# Windows Navigation

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| 1 | Use correct terminology for basic components of a computer system (e.g. monitor, keyboard, disk, printer, mouse), and develop understanding of their basic functions. |
| 2 | Explore and develop keyboarding skills (It is to the discretion of teacher to determine whether students will learn touch typing or simply become familiar with the keyboard functions). |
| 3 | Identifies location of all letters on the *alpha* keyboard |
| 4 | Identifies location of all numbers on the *alpha* keyboard |
| 5 | Identifies location of all punctuation keys on the *alpha* keyboard, including secondary keys (with shift-key as modifier) |
| 6 | Identifies location of all navigation keys on the keyboard |
| 7 | Identifies location of all editing keys on the keyboard |
| 8 | Identifies location of all lock keys on the keyboard |
| 9 | Identifies location of all modifier keys on the *alpha* keyboard (Ctrl, Alt, Tab, Backspace, Enter, Shift, Window key, Application key, Caps Lock, Escape, etc.) |
| 10 | Identifies location of all numbers on the *number* keyboard |
| 11 | Identifies location of all arithmetic keys on the numeric keypad |
| 12 | Identifies location of function keys (f-keys) |
| 13 | Identifies location of escape-key, print screen, and pause |
| 14 | Use application key (understand relation to point and click mouse users) |
| 15 | Understanding of the (num lock) key |
| 16 | Understand the Desktop |
| 17 | Understand the Start Menu |
| 18 | Find and launch programs/applications (start menu) |
| 19 | Open windows explorer |
| 20 | Find and launch programs/applications (c drive) |
| 21 | Understand tree view and list view arrangement |
| 22 | Access Menu Bar |
| 23 | Access System Menu |
| 24 | Use of Hot Keys and Keyboard Shortcuts |
| 25 | Use of First Letter Navigation |
| 26 | Create new folders and files |
| 27 | Rename files/folders |
| 28 | Select folders, files |
| 29 | Copy/paste files |
| 30 | Cut/paste files |
| 31 | Run multiple applications simultaneously, alternating among them [Task *switching* (cycle between open windows)] |
| 32 | Close window/application |
| 33 | Close document |
| 34 | Demonstrate understanding of the difference between closing a file/window and quitting a program |
| 35 | Create new window/document |
| 36 | Understand appropriate use of (enter) when in dialogue box, (enter) as preset default button |
| 37 | Check or uncheck a check box |
| 38 | Add items to the Start Menu (knowledge of point and click method) |
| 39 | Show/Hide extensions in folder view |
| 40 | Adjust the volume on the computer |
| 41 | Search for files and folders |
| 42 | Use recommended sequence to troubleshoot freezing problems (check plug and cable connections, use the stop command, force quit a program, restart if necessary) |
| 43 | Open and delete files to/from local hard drive |
| 44 | Properly shut down computer |
| 45 | Demonstrate understanding of the difference between (backspace) and (delete) |
| 46 | Read and resolve commonly occurring error messages (read in complete and “ok” out of them, or read and resolve) |
| 47 | Use recommended sequence to troubleshoot printing problems (stop sending print jobs, check plug and cable connections, check that the printer is on, cancel print jobs in Print Monitor, check printer for paper or jams, turn printer off and then back on, get help) |

# Application Access

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| 48 | Acknowledge active program and read the title bar |
| 49 | Navigate *save as* dialogue box |
| 50 | Understand and use *save as type* file option |
| 51 | Print from Menu Bar and/or combination keys |
| 52 | Confirm program version number and information |
| 53 | Play media file |
| 54 | Program specific help |
| 55 | Understand undo in applicable programs |
| 56 | Look for program updates |
| 57 | Install new software |
| 58 | Expand/Extract files |

# Storage Options / External Devices

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| 59 | Understanding storage options (physical devices) |
| 60 | Understand and navigate pop-up box when removable disk is inserted |
| 61 | Use 3 ½ floppy if necessary, if not familiarity with 3 ½ floppy |
| 62 | Use CD |
| 63 | Use USB |
| 64 | Use Compact Flash card |
| 65 | Use SD card |
| 66 | Appropriately use card reader when necessary |
| 67 | Use external hard drive |
| 68 | Safely Remove Hardware |
| 69 | Duplicate CD |
| 70 | Burn music CD |
| 71 | Burn data CD |
| 72 | Label CD appropriately |
| 73 | Experience computer peripherals (digital camera/camcorder) |
| 74 | Use .mp3 player |
| 75 | Use of transfer programs when necessary (such as BookPort transfer) |
| 76 | Use variety of printer types (including usb, parallel, serial, and bluetooth) |
| 77 | Scan pictures |
| 78 | Scan to optical character recognition (OCR) recognition |
| 79 | Explore the use of tactile graphic readers (e.g. Intellitools, Talking Tactile Tablet, Iveo) |
| 80 | Connect PDA and access files in either direction |

# Network

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| 81 | Open and delete files to/from a network server |
| 82 | Share a folder over a network |
| 83 | Share a printer over a network |
| 84 | Access a shared folder over a network |
| 85 | Access a shared printer over a network |
| 86 | Map a network drive |

# Word Processing

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| 87 | Navigate a document using arrow keys |
| 88 | Navigate to the beginning or end of a line |
| 89 | Navigate to the beginning or end of a document |
| 90 | Select Text |
| 91 | Copy/paste characters/words/paragraphs from documents |
| 92 | Cut/paste characters/words/paragraphs from documents |
| 93 | Change alignment |
| 94 | Change font |
| 95 | Change font style |
| 96 | Change font size |
| 97 | Change font color |
| 98 | Change font effects |
| 99 | Undo and redo keystrokes |
| 100 | Use outline format (numbering or bullets) |
| 101 | Spell Check |
| 102 | Use thesaurus |
| 103 | Manipulate line spacing |
| 104 | Format columns |
| 105 | Insert image |
| 106 | Use word wrap with images |
| 107 | Utilize header and footer |
| 108 | Insert footnotes |
| 109 | Sort |
| 110 | Conduct word count |
| 111 | Determine number of pages |
| 112 | Manipulate margins |
| 113 | Add page breaks to a document (bibliography) |
| 114 | Add page numbers to a document |
| 115 | Select page orientation (portrait or landscape) |
| 116 | Print in accessible format (e.g. print, large print, Braille, Braille and print) |
| 117 | Select number of copies in print dialogue |
| 118 | Select page range in print dialogue |
| 119 | Select printer in print dialogue |
| 120 | Select media and paper source in print dialogue |
| 121 | Print to PDF |

# Internet

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| 122 | Open desired URL |
| 123 | Use navigation features of browser (e.g. “go,” “back,” “forward”) |
| 124 | Conduct basic search for web-sites |
| 125 | Conduct basic search for images |
| 126 | Conduct basic search for news |
| 127 | Copy/paste characters/words/paragraphs/full articles |
| 128 | Download images from Internet |
| 129 | Set desired homepage |
| 130 | Add to Favorites |
| 131 | Organize Favorites |
| 132 | Use of multiple tabs (tabbed browsing) |
| 133 | Use online thesaurus |
| 134 | Use online dictionary |
| 135 | Use online encyclopedia |
| 136 | Use multiple search tools to find information on the Internet |
| 137 | Use keyword and phrase searching and apply “+” and “-“ limiters |
| 138 | Cite sources, acquire exact url |
| 139 | Download files appropriately |

# E-mail

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| 140 | Compose e-mail |
| 141 | Read received e-mail |
| 142 | Open an attached file |
| 143 | Send an attachment |
| 144 | Delete an e-mail |
| 145 | Add contacts |

# PowerPoint

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| 146 | Navigate an existing presentation using page up and page down |
| 147 | Navigate through individual slides using tab and shift+tab |
| 148 | Navigate to the beginning and end of a presentation |
| 149 | Add text to pre-defined areas (i.e. *title* and *subtitle*) |
| 150 | Move throughout task panes |
| 151 | Create new slide |
| 152 | Create new slide with customized theme (other than default title and content) |
| 153 | Change the layout them of the selected slide |
| 154 | Reset the position, size, and formatting of the slide placeholders to default |
| 155 | Change font/font style/font size/font color/font effects |
| 156 | Remove outline format (default bullets) |
| 157 | Adjust or add outline format varieties (numbering or bullets) |
| 158 | Navigate between object mode and edit mode on placeholders |
| 159 | Move object placeholders |
| 160 | Change shape of placeholders |
| 161 | Change colored outline of placeholder |
| 162 | Change shape fill color |
| 163 | Change shape line weight (thickness) |
| 164 | Change shape outline style (i.e. dashes) |
| 165 | Change shape effects |
| 166 | Use WordArt styles including text fill, text outline, and text effects |
| 167 | Insert Pictures from file |
| 168 | Insert Clip Art |
| 169 | Create Photo Album from collection of pictures |
| 170 | Insert Shapes |
| 171 | Adjust size and position of inserted items |
| 172 | Understand and articulate positioning for giving directions to sighted assistant |
| 173 | Create hyperlink to URL, e-mail, place within document, or outside document |
| 174 | Arrange items including rotation, bringing objects to front and back |
| 175 | Use header and footer (including inserting date and slide number) |
| 176 | Insert a movie from file or animated Clip Art |
| 177 | Insert sound from clip organizer |
| 178 | Insert sound from file |
| 179 | Insert recorded sound |
| 180 | Adjust slide orientation (portrait or landscape) |
| 181 | Change slide design them (understand built-in design themes) |
| 182 | Change slide design colors (understand built-in design color concepts and be able to articulate asking for help in selecting a design color) |
| 183 | Change slide design fonts |
| 184 | Change slide theme effects |
| 185 | Change slide background styles |
| 186 | Include Animations to slide and within slide transitions |
| 187 | Include Custom Animation  |
| 188 | Adjust when animation begins (on click, with previous slide, after previous slide) |
| 189 | Adjust what direction transition comes in from (left, right, top, bottom) |
| 190 | Adjust transition speed |
| 191 | Use notes pane to collect notes to include in presentation |
| 192 | Begin slide show from beginning |
| 193 | Begin slide show from current slide |
| 194 | Set up slide show as presented by speaker, browsed by individual, or browsed at a kiosk |
| 195 | Adjust presentation views to create handouts, etc. |
| 196 | Save in an accessible format (Outline/RTF) |

# Excel

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| 197 | Navigate spreadsheet using arrow keys, tab, shift+tab, and enter |
| 198 | Enter text into desired cell(s) |
| 199 | Enter numbers into desired cell(s) |
| 200 | Understand concept of a blank cell “A1” to create table with both column and row titles |
| 201 | Create a simple table using spreadsheet |
| 202 | Edit content of individual cells by writing over existing content |
| 203 | Edit content of individual cells using the (F2) key |
| 204 | Select multiple cells using navigation keys + shift key |
| 205 | Knowledge of definitions and function of sum, difference, product, and multiple |
| 206 | Use of function *=sum(b2,e2)* to total a row also be able to total a column, i.e. *=sum(b2,b6)* |
| 207 | Use of functions =product(*cell,cell*), =quotient(*cell,cell*) |
| 208 | Use of function *=cell-cell* for subtraction |
| 209 | Be able to use formulas from #207 and #208 as well as be able to use *=cell+cell, =cell-cell, =cell\*cell, =cell/cell* |
| 210 | Use of *:* to represent a range of cells |
| 211 | Use of both *:* and *,* within a formula, i.e. *=sum(A1:A4,A8)* |
| 212 | Insert columns and rows |
| 213 | Delete columns and rows |
| 214 | Understand and define various chart types, including column, line, pie, bar, area, scatter, stock, surface, doughnut, bubble, and radar |
| 215 | Understand and define various chart sub-types, i.e. for Column charts: 2-D Column, 3-D Column, Cylinder, Cone, Pyramid |
| 216 | Insert Chart using data from spreadsheet |
| 217 | Copy Chart from spreadsheet and paste into Word, PowerPoint, e-mail, or other applicable application |
| 218 | Change chart type from *Insert* menu or *Application* menu |
| 219 | Change fonts within chart |
| 220 | Format chart area including fill, border color, border styles, shadows, 3-D format |
| 221 | Change chart style |
| 222 | Add/adjust data labels of chart |
| 223 | Add/adjust legend of chart |
| 224 | Add/adjust Chart title |
| 225 | Navigate and understand *Formulas* ribbon |
| 226 | Sort columns and rows using automatic sorting option |
| 227 | Wrap text within a cell |
| 228 | Merge cells and center content |
| 229 | Change number type (i.e. dollar, percent) |
| 230 | Change place value before and after decimal |
| 231 | Change table style |
| 232 | Change cell style |
| 233 | Clear cell contents |
| 234 | Use multiple sheets |
| 235 | Print choice selection (i.e. entire workbook, active sheet, selection) |

# Considerations

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| 236 | Exhibit legal and ethical behaviors when using technology, and understand consequences of misuse |
| 237 | Understand implications of institution's acceptable use policy and consequences for misuse of technology |
| 238 | Express individual technology needs |
| 239 | Identify technology resources |
| 240 | Use technology research and publishing tools to address real-world problems |
| 241 | Evaluate information from the Internet for bias |
| 242 | Explore issues of ergonomics and safety in using computers |
| 243 | Identify ways in which technology is used in the workplace and in society |

# BrailleNote Conversions

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| 244 | Convert Keysoft files to MS Word |
| 245 | Transfer files between BrailleNote and PC |
| 246 | Use BrailleNote as electronic braille display |

This list above does not include programs specific to students with visual impairments including:

* Screen reader specific commands
* Knowledge and basic use of free screen readers for use on any computer
* Optical Character Recognition (OCR) programs, and scanners or camera scanning aides
* Braille Translation programs and use of Braille Embossers
* Ability to search for and download electronic books
* Ability to search for and download accessible games
* Accessible Math tools including math editors, accessible calculator (whether hardware or software)
* Accessible sound recording software for use in presentations
* Accessible Music Braille translators and publishing software
* Thorough understanding of functions and use of Braille display
* Thorough understanding of functions and use of Braille note-taker
* Thorough understanding of functions and use of accessible GPS
* Thorough understanding of functions and use of accessible digital talking book player/reader
* Understanding terminology and components of hardware [both design and function) including computer, printers, scanners, accessories (printer adapters, etc.)]
* Use of and ability to produce tactile graphics
* General knowledge of technology available to students with visual impairments and terminology and concepts to advocate for such technology.

This list is probably not exhaustive but covers the majority of programs available to students with visual impairments.