Windows 10: Ease of Access Features for Someone with Partial Sight

A Personal Perspective by Carrie Anton, Assistive Technologist & National Honorary Chairperson of CNIB

Introduction

There are many functions built into Windows that can improve the visibility, use and effective reading on a computer. Most of us want to be effective and get things done as quickly as possible with the least of frustration possible. I hope that this article will help you through my experience and tips to embrace the technology that you have in your hands to aid in happily completing computer tasks. This is not an exhaustive list but are things that can be very helpful.

Microsoft's Windows has an Ease of Access Center in the Control Panel. In my professional opinion as an Assistive Technologist and partially sighted user, it has improved to a point of being reliable and functional as far as assistive technology being built into an operating system goes. And to you and me that means good and free solutions for the partially sighted user.

This article started out as a learning experience for myself as I received a new laptop at work that had Windows 10 on it. There seemed to be appetite for a resource to help people learn the features built into Microsoft Windows. This can help people who experience vision loss without investing in expensive magnification software products. So I brought the topic in the form of a face to face presentation to the GTT Edmonton (Getting together to Talk Technology) user group meeting and then an encore presentation was requested at the GTT National teleconference meeting. I think most attendees took away at least one new nugget of information.

I've been working in assistive technology for close to 30 years and have worked with many products for users with vision impairment and other disabilities. I've seen many developer's

products, call them the good, bad and the ugly, but all made with good intentions. My goal as an Assistive Technologist is to find technological solutions to daily needs without wasting someone's time or money. I try to be the most resourceful I can and stay up to date. Even this article is probably half a year too late to help many.

This guide with resources is an important starting point to creating a usable experience in Windows 10 for someone with partial sight, without getting too technical. In most cases people with low vision a) want to use the vision they have, b) use the mouse and a few keyboard shortcuts, and c) have horrible headaches and neck pain from squinting and poor posture leaning so close to the monitor. We also have well-meaning friends and family who have computers who want to help but often times miss the issues we are going through with our vision differences.

I hope there are resources in this guide that propel you further to find out more about the feature you find useful. The commands provided are for Windows 10. The resource links provided take you to the Microsoft webpages where you can choose the version of Windows you are using and find its commands. There are slight differences in some commands between Windows 7 & 8 to Windows 10.

The obvious difference between Windows 8 and Windows 10 is that we now have the desktop view and start menu back. These were consistent landmarks since Windows XP, and those of us who are not real functional at doing puzzles or playing with random Mah-jongg tiles to find our icons, are once again happy with the familiar consistent layout and navigation from Windows products past.

If you have Windows 7 or 8, please do not update yourself to Windows 10 even though it says it's for free. Please get a professional to do it. There have been glitches. Ensure you back up all your data like pictures, videos, and documents and find your important software serial numbers in case something goes wrong.

I've provided a Table of Contents for the various headings in this document so you may quickly jump to the section that interests you.

Contents

Windows Ease of Access Center

This is where all Accessibility related features can be adjusted. If you browse sections you can choose to turn on or off the feature, especially when turned on by accident.

TO DO THIS	PRESS THIS
Open the Ease of Access Center	Windows Logo Key + U

Don't let this article fool you. I am a mouse user but sometimes it just is faster and more accurate to use keyboard shortcut commands. Especially for moving around a document, controlling menus and file management.

Keyboard shortcut keys for menus, navigating and controlling programs are much more efficient and a must to learn for a visually impaired person to reduce frustration and the search for things visually. When I hit a keyboard shortcut key I see or hear the action is done compared to finding the button and then bouncing back to me text to check the action was done or button was pressed.

> For example, to bold a line of text. Move to the front of the line with Home key. Select the line by holding Shift and press the End key. The line appears selected. Then Control +B bolds the line. My view has not shifted from my work.

> Compare that to placing the mouse at the front of the line as its shape changes from an arrow to a typing cursor. Left click and hold the left mouse button and drag the mouse straight across the screen to the end of that line. Let go of the left mouse button. Then without any other click or keyboard typing, move to the top of the word processor program to view the ribbon of tools. See the "bold" icon? Click it once with the left

mouse button. Then view back down to the text to confirm that the action was completed.

This is a basic example. But the multiple steps needed to scroll around the screen is evident and can also cause some people to be dizzy. One of the largest issues people have with screen magnification is that they hate to scroll. My answer is: use the keyboard more and scroll for quick viewing reasons, like orientation to an application's screen or confirming formatting looks ok.

Remember a computer has 2 control mechanisms, the keyboard and the mouse. Screen magnification programs are sophisticated enough to be able to follow the actions of both.

Here are some of my favourite keyboard shortcut keys:

TO DO THIS	PRESS THIS
Start Menu, / Windows Logo Key	On many keyboards, the Windows Logo Key is located on the bottom row of keys, 2 to the left of the spacebar
Switch between running applications	ALT+TAB key
Cancel or Close documents and applications	ESCAPE key closes menus and most times messages that pop up. CONTROL+F4 closes a document but not the program ALT+F4 closes the program and its documents
Moving around the document quickly.	There are a variety of navigation keys including Home and End, 4 directional cursor arrow keys and page up and page down. Also, Hold the CONTROL key and press these navigational keys to move even more quickly between words or paragraphs or pages in a document.
Automatically select the word, sentence, paragraph or table text that your cursor is in.	F8 selects chunks of text, expanding the selection the next time you press F8. Starting at the word, then line, then entire document.
Selecting things – all-inclusive or random items whether it be a line, paragraph, word, image, file or folder in a list	Hold down the SHIFT key, while using the navigation keys or left mouse click at the end position you want to finish selecting text. The colour changes and these things are called "selected". Don't let go of the SHIFT or CONTROL keys or you have to start over reselecting items. Also hitting any typing key will overwrite what you've selected.
Cut, Copy & Paste (this works for images, text, files, folders, almost anything you need to move)	CONTROL + X, CONTROL + C, CONTROL+V
Save or Save As	CONTROL+S, CONTROL+A

TO DO THIS	PRESS THIS
Open Menus and Activate Ribbon Tools and Buttons	ALT key is located to either side of the spacebar. ALT + the underlined letter of a button activates that button. So a Save button in a message box has an underlined S, press ALT= S and the Save button is pressed. By itself ALT opens menus and reveals Capital letters and Numbers along the ribbon toolbar which are the shortcut keys to activate that ribbon item. For example, to see the headings structure of a document in Word open the Navigation Pane by pressing these keys in succession ALT, W, and K. A panel opens on the left side of your document. If headings are in the document, you can quickly use this like a table of contents. Click on them and move there.
Search for text	In a document, webpage, or most applications use CONTROL+F to open the Find dialogue box. In File Explorer or Microsoft Outlook search for text in a filename or email with CONTROL + E. To search for applications or files you can use Window's Search by going into the Start Menu with Windows Logo Key, then start typing what you want to search for in the search text area.
Select Random files in a list	Holding the CONTROL key while selecting files allows you to choose various files in a list view rather than the SHIFT key version which is an all-inclusive selecting of files in a range .
Verify formulas in Microsoft Excel	CONTRO +~ (tilde) reveals the formula in the cell rather than needing to view the status line.
Right click on something without using the mouse	Some keyboards have an APPLICATION Key beside the right CONTROL key. The keys icon looks like a menu list. Alternatively press SHIFT F10.

Every time you see a Capital letter in a box beside a menu item or an underlined letter on a button, you "should" be able to press that letter to activate it if the program developer has used industry best practices. Buttons are often activated with the press of the spacebar or Enter key, but be sure you are on the button or link first. That is exactly our issue as a visually impaired person. That is, knowing that you are on the right button. Normally a dotted line appears around the button or link. Good web designers place a visual indicator or focus on the active button or link with a change in colour or a dotted outline.

If you use the mouse for buttons and links, you will have already noticed that this colour change is often in use by some designers to visually indicate where the mouse is pointing. A visual keyboard focus is a few years away for most developers to make it best practice. With more

and more people using keyboard shortcuts, a visual keyboard indicator for its focus will become popular.

> **Commented [ES1]:** Doesn't make sense I do not understand what you are trying to say here.

More Windows Shortcut Keys https://support.microsoft.com/en-us/help/12445/windows-keyboard-shortcuts

Scaling

Scaling is a display setting that adjusts the size of icons and text while maintaining clarity of items on your screen. The default is 125% but you can also customise it to what you want. Icons are larger and text is larger without the stepping pixelated that often happens with magnifying things. This will make it easier to recognize icons and read menus though documents may need to be scrolled left and right more. Screen resolutions are getting larger so scaling is becoming quite common for everyone if magnification software is not desired.

- Right click a place on the desktop (not an icon).
- Go to display settings
- Scale and Layout appear below Brightness in the middle of the dialogue
- You can choose a setting from the dropdown or customise if.

Magnifier

Magnifier is the screen magnification software built into Windows. It allows you to enlarge the entire screen or sections of it. There are 3 viewing modes including full, lens and docked. Magnifier's application toolbar appears in the Taskbar at the bottom of your display bar. It may also be a hovering transparent magnifying glass. Clicking either makes the Magnifier toolbar appear.
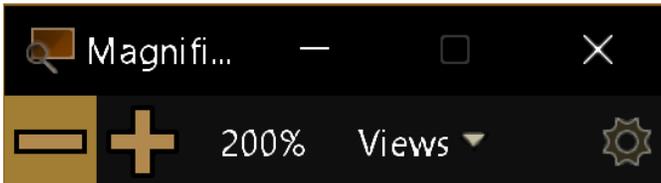
Click the various icons on the Magnifier toolbar like the Minus, Plus, Zoom Percentage, Views and the Gear to adjust Magnifier's settings. Or do the following keyboard hot keys:

TO DO THIS	PRESS THIS
Turn Magnifier on	Windows Logo Key + Plus (+)
Turn Magnifier off	Windows Logo Key + Esc
When Magnifier is on, zoom in or out	Windows Logo Key + Plus (+) or Minus (-)
Zoom in and out using the mouse scroll wheel	CONTROL+ALT + mouse scroll wheel
Open Magnifier settings	Windows Logo Key + CONTROL + M
Pan in the direction of the arrow keys	CONTROL + ALT+ arrow keys

TO DO THIS	PRESS THIS
Invert colors	CONTROL+ ALT+ I
Switch to full screen view	CONTROL+ ALT+ F
Switch to lens view	CONTROL+ ALT + L
Switch to docked view	CONTROL+ ALT + D
Cycle through views	CONTROL+ ALT+ M
Resize the lens with the mouse	CONTROL + ALT + R
Resize the lens with the keyboard	Shift + ALT + arrow keys
Quickly see the entire desktop when using full screen view	CONTROL + ALT + Spacebar

You may never have to go into the settings for Magnifier but it has quite a few customisable settings including start up behaviors and the optional following of multiple types of cursors or pointers including Narrators.

Basically, Magnifier enlarges the screen. I did find that Windows 7's Magnifier was not as effective and often stopped following the mouse or locked the view. If Magnifier stops running properly deactivate it with Windows Logo Key + Escape, then activate it again with Windows Logo Key and the plus key and it starts working.

More about Magnifier   https://support.microsoft.com/en-us/help/11542/windows-use-magnifier

Mouse Enhancements

I admit the Mouse is one of the hardest things to find on a computer screen. The Mouse Pointer's Size and Colour often make the difference in its visibility. Being said, the mouse is great for quickly scrolling and viewing sections of the screen but to rely on it to always click menus, buttons and document navigation is time consuming and frustrating, depending on the size of magnification you use and steadiness of your mouse control.

In the mouse settings tab of the Ease of Access Center adjust the Pointer's between 3 sizes and colours including invert which reverses the pointer's colour to provide contrast. Keep in mind the invert of some colours may not be ideal for viewing (i.e. Blue is yellow, orange is green, white is black, etc.)

Also, if you can find your Mouse Properties, you can adjust more mouse shapes and effects like pointer trails which make the mouse more visible when moving. Here is how to find Mouse Properties.

- Go to the Start menu by pressing the Windows Logo Key
- Find the Control Panel by typing or clicking it. Or type Mouse in Cortana's Search field.
- You are looking for the Mouse Properties areas and in the Pointer tab you can choose more shapes, its speed, how it behaves when moving, and more.
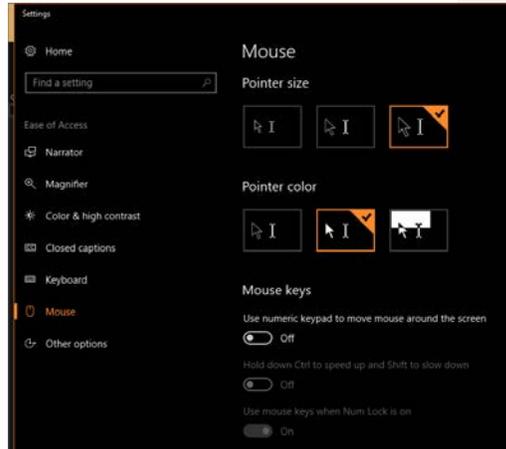
More on adjusting your Mouse Settings https://support.microsoft.com/en-us/help/14206/windows-7-change-mouse-settings

Cursor Thickness

In the Ease of Access Center's Other Options, you can change the thickness of the typing cursor by moving the horizontal left/right slider. You see the sample cursor change from a thin vertical line to a thick box. This makes finding where your cursor is for typing much easier.
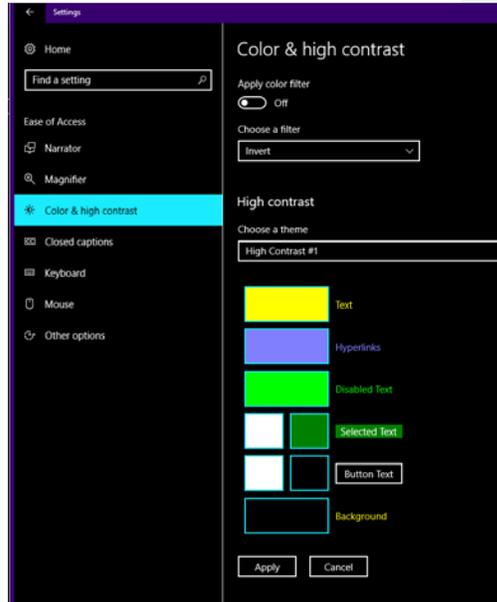
Colour & High Contrast

There are multiple ways to change colours on your screen in Windows. In the Ease of Access Center under Colour and High Contrast you can choose your method and its settings. Then they can be easily activated by a keystroke when needed. I often flip back and forth between colour settings and regular view depending on the document I am looking at.

Method 1: Magnifier's invert colour setting - When Magnifier is on (Windows Logo Key + PLUS), you can invert colours (CONTROL+ ALT+I)

Method 2: Windows Colour Filters - especially useful if you just want to invert colours, use shades of gray or need filters to help see colours when you have colour blindness. One in 7 males have a form of colour blindness.

Method 3: Windows High Contrast Themes are a quick way to adjust all colours in every application for text, hyperlinks, buttons and active or inactive windows. But you can lose information that is filtered out of the theme.

Many applications also allow you to change your experience in it, like all web browsers have Preference settings to allow you to remove images and customise colour

You will need to be the judge of your own experience. For working with text and email High Contrast Themes work great. For someone who is always on the web and uses cues from images and colour, themes won't work well as colours are filtered to provide high contrast. Often times we see white font on white background or images go missing.

When you use Magnifier's invert Colours or similarly the Colour & High Contrast Invert filter, images, foreground and background differences are maintained though they may be hard to see. Every colour has an inversion such as orange's invert is green, yellow's is blue, and white's is black. You should never lose information unless the inverts of your text and background colours are similar.

I find that using invert colour settings presents the best diversity of colour without the potential loss of colour which is an important visual indicator for someone with vision impairment. Seeing a link, heading, menu item or button in a consistent and different colour is important. Invert colours is also a Windows colour filter. So best to play around with these options and decide if you have enough colour indication to know what is what. I prefer white print on black or very dark backgrounds and because of the tasks I do on a computer, I want links, headings and buttons to stand out with vivid colour. I also want my menus to be high contrast not some form of grey and white. I'm also very cognisant of losing colours when using colour filters or high contrast themes. Because so much information we read or programs we use, use colour as an indicator of something like "Continue", "Approved" or "Print" and the design community does

not seem to actively promote good colour contrast between text and background colours which benefits everyone.

TO DO THIS	PRESS THIS
Turn Your Windows High Contrast Theme on or off	Left ALT+ left SHIFT + Print Screen
Turn Your Windows color filter on or off	Windows Logo Key + CONTROL + C
Turn Magnifier's Invert Colour on or off	1) Turn Magnifier On Windows Logo Key + PLUS 2) Invert its views colour CONTROL+ALT+I

Text to Speech to Read What is Magnified

Windows has a built in screen reader called Narrator which will be detailed later. Narrator reads everything on the screen including where your mouse points. But some people with partial sight find it too talkative and it can be confusing if you do not have a good orientation to the application screen you are using. When used well with Magnifier, Narrator can also help you find your place.

For those who want only selected text read aloud in MS Office documents there is a Speak feature that can be added to the Quick Access Toolbar at the top of the application. It reads aloud any text you select in the document. It can be activated by keyboard shortcut or clicking the icon in the Quick Access Toolbar. This feature is available in Microsoft Office 2013, 2016 and of course O365.
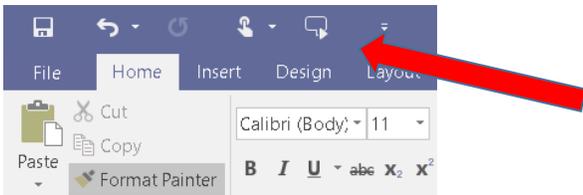
To set up the Speak button in MS Word:

1. Click the dropdown arrow button on the right of the Quick Access tool bar.
2. In this submenu choose More Commands
3. A 2 part dialogue box opens, Choose Quick Access Toolbar from the left pane
4. In the main area for Customize Quick Access Toolbar select All Commands instead of Popular Commands
5. Scroll down the alphabetic list or click in the list and type an S until you find Speak.
6. Once Speak is chosen, click the Add button. Speak moves over to the box where other Quick Access toolbar shortcuts exist. You can reorder this list how you like to make the Speak button appear at the beginning of all tools or leave it at the end.
7. Click OK to save and close this setting.

Now when you select text, you can click the Speak Selection icon in the Quick Access toolbar and it will read the text aloud. If you know which button it is in the QA tool bar you can Press

ALT+ the number of the button such as 5. Clicking the button again or the same shortcut key strokes stops speech.

Narrator

Narrator is a full blown screen reading application that does just that, it reads the screen. Again keyboard shortcuts are extremely important to navigating documents and applications with it and controlling what is read.

I use Narrator to read documents and read where my mouse is pointing. Narrator's setting panel located in the Ease of Access Center allows me to customise the way narrator acts such as its voice and ensure it follows the typing cursor and mouse pointer. Narrator also lets you "highlight the cursor" which is useful when reading, as a red box appears around where Narrator is reading. I can then hear where my mouse is pointing or see where it is reading in the document.

This can seem like a lot of action and the mouse jumps around because Narrator and Magnifier fight over control sometimes. So knowing where you are and where you want to go is important. Having an orientation to generally know where things are, such as all applications have a menu at the top, email applications are broken into 3 sections; folder lists and email lists and sometimes a reading pane. I usually start using a new program with magnification only. Then I incorporate screen reading to have things read to me because it is quicker.

One of the most important things of using Narrator with magnification is to listen to what it says. It does give you hints and clues as to what to do and where you are. Be patient.

TO DO THIS	PRESS THIS
Open Narrator settings	Windows Logo Key + CONTROL + N
Turn Narrator On or Off	Windows Logo Key + CONTROL + Enter for Windows 10
	Windows Logo Key + Enter for Windows 7/8

Narrator provides ways to read text by page, paragraph, line, word, and character. (Taken from Microsoft's webpage).

To read by page

- To read the current page, press **Caps lock + Ctrl + U**.
- To read the next page, press **Caps lock + U**.
- To read the previous page, press **Caps lock + Shift + U**.

To read by paragraph

- To read the current paragraph, press **Caps lock + Ctrl + I**.
- To read the next paragraph, press **Caps lock + I**.
- To read the previous paragraph, press **Caps lock + Shift + I**.

To read by line of text

- To read the current line, press **Caps lock + Ctrl + O**.
- To read the next line, **Caps lock + O**.
- To read the previous line, **Caps lock + Shift + O**.

To read by word

- To read the current word, press **Caps lock + Ctrl + P**.
- To read the next word, press **Caps lock + P**.
- To read the previous word, press **Caps lock + Shift + P**.

To read by character

- To read the current character, press **Caps lock + Ctrl + Left bracket ([)**.
- To read the next character, press **Caps lock + Left bracket ([)**.
- To read the previous character, press **Caps lock + Shift + Left bracket ([)**.

Tips: As a best practice, use these text reading commands and Scan Mode together. For example, turn on Scan Mode and use the up and down arrow keys to read by paragraph and **Caps lock + O** or **Caps lock + Shift + O** to read by line. If you want to reread the current line, press **Caps lock + Ctrl + O**. To reread the current paragraph, press **Caps lock + Ctrl + I**.

More on Getting Started with Narrator https://support.microsoft.com/en-us/help/22798

Narrator's Scan Mode

The second best feature to Narrator working well with my mouse pointer is Narrator's "scan mode". This is a reading mode where I can easily use arrow keys and keyboard shortcut keys for skimming and reading a document or webpage. It allows me to read text and jump directly to headings, links, tables, and landmarks. I can also activate controls like buttons and links when encountered. Scan mode is an improvement and bonus for Narrator.

If a document doesn't support Narrator's text reading commands, Narrator will say "not on explorable text." In this case, use Scan Mode to navigate and read text. While in scan mode you need to listen for Narrator saying scan on or scan off, otherwise the letters or arrow keys you use are actually typing or moving your cursor in your document.

When scan mode is turned on, use the following keys to navigate apps and webpages.

TO DO THIS	PRESS THIS KEY
Turn Scan Mode On or Off	**Caps lock + Spacebar**.
Read by paragraph in scan mode	Up and Down arrow keys
Read by character	Left and Right arrow keys

TO DO THIS	PRESS THIS KEY
To activate an item that you want to use, such as a button in an app, a link in a webpage, or a text box	Press the spacebar
Move to the start or end of a line of text in an app or webpage	Home and End
Move to the beginning or end of text	CONTROL + Home and CONTROL + End
Move to the next or previous word	CONTROL + Left arrow and CONTROL + Right arrow
Move to the next or previous line	CONTROL + Up arrow and CONTROL + Down arrow
Move to the next or previous paragraph of text in an app or webpage Note: Scan mode automatically turns off in edit fields so you can enter text. Press up or down arrow again to leave the edit field and resume scan mode.	Up arrow and Down arrow
Move to the next or previous button	B or Shift + B
Move to the next or previous combo box	C or Shift + C
Move to the next or previous landmark	D or Shift + D
Move to the next or previous edit field Note Scan mode won't turn off automatically when navigating by edit field. Narrator will tell you to press spacebar to edit if you want to type into the edit field.	E or Shift + E
Move to the next or previous form field	F or Shift + F
Move to the next or previous heading	H or Shift + H, and Alt + Down arrow or Alt + Up arrow

To learn more about Scan Mode. https://support.microsoft.com/en-us/help/22809/windows-10-narrator-using-scan-mode

Speech Recognition

I've been typing since I was a 10 year-old, so my speed is not an issue. But speech recognition is still faster. Imagine speaking to your computer and having it type what you say almost simultaneously. The trick to anyone using speech recognition software is to recognise when mistakes are made. You can open programs, control menus, click buttons and dictate text, correct and format that dictated text. How can I possibly type, mouse click and see faster than just saying it? Read further as there are two free and easy ways to experience Speech Recognition in Windows.

First be in a quiet environment with a microphone connected to your computer. Then set your perfect viewing options which may include features I've already described. I would not recommend using Narrator with Speech Recognition features.

Dictate Plug In

Microsoft released Dictate, a free plug in for Microsoft Word, Outlook and PowerPoint. The preferred system requirements are Windows 10 and Office 2016 (minimum system requirements are Windows 8.1 or later, Office 2013 or later).

This is quick and easy to set up. Download the appropriate plug in from http://dictate.ms/. Once installed you will notice a Dictate ribbon at the top of your MS Office applications.
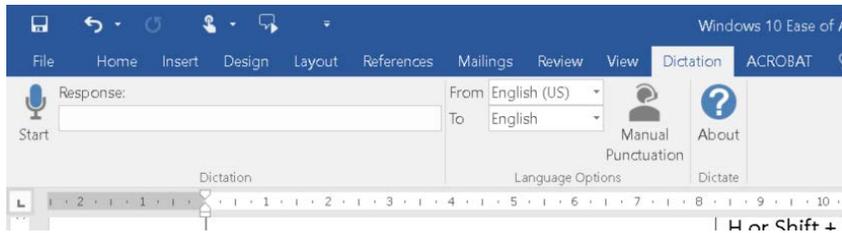

When you want to dictate in your document, plug in a microphone, go to the Dictate Ribbon and its' controls are there. You can easily increase your writing fluency. It also can translate what you say to a language of your choice (not tested).

Speech Recognition in the Control Panel

Windows has the Speech Recognition feature built into it which provides a more comprehensive dictating experience. You can control the computer, open applications, click buttons, as well as dictate in your documents which reduces the need to type so much.

In order to ensure that your dictation goes off successfully, set up and train your speech profile. Always spell/grammar check after a dictation session, in your email program you may have to go in and set the setting to always check spelling before sending an email.
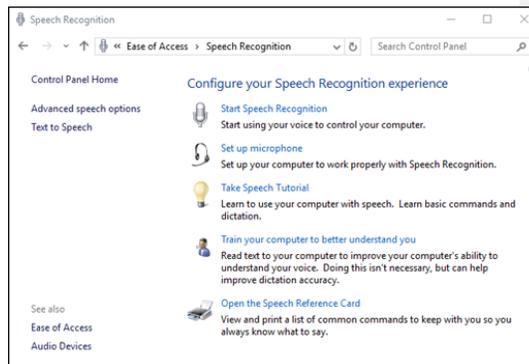
To start using Speech Recognition, in the Start Menu Type Speech Recognition or just speech and it will appear in the list of choices. A Speech Recognition dialogue appears.

I recommend to Set Up your microphone which adjusts the volume and other settings. Then take the Speech Recognition Tutorial. You will have to read short passages aloud in your microphone.

To start Speech Recognition, enter the same way via the Search in the Start Menu. The first choice is Start Speech Recognition.

When you Start Speech Recognition, a floating toolbar appears. You can click the microphone icon and start dictating in a blank document. Try to dictate in full sentences, say punctuation and numbers. You may be surprised!
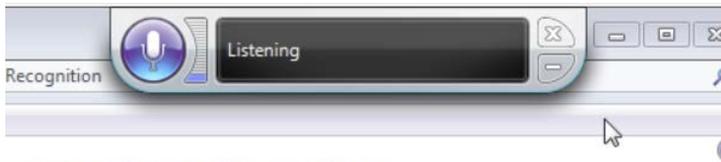
Some Common Commands are below:

TO DO THIS	SAY
At Anytime you can find what commands to use,	"what can I say?"
Select an Item by name	"Click" and the name of the icon or item such as File, Recycle Bin, Computer, Ok Button
Double click or activate an icon	"Double click" and the name of the item such as Recycle Bin, filename, etc.
Switch to an Open Application	"Switch to" and the apps name
Scroll in one direction	"Scroll" up, down, left, or right.
Insert a new paragraph or new line in a document	"New Paragraph", "New Line"
Select a word in a document	"select" word
Correct a word	"Correct" word
Delete a word	"Delete" word
Turn on Listening Mode	"Start Listening"
Turn off listening mode	"stop listening"
Put the cursor before a specific word	"Go To" word
Go to the start of the current sentence	"Go to start of sentence"
Go to the start of the current document	"Go to start of document"
Select a word range in the current document	Select word range; Select word through word
Capitalize the first letter of a word	"Caps" word
Delete the previous sentence	"Delete previous sentence"

More about Speech Recognition https://support.microsoft.com/en-us/help/12427/windows-speech-recognition-commands

Conclusion

The big question is, "does Windows 10 Magnifier and Narrator along with cursor, mouse and colour accessibility enhancements reduce the need for a fee based Magnification software product?"

Out of the box Windows 10 built in Ease of Access features are very much improved over other Windows versions of them. Because they are free I would suggest testing it in the specific applications you commonly use like email, spreadsheets, web browsers and social media platforms.

I recommend taking the time to learn the programs you want to use once you have set up your magnification and colour settings.

If you are planning to use a screen magnification product for Windows, and need moderate speech support I would suggest trying some of the things I've outlined in this guide.

The fee based products do have many more mouse and cursor enhancement themes, more view customisations including dual monitors, better voices to read to you, multiple ways to read documents and webpages and are generally compatible with most programs. Many fee based magnification software have timed demo versions of the software that you can test-drive before buying. With fee based products you will still be asked to use keyboard shortcuts or continually go back to the program toolbar.

Be prepared to read help files, web articles and reach out to your local support networks like CNIB Assistive Technology department, Canadian Council of the Blind's Getting Together to Talk Tech user groups, or if you are a student reach out to your TVI or post-secondary institution's Assistive Technologist.

Other Ease of Access Tools & Windows Shortcut Keys

Microsoft has built in a ton of other features for people who have hearing loss, have reduced motor dexterity that affects computer use including hand tremors or heavy fingers that press too many keys. Consult the Microsoft website for more details on Ease of Access settings on your version of Windows.

Other Windows 10 Accessibility shortcut Keys https://support.microsoft.com/en-us/help/13810/windows-keyboard-shortcuts-accessibility

Articles to Come

- Maximise the built-in accessibility Features of iPhone and iPad for Low Vision users
- Free iPhone/iPad Apps we all need to have – scan and read documents, identify things, label things, know what is nearby, enhance surfing the web.