Windows Accessibility

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Better Abilities

Introduction

• Worked in the disability field for over 20 years in various non-profits in Cleveland
• Much of that time has been with vocational programs working with adults seeking employment
• Focused on computer-related Assistive Technology for 15 years
• Became self-employed four years ago as Better Abilities.

Accessibility in the Operating System (OS)

• Microsoft Windows – Ease of Access

• Macintosh (Apple) – Accessibility

I’m focusing on Windows, but similar items should be found in Macintosh.
Computer OS ≠ Mobile OS

iPhone, iPad, Android, and all of their Apps are a different presentation.

Windows Phone? I just haven’t worked with enough of them to know.

Computer Presents Challenges

History

- Early 1980’s – Trace Center created StickyKeys, FilterKeys, MouseKeys
- Late 1980’s – Dragon Dictate, ZoomText, JAWS created as third-party software
- Mid 1990’s – both Microsoft and Apple begin incorporating accessibility features within their operating systems
How do you use a computer?

• Input
  • Keyboard – enter text, navigate through arrow and tab keys
  • Mouse – click a button, move the pointer to an insert point, drag

• Output
  • Monitor – lets you see information presented
  • Speakers – lets you hear information and sounds

Apologies for being basic, but we always return to the basics

“Mike, come help. She can’t use the mouse.”
She can’t use the mouse because she can’t SEE!

How to find these adaptations

Whether it’s Windows 7 or Windows 8, the keyboard shortcut is the same.

Press the Windows Key
Type your search term

Windows 7 Search
Windows 8 Search

Keyboard Problems

- Can’t physically use write or use the keyboard
- Can’t see the keyboard
- Can’t understand the keyboard
- Can use keyboard but not well, too slow (30wpm a good benchmark)

Speech Recognition

- Both Windows and Macintosh have their own speech recognition
- Dragon NaturallySpeaking still considered the best
On-Screen Keyboard

- Have good mouse skills
- Be able to see the screen

Ease of Access Center - Keyboard

- MouseKeys
- StickyKeys
- ToggleKeys
- FilterKeys

- Underline Keyboard Shortcuts and Access Keys

Other Keyboard Layouts

- need add ZoomCap stickers to keyboard

Dvorak most popular alternative layout.
Found under Ease of Access – Keyboard and also under Language Settings
Dvorak also has one-handed layouts
Third-Party Keyboards, Touch Dots

Mouse Problems?

• Can’t physically move the mouse
• Can’t physically click the mouse
• Can’t see the mouse pointer

Keyboard Shortcuts / Navigation

<table>
<thead>
<tr>
<th>To Do This . . .</th>
<th>Do This . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move from one window to another window</td>
<td>Press: Ctrl+Tab or Alt+Tab</td>
</tr>
<tr>
<td>Maximize your current window</td>
<td>Press: F11</td>
</tr>
<tr>
<td>Minimize your current window</td>
<td>Press: F10</td>
</tr>
<tr>
<td>Send current window to screen’s left</td>
<td>Press: F5</td>
</tr>
<tr>
<td>Send current window to screen’s right</td>
<td>Press: F6</td>
</tr>
<tr>
<td>Show or Hide the Desktop</td>
<td>Press: F9</td>
</tr>
<tr>
<td>Access your laptop’s main settings</td>
<td>Press: F11</td>
</tr>
<tr>
<td>Launch Windows Explorer</td>
<td>Press: F3</td>
</tr>
<tr>
<td>Lock your PC</td>
<td>Press: F8</td>
</tr>
</tbody>
</table>
Ease of Access – Mouse

- Mouse Pointer size & color
- MouseKeys
- Settings
  - Flip Mouse Buttons
  - Speed
  - Pointer Trails
  - Control Key "Ping"

Third-Party Mice / Trackballs

Which tasks require keyboard vs. mouse

- Keyboard – report-writing, data entry
- Mouse – telephone surveys, internet tasks
Seeing or vision problems?

Bigger Monitor?

Changing Display Settings / Color & Transparency
Ease of Access - Display

- Narrator
- Magnifier
- Focus box

Hearing Trouble? Only Sound Sentry

Windows 10 – Closed Captioning
Windows vs. Third-Party

I will look first at Windows OS adaptations, especially if disability is mild.

Most third-party software much better for more significant adaptations:
• Dragon NaturallySpeaking
• JAWS
• ZoomText

OS Accessibility = Universal Design

Eventually, third-party software won’t be needed because it will all be included within the Windows Operating System.

iPhone already accessible to people who are totally blind using ONLY iOS software like VoiceOver.

Questions?