute VoiceOver.					
Three-finger triple tap	Turn the display on or off.					

Android Tablets

- Samsung Galaxy (Will work for most Android Tablets)
 - Font Size: Settings—Display–Font Size
 - Settings- Accessibility- TalkBack ON



Android Gestures						
Use this keyboard shortcut	To do this					
Drag one finger	Explore your screen and hear audible feedback for what is being touched					
Double-tap anywhere on the screen	Opens or activates the item that you last touched					
Swipe up or down using two fingers	Scroll lists and pages					
Swipe left or right using two fingers	Change pages and screens					
Swipe right (or down) using one finger	Move to the next item					
Swipe left (or up) using one finger	Move to the previous item					
Swipe down then up using a single motion	Transition to the next reading level when reading blocks of text, then swipe right to read forward or left to read backward					
Swipe up then down using a single motion	Transition to the previous reading level when reading blocks of text, then swipe right to read forward or left to read backward					
Swipe right then left using a single mo- tion	Move to the next piece of information					
Swipe left then right using a single mo- tion	Move to the previous piece of information					
Up then right	Open local context menu					
Up then left	Home button					
Down then right	Open global context menu					
Down then left	Back button					
Right then down	Open notifications					
Left then up	Recent apps button					

Other Tablets

Kindle Fire

- Settings—Accessibility- Voice Guide: On and Explore by Touch: On
 - Can touch items and have read aloud. Double tap to select an item.
 - Note: use two fingers for most actions
 - Three swipes down from top to open settings again.
- Text to Speech (TTS) in books can be used without VoiceGuide or Explore by Touch. Kindle e-readers
 - Settings—VoiceGuide

Nook Tablets (Tablet HD is similar to general Android gestures)

- Settings– Accessibility– TalkBack and Explore by touch ON.
 - Explore, double tap to select. Two fingers to scroll through Apps.
- Also Extra Large Text option in Settings—Accessibility

<u>Great Resources</u>

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- Hear text read aloud with Narrator Microsoft Windows Help. (n.d.). Windows.Microsoft.com. Retrieved April 1, 2014, from <u>http://windows.microsoft.com/en-us/</u><u>windows/hear-text-read-aloud-narrator#1TC=windows-7</u>
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