# Accessibility in Windows 10

## A Guide for Educators

Empower students with accessible technology that enables personalized learning

Windows 10

Microsoft

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# Introduction

Microsoft's mission is to **empower all people and all organizations to achieve more**.

The classroom is no different. Microsoft Windows and Windows-based applications like Office, together with other assistive technologies, offer features that make computers easier to use for everyone – giving teachers the opportunity to provide personalized learning and students an improved experience and equal opportunity in the classroom.

We and our partners provide a broad and deep collection of proven software, devices and services to benefit people with unique differences and needs. In this guide, you'll find classroom considerations, desired learning outcomes, technology solutions, software features and steps to help improve overall learning and literacy in addition to assets to help those with temporary or permanent vision loss, and hearing, speech and mobility impairments.

The guide is intended for educators and students alike, but is not a one size fits all. We realize that Windows and Office enable just some of the desired learning experiences and outcomes, and are often supported by other tools and platforms. We know students have a say in how they learn, and teachers need a variety of hardware and software solutions to reach desired results in the classroom.

Please provide us feedback on the guide and share your own classroom experiences and solutions to help us keep it up to date. Let us know what worked and what can be improved. We look forward to our continued partnership with educators bringing technology into the classroom.

Best,

The Microsoft Accessibility Team

# Windows PCs and tablets

Microsoft Windows PCs and tablets support people with different needs, including people with both temporary and permanent learning and literacy, vision, hearing, speech, and mobility impairments – making it easier to focus, see and consume content, interact with the computer, and write or create content in alternative ways. More and more devices today are touch-enabled, lightweight, and mobile, improving the user experience for all.

This guide focuses on Windows 10 features that aid in learning, combined with the Office 2016 applications so often used in the classroom. Many of the suggestions in this guide can be accessed in the **Windows 10 Settings**.

# Windows 10

## Learning and literacy

Learning and literacy involves more than just reading and writing, and it rarely takes place in isolation. Windows has assistive technologies and tools that can help users **learn more effectively, engage and collaborate with others**, and **express themselves** in ways that matter and work for them.

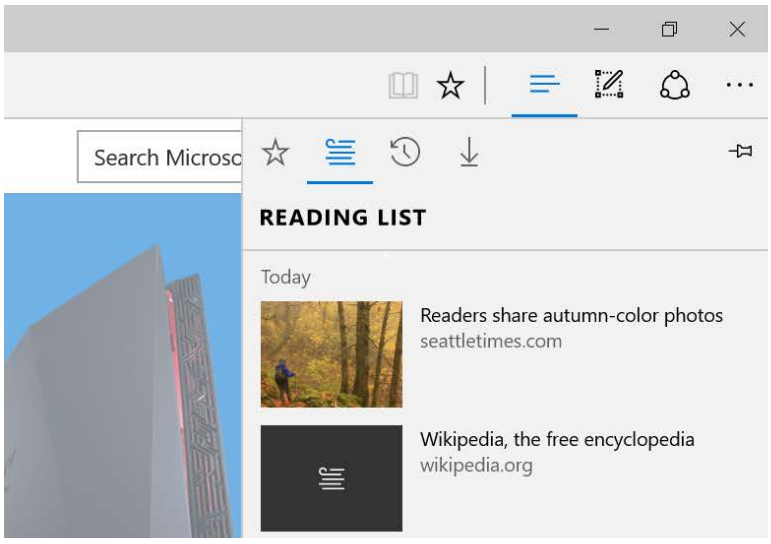
Since there is no single best way to set up a computer, Windows provides multiple ways to adjust settings to accommodate the widest variety of users and their needs.

By **understanding and leveraging the tools and features** available in and for Windows, users can focus on comprehension, assessment, and collaboration rather than focusing on the mechanics of interpreting or presenting information. These features will help users process and present information in ways that are easiest and most efficient for them based on their learning needs.

### Improving focus

The amount of content and functionality available on a computer or device can be overwhelming. Windows has options that will help users unclutter the screen and **improve their focus and comprehension**. These features include:

1. Turning off animations and background images (Settings > Ease of Access > Other options)
2. Turning off live tiles (Right Click > Turn live tiles off)
3. Using Microsoft Edge
    a. Microsoft Edge gives you new ways to find stuff, readand writen the web, and offers help from Cortana where you need it. To get going, select Microsoft Edge on the taskbar.
    b. Reading List and Reading View help you keep your most popular reading handy and read without distraction.



4. Maximizing Windows (F11)
5. Quiet hours
    a. A setting for selecting times of day when you don't want to be interrupted by notifications

### Consuming content

The visual properties of content can be adjusted throughout Windows. These adjustments can make content easier to read and understand.

Windows makes it easy to change the color and size of text to improve visibility. Most of these settings can be found in the Windows 10 Settings.

Screens can be cluttered, even within applications. In many Windows applications (including Edge, Internet Explorer, and Office), users can select Reading Mode. Reading Mode eliminates much of the interface (tool bars, navigation, etc.), providing the maximum amount of room for content, making it easier to focus and read.

### Expressing yourself

Windows has functionality that makes **writing and creating content** easier for users with accessibility issues. Features such as speech recognition and word prediction aid in writing and can work in tandem with alternative input devices such as large-key keyboards.

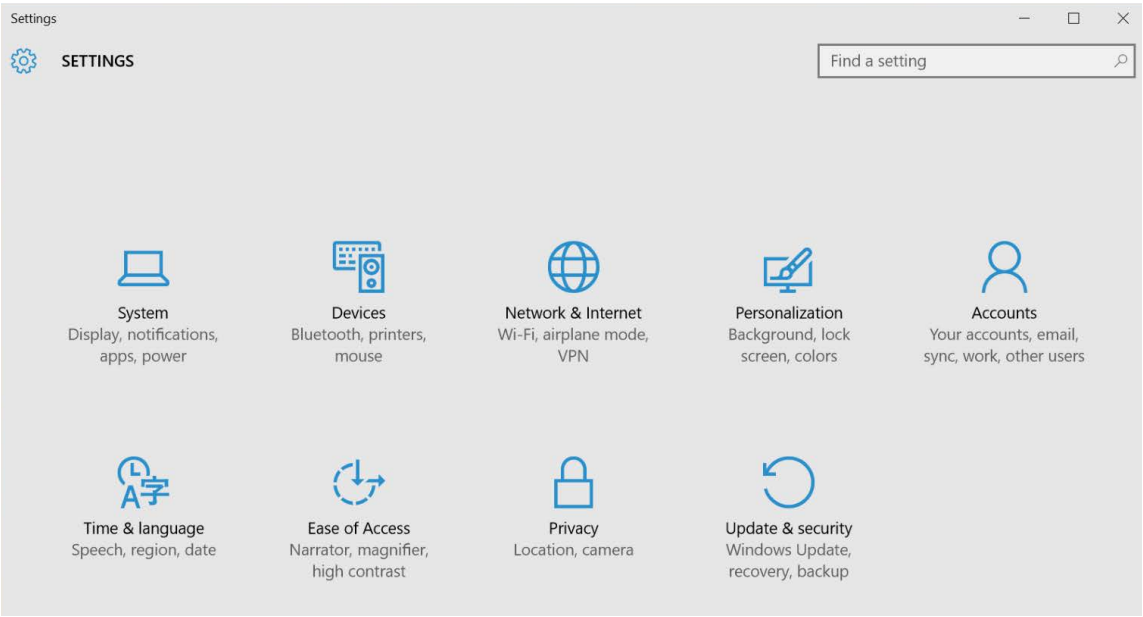
# Vision

## Make your computer easier to see

Windows includes numerous features and options for students who have difficulty seeing the screen, or for students who are blind and need to use the computer without a display. Users will be able to **customize their systems** and displays through the Windows 10 Settings.

### Adjust sizes for better visibility

In the **Make the computer easier to see** section of the Ease of Access Center (Control Panel\Ease of Access\Ease of Access Center\Make the computer easier to see), users can personalize their displays by selecting visual and audio options (including Narrator) that best suit their needs.




1. **Use a large monitor** (Windows Key + P)
2. **Change desktop fonts** (Control Panel > Appearance and Personalization > Display)
3. **Change icons**
4. **Add cursor trails** (Settings > Ease of Access > Make the mouse easier to use)
5. **Increase tile size** (Right click with mouse or long tap – press and hold using touch)
6. **Use Magnifier** (Settings > Ease of Access > Start Magnifier)
7. **Adjust size of text, apps, and other items** (Settings > System > Display)

### Create custom colors

Users can also use the Control Panel to **create personalized colors and themes** to make screens easier to read.

### Non visual/digital access

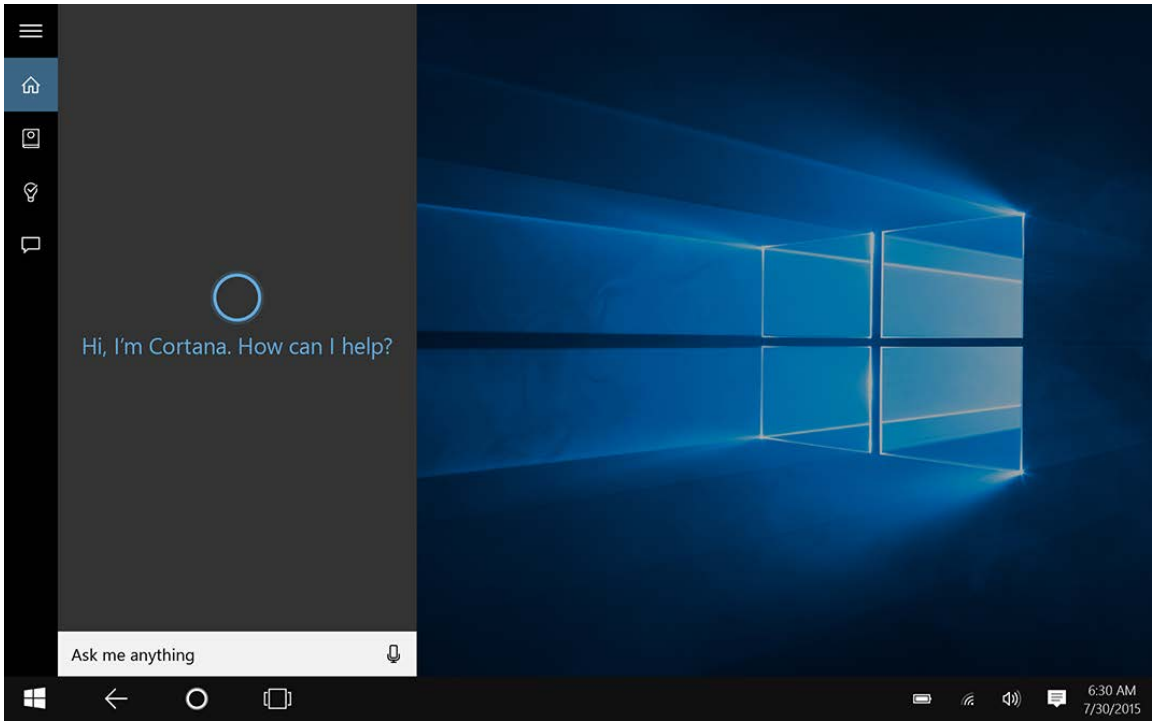
Users who are blind and cannot use a monitor can adjust settings to **Use the computer without a display** in the Ease of Access Center. These features include Narrator and audio descriptions of what's happening in videos (when available).

Alternative screen readers and other assistive technologies and devices are available from Microsoft and third parties. See Page 28 for more information.

1. **Narrator** (Settings > Ease of Access > Narrator) and **OneNote** can help users understand and present content.
2. **Keyboard shortcuts** are combinations of two or more keys that you can use to perform a task that would typically require a mouse or other pointing device. Keyboard shortcuts can make it easier to work with your PC. Top shortcuts include:
    a. Magnifier: Windows Key + (plus sign) to zoom in and Windows Key + (minus sign) to zoom out
    b. Narrator: Windows Key + Enter
    c. High Contrast: Left Shift + Left Alt + Print Screen
3. **Third-party screen readers** convert text to speech. These can vary in functionality, some simply reading selected text, and others describing everything that's on the screen. The type of screen reader users prefer depends in part on the level of their vision impairment.
4. **Devices** such as **Braille displays** and digital recorders can meet specialized needs. (http://www.microsoft.com/enable/at/types.aspx)

### Interact with Cortana using speech

**Cortana** will help you find things on your PC, manage your calendar, track packages, find files, and chat with you. The more you use Cortana, the more personalized your experience will be. To get started: **type** a question in the search box on the taskbar; or **talk** to Cortana with a microphone.




**Vibration settings.** Receiving notifications by vibration rather than on screen helps alleviate visual clutter and distractions and helps ensure those who are vision impaired don't miss something critical. The Microsoft Band can be used to receive haptic (vibration) notifications for text messages, calendar notifications, and email right on your wrist. You can control the haptic alerts when notifications arrive, enable or disable haptic alerts, and also set the intensity levels for the vibration.

# Hearing

## Accessibility features in Windows for students with hearing impairments

Users with hearing impairments will be able to **customize Windows notifications and captions**, allowing them to use more of their device's features. Visual notifications and captions allow users to choose to receive visual warnings and text captions, rather than sound messages, for system events such as a new email message arriving.

Accessibility features helpful for students who have hearing impairments include:

1. Adjusting volume
2. Changing computer sounds
3. Using text or visual alternatives for sounds

These features can be accessed through Windows 10 Settings.

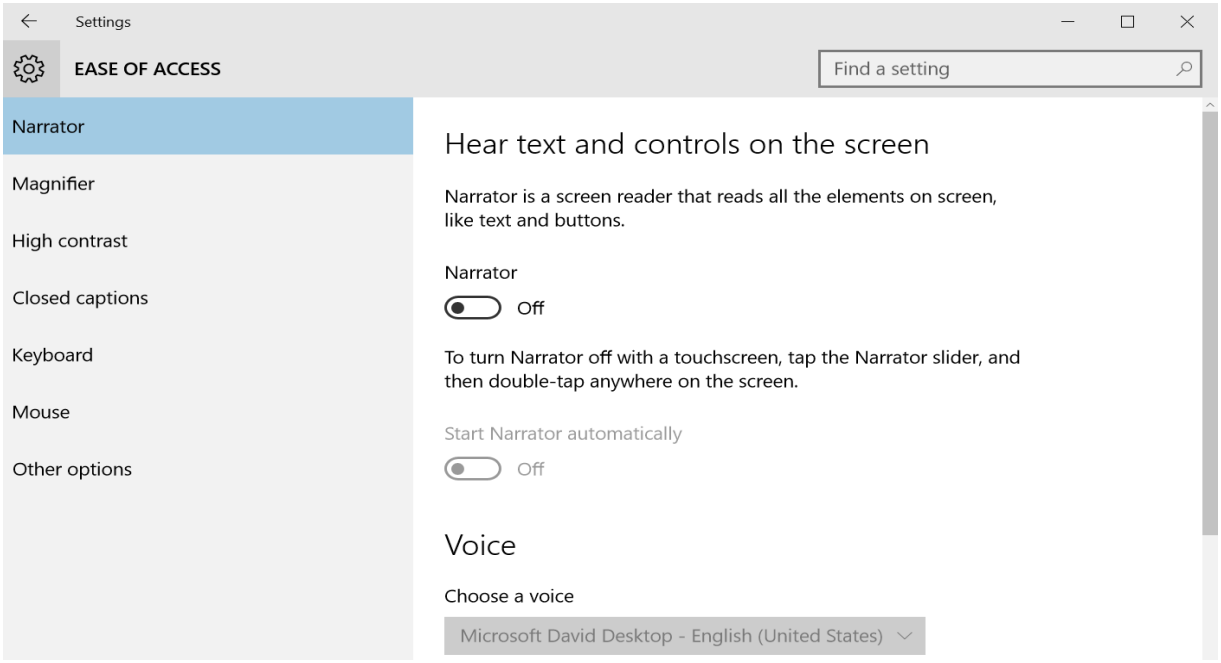
### Making your computer easier to hear

One easy way users with hearing impairments can **improve their experience** is to adjust the volume of the device and/or external speakers. Headphones or earbuds can also be used to focus sound toward the ears and to block out external sound.

Users can also go to the Control Panel to change system sounds to suit their needs.

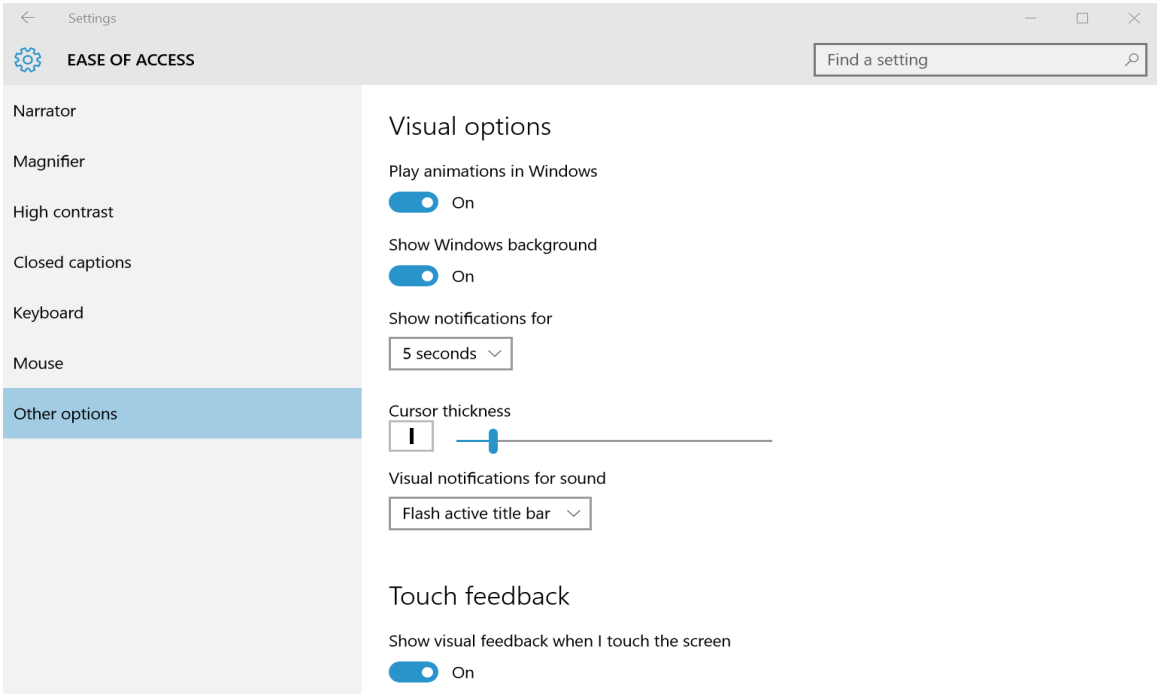
### Visual alternatives to sound

If using sound alerts is not an option, users can replace them by turning on Narrator, a screen reader that gives a visual alert instead, **audio alerts with visual alerts** in Ease of Access (Settings > Ease of Access > Narrator)



### Adjusting delay

Some Windows notifications disappear five seconds after they appear, and this might not be enough time for users to notice them. Users can **increase the notification delay time** in the **Other options** section of the Ease of Access settings.




### Closed captioning

Windows offers **closed captioning** as well, providing textual representation of dialogue or audio. This differs from subtitles, which usually show dialogue from a media piece in a different language than the piece originally had. Users can easily **adjust closed captioning settings** within the Windows 10 Settings (Settings > Ease of Access > Closed Captions). When selected at the settings level, **closed captioning** will be used by default when movies and TV are viewed.

**Skype.** Skype can provide an improved communication experience for users with hearing impairments. Skype Translator provides on-screen translation and transcription in near real-time so people can **participate in video conversations** regardless of their hearing abilities. Skype Instant Messenger can aid in team communication without having to use a separate device for messaging.

# Mobility

Users with temporary or permanent mobility issues can leverage a variety of software and hardware to **use their computers more efficiently**. Windows provides many keyboard options to make typing easier, and third parties have developed many different alternative input devices.

### Using fewer devices

Windows helps users **reduce the number of devices** they need to get their work done. Windows 2-in-1s or tablets, like Surface, combine the features of laptops and tablets, and applications like OneDrive give users mobility of experience. And because settings can travel across devices, configuration is simple when multiple devices are needed.

### Easier-to-use keyboard

Users who have difficulty with or experience pain or discomfort while using a keyboard have several options to improve their experience:

1. **StickyKeys** helps users who might have trouble pressing two keys at once. StickyKeys enables the user to press a key, such as CTRL, SHIFT, or ALT and have it remain active until another key is pressed. StickyKeys is enabled in the Ease of Access Center.
2. **FilterKeys** lets users set the sensitivity of the keyboard so it can ignore brief or repeated keystrokes. FilterKeys is enabled in the Ease of Access Center.
3. **Keyboard shortcuts** are combinations of two or more keys that, when pressed, initiate a command that would typically require a mouse or other pointing device. Top shortcuts include:
    a. Sticky keys: Press Right Shift Key 5 times
    b. Filter keys: Hold down Right Shift Key for 8 seconds
    c. Toggle keys: Hold down Num Lock Key for 5 seconds
4. Other keyboard controls are available to make the keyboard easier to use in the Ease of Access Settings.

### Use the computer without the mouse or keyboard

Windows includes features that make it possible to use the computer without a mouse or keyboard. Users can **control Windows and applications** with Windows Speech Recognition, and the On-Screen Keyboard enables users to enter text with alternative pointing devices by selecting keys on the screen. Touchscreen-enabled computers and tablets also let users interact with the screen without the use of a mouse or keyboard.

Other options to **control a computer without using a mouse or keyboard** include:

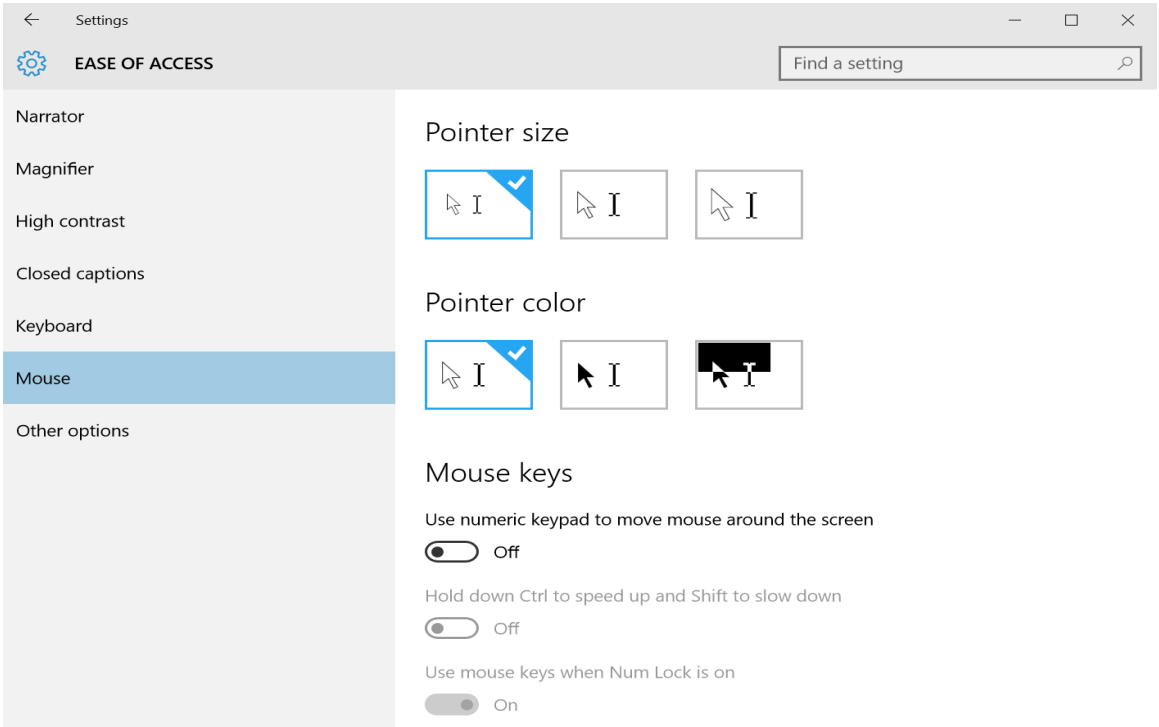
1. **Touch devices** can help users with mobility issues type and create content without using a keyboard.
2. **Word prediction** enables users to select a desired word from a computer generated list. The application predicts the word to be completed and subsequent words based on the first one or two letters typed by the user, word frequency, and context.

3. **Head/Eye tracking** devices allow a user to control Windows with only the movement of the head or eyes.
4. **Speech Recognition** allows users to command devices by voice – including the capability to dictate into almost any application. Users can dictate documents and email and surf the Web by saying what they see. An easy setup process and an interactive tutorial are available to familiarize users with the speech commands and train their computers to better understand them.

### Make the mouse easier to use

Users who experience pain or discomfort while using the mouse can **explore the mouse options** available in the Windows 10 Settings. There are a variety of options available including:

1. **Change the color and size** of mouse pointers.
2. **Turn on Mouse Keys**. Use this option to control the movement of the mouse pointer by using the numeric keypad.
3. **Activate a window** by hovering over it with the mouse.
4. **Prevent windows from being automatically arranged** when moved to the edge of the screen.



### Alternative input devices

A variety of input devices are available to aid people with mobility and dexterity impairments. Some of the assistive technology products available from independent technology companies include:

1. Ergonomic keyboards and mice
2. Joysticks
3. Trackballs
4. Switches
5. On-screen keyboards
6. Keyboard filters
7. Touchscreens
8. Alternative PC hardware
9. Ergonomic workstations
10. Keyboards in different layouts
11. Electronic pointing devices
12. Sip-and-puff devices
13. Wands and sticks

**Microsoft Surface USB.** Many people with mobility issues rely on specialized hardware like head tracking cameras or switches. Microsoft Surface combines the form and portability of a tablet with the ability to support the connection of any USB-enabled device, making Surface the perfect solution for someone with limited mobility. See Surface on pages 22 and 24.

# Speech

Windows assistive technology can help people with speech impairments **communicate more effectively.** Users can leverage the functionality of visual presentation tools to address groups of people, and messaging tools can improve communication through different text-to-speech mechanisms.

Accessibility features that can help students with speech impairments include:

1. **Visual presentation tools** including PowerPoint, Sway, and OneNote can all help users communicate and present ideas without speaking.
2. **Text-to-speech** applications can quickly and easily turn typed content into speech.
3. **Messaging tools** such as Skype messaging and Yammer can aid in collaboration without requiring speech.
4. **Specialized software** – AAC (Augmentative and Alternative Communication) software can be used to build words and phrases, allowing someone with a speech difficulty the ability to communicate electronically.

   There are many additional text-to-speech readers available from third-party vendors. See Page 28.

# Office 2016

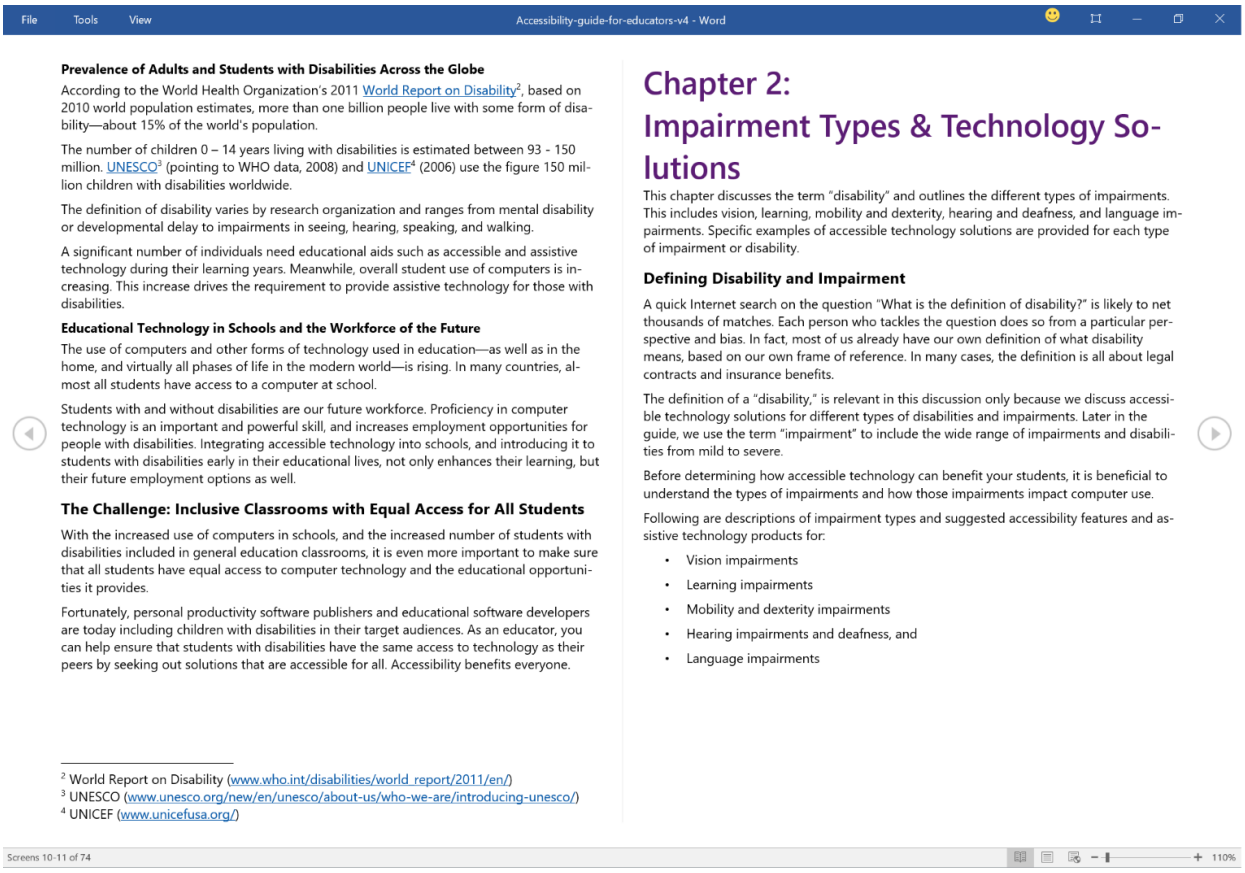
## Learning and literacy

Learning and literacy involves more than just reading and writing, and it rarely takes place in isolation. Microsoft Office has features and tools that can help users **learn more effectively, engage and collaborate with others**, and **express themselves** in ways that matter and work for them.

By **understanding and leveraging the tools and features** available in Office, users can focus on comprehension, assessment, and collaboration rather than focusing on the mechanics of interpreting or presenting information. These features will help users process and present information in ways that are easiest and most efficient for them based on their learning needs.

### Improving focus

1. **Minimize the ribbon** to reduce the visual clutter and distractions on the screen.
2. **Customize the ribbon** to only show the tasks and tools commonly used.
3. **View documents in eade Mode** to simplify view.



### Consuming content

Users will be able to **see and understand content** through assistive technology and accessibility best practices including:

1. Use the **Accessibility Checker** before publishing or sharing a document to identify content that may be problematic for users with disabilities.
2. Use **Reading mode** to automatically fit a page layout to your device, using columns and larger font sizes.
3. **Office mix,** a PowerPoint add-in that allows you to record a presentation and store it for later and repeated viewing.

### Expressing yourself

Many features of Office can help users create content that does more than simply convey information – users can **create engaging content** that stands out from plain text. Templates and tools provide a basis for developing projects that are both informative and creative.

1. **Smart Art** can help users create visual representations of information.
2. **Templates** can simplify production with preset formatting.
3. **Proofing tools** such as advanced spelling/grammar checkers and thesaurus can help spot and correct language issues.
4. **Insights for Office** brings the powerful Bing search engine into documents and helps sort results based on context – it can tell if the Lincoln being searched for is the president or the town car.
5. The **Language bar** is a toolbar that appears on the desktop automatically when users add text services, such as input languages, keyboard layouts, handwriting recognition, speech recognition, or input method editors (IMEs). The Language bar provides a quick way to change the input language or keyboard layout from the desktop. Insert visual of language bar.
6. **Speech-to-Text** features and tools help users input content without using the keyboard.
7. The **Ink** function enables users to create Office content without using the keyboard – they can add handwritten content and convert it to text.

**Collaboration with OneNote.** The classroom has changed dramatically in the past decade. With the implementation of technology, teachers have moved from lecturing at the front of the classroom to working side by side with students. Technology has enabled teachers to share content more easily, give students feedback more quickly, and project student work with the push of a button.

21st century classrooms also encourage students to collaborate with each other. Applications like OneNote allow students to contribute to group projects, edit with other students, and organize resources within the same application. Additionally, many students benefit from a variety of learning modalities, and OneNote makes it easy to save video, web content, and written content in one location. Collaboration – both both teacher to student and between students – is a key to classroom activity. OneNote gives teachers and students an edge by promoting real-time collaboration with easily organized content.

# Vision

## Make your document easier to see

Users can **adjust the size of a document for better visibility** in all Office applications, making content easier to read.

### Document zoom

You can zoom in to get a close-up view of your file or zoom out to see more of the page at a reduced size. You can also save a particular zoom setting with a document, template, presentation, or spreadsheet.

1. **Using the keyboard**
    a. Press ALT+W, and then press Q.
    b. Press ALT+W, and then the TAB key repeatedly until the Percent box is selected, and then type a percentage or press UP ARROW or DOWN ARROW to select a percentage.
2. **Using the mouse**
    a. On the View tab, in the Zoom group, click Zoom.
    b. Click the zoom setting that you want or type a percentage in the Percent box.

### Reading Mode

Users can implement **Reading Mode** in Office (View > Reading Mode) to **customize the display** in order to maximize the space required for larger fonts and wider columns. Reading Mode hides writing tools and menus and automatically fits the page layout to your device, using columns and larger font sizes, both of which you can adjust.

### Create custom colors

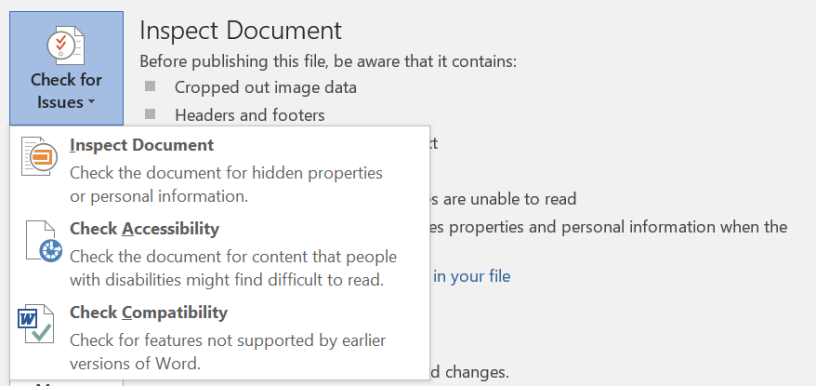
Users can create custom colors and themes to **improve the reading experience**. Office offers several ways to create custom colors, including:

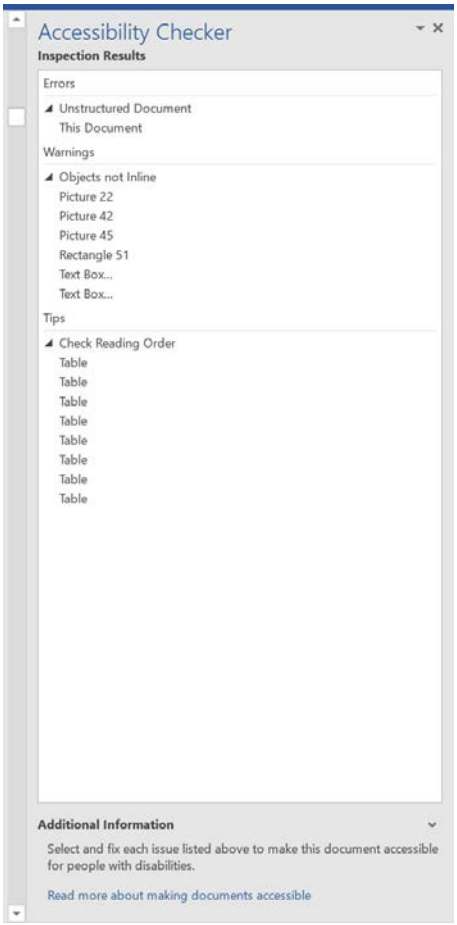
1. Office themes
2. Document themes
3. Document templates
4. High-contrast colors

### Non visual access

Users with visual impairments have several options within Office to **read or write content**. Narrator can read Office content aloud, and many third-party vendors offer screen readers and text-to-speech applications.

**Accessibility Checker.** With the click of a button in Word, Excel, and PowerPoint, you can scan a document, spreadsheet, or presentation to identify areas that may be problematic for users with disabilities. The feature, called Accessibility Checker helps you create more accessible content. It highlights and explains accessibility issues, so you can fix them before the content is finalized.



# Hearing

Microsoft Office 2016 has features that will make work easier for users with hearing impairments.

### Easier to hear

One easy way users with hearing impairments can **improve their user experience** is to adjust the volume of the device and/or external speakers. Headphones or earbuds can also be used to focus sound toward the ears and to block out external sound.

1. **Record audio (or video) with OneNote.** Users can then replay the recording to hear what might have been missed. They can also use the speech-to-text functionality to read a transcription of what they recorded.

2. **Microsoft Outlook and Microsoft Lync.** Users with hearing impairments may be able to use a combination of Windows, Microsoft Outlook, and Microsoft Lync to communicate via text rather than spoken dialogue with colleagues in real time.
3. **Visual alternatives to sound.** Select option for feedback with animation (Options > Advanced > General)
4. **Closed captioning –** stamp tool

**Office Mix.** This add-in for PowerPoint enables users to create engaging presentations that include audio, video, and inking.

# Mobility

Users with temporary or permanent mobility issues can use a variety of software and hardware to **use their computers more efficiently**. Windows provides many keyboard options to make typing easier, and third parties have developed many different alternative input devices.

### Fewer devices

Windows helps users reduce the number of devices they need to get their work done. Windows 2-in-1s (like the Surface, Surface Pro 4 and Surface Book) combine the features of laptops and tablets, and applications like OneDrive give users mobility of experience – making settings travel across devices.

### Collaborative, adaptive software

OneNote and Office Mix also provide functionality that will help users **create and share engaging content** regardless of their accessibility needs.

OneNote is an information-gathering and collaboration tool that integrates with Office, making it very easy to **share information**. It works on PCs and devices, giving users different ways to access, create, and share content.

Office Mix is an add-in for PowerPoint that streamlines creating and sharing presentations. Users can integrate audio, video, and inking into presentations, making them easier to create and personalize than when using PowerPoint alone.

### Easier-to-use keyboard

Users who experience pain or discomfort while using a keyboard have several options to improve their Office experience.

**Key options:**

8. The **StickyKeys** option helps users who might have trouble pressing two keys at once. StickyKeys enables the user to press a key, such as CTRL, SHIFT, or ALT and have it remain active until another key is pressed.
9. The **FilterKeys** function lets users set the sensitivity of the keyboard so it can ignore brief or repeated keystrokes.
10. **Keyboard shortcuts** are combinations of two or more keys that, when pressed, initiate a command that would typically require a mouse or other pointing device.

### Use Office without the mouse or keyboard

Office can be used without the mouse or keyboard. Windows Speech Recognition enables the use of voice commands to navigate the computer screen, and the On-Screen Keyboard helps users enter text by selecting keys on a visual keyboard displayed on the computer screen. Touchscreen-enabled Windows computers and tablets also enable users to navigate the screen without the use of a mouse or keyboard.

Other options available for **operating a computer without using a mouse or keyboard** include:

1. **Touch devices**, which can help users with mobility issues type and create content in Office without using a keyboard.
2. **Word prediction**, from Microsoft or third parties.
3. **Cortana,** which will help you find things on your PC, manage your calendar, track packages, find files, and chat with you. The more you use Cortana, the more personalized your experience will be. To get started, type a question in the search box on the taskbar.

### Make the mouse easier to use

Users who experience pain or discomfort while using the mouse in Office can **explore the mouse options** available on the **Make the mouse easier to use** screen in the Ease of Access Center. There are a variety of options available, including:

1. Changing the color and size of mouse pointers.
2. Turning on Mouse Keys. Use this option to control the movement of the mouse pointer by using the numeric keypad.
3. Activate a window by hovering over it with the mouse.
4. Prevent windows from being automatically arranged when moved to the edge of the screen.

**Microsoft Surface USB.** People have a broad range of learning styles, including visual, auditory, and kinetic. Surface provides the widest variety of input/output to accommodate different learning styles, including the ability to talk to Cortana.

### Alternative input devices

Office can utilize a variety of input devices that are available to aid people with mobility and dexterity impairments. Some of the assistive technology products available from independent technology companies include:

1. Ergonomic keyboards and mice
2. Joysticks
3. Trackballs
4. On-screen keyboard programs
5. Keyboard filters
6. Touchscreens
7. Alternative PC hardware and all-access workstations
8. Keyboards in different sizes
9. Electronic pointing devices
10. Sip-and-puff devices
11. Wands and sticks

### Keyboard shortcuts

Keyboard shortcuts in Microsoft Office products make it easier for people with mobility and dexterity impairments to interact with their computers while creating Word documents, Excel spreadsheets, PowerPoint presentations, and more. These shortcuts can reduce the number of keystrokes needed to perform certain actions, as well as replacing mouse-based actions.

A complete list of Office 2016 keyboard shortcuts can be found here: https://support.office.com/en-us/article/Keyboard-shortcuts-for-Microsoft-Word-2016-for-Windows-95ef89dd-7142-4b50-afb2-f762f663ceb2

# Speech

Microsoft Office includes technology that can help users with speech impairments **communicate effectively and efficiently.**

### Visual Presentation Tools

Several **visual presentation tools** are available, including PowerPoint, Sway, and OneNote. Sway and OneNote will even enable real-time collaboration that doesn't require speech.

### Text-to-Speech

Text-to-speech (TTS) is the ability of your computer to play back written text as spoken words. Depending upon configuration and installed TTS engines, users can hear most text that appears on their screens.

For ease of use, TTS can be added to the Quick Access Toolbar:

1. Next to the Quick Access Toolbar, click **Customize Quick Access Toolbar**.
2. Click **More Commands**.
3. In the **Choose commands from** list, select **All Commands**.
4. Scroll down to the **Speak** command, select it, and then click **Add**.
5. Click **OK**.

To use TTS in Office products, highlight the text to be read, and click the TTS icon.

### Messaging tools

Office users have access to **messaging tools**, such as Skype Instant Messenger and Yammer, that provide alternative ways of communicating with team members.

# Accessibility in practice

## Universal Design for Learning

**Universal Design for Learning (UDL)** is a set of principles for curriculum development that give all individuals equal opportunities to learn. UDL provides a blueprint educators can use for creating instructional goals, methods, materials, and assessments that work for everyone – not a single, one-size-fits-all solution, but rather flexible approaches that can be customized and adjusted for individual needs.

**Why is UDL necessary?**
Individuals bring a huge variety of skills, needs, and interests to learning. Neuroscience reveals that these differences are as varied and unique as our DNA or fingerprints. To learn more about the what, why, and how of learning, and how UDL aids the inclusive classroom, visit http://www.udlcenter.org/

## Assistive technology product guide

Assistive technology products are specialty hardware and software products (such as screen readers and voice recognition products) that provide essential accessibility to computers for those with significant vision, hearing, dexterity and mobility, language and communication, or learning needs.

The following table provides a list of assistive technology hardware and software products by category. Specific examples of the assistive technology products are provided. The table is by no means exhaustive or an endorsement of these products, but is provided as a sampling of what is available today.

**Selecting assistive technology**

When selecting assistive technology, it is critical to find products that are compatible with your version of Windows and the software programs you use.

**Purchasing assistive technology**

The Enablemart website (www.enablemart.com/) is one source where you can purchase assistive technology products for schools. Another is Boundless Assistive Technology (www.boundlessat.com/). Education and government customers may be eligible for volume pricing.

# Assistive technology table

| | | | |
|---|---|---|---|
| Vision | **Magnifier** | **Screen Reader** | **Braille** |
| | Zoomtext | Window Eyes | Duxbury Braille Traslator |
| | Magic | JAWS | ViewPlus IVEO |
| | | NVDA | BAUM Vario |
| | | Supernova | Tack-Tiles |
| | | System Access | |
| Communication | **AAC** | **Messaging** | **Sign Language** |
| | Talking Tiles | Skype | Finger Speller |
| | Compass | Facebook Messenger | |
| Mobility | **Eye/Head Tracking** | **Switches** | **Mounting** |
| | Tobii PCEye | Ablenet | Adaptivation |
| | Eyegaze Edge | | Mount'n Mover |
| | Tracker Pro | | |
| Learning | **Reading** | **Writing** | **Math** |
| | Claro Read | CoWriter | MathType |
| | Read and Write Gold | Sonocent Audio Notetaker | |
| | Scan and Read Pro | | |
| Other | **Distributors** | | |
| | Enablemart | | |
| | Boundless AT | | |

# Resources from Microsoft

**Microsoft Accessibility Website –** www.microsoft.com/enable/

Microsoft in Education – http://education.microsoft.com

Daily Edventures Blog – http://dailyedventures.com/

## Annual conferences about accessible technology

The following organizations host annual accessible technology conferences:

- Assistive Technology Industry Association
  www.atia.org
- Technology and Persons with Disabilities Conference at CSUN
  www.csun.edu/cod/conf/
- Rehabilitation Engineering and Assistive Technology Society of North America
  www.resna.org
- National Association of Special Education Teachers
  www.naset.org
- Pacific Rim International Conference on Disability and Diversity
  http://www.pacrim.hawaii.edu/

## Other resources

Many schools and districts have accessibility and special education staff for student assessment. If your school doesn't have such resources available, some resources that may be helpful to you are listed here.

Assistive technology centers and occupational therapists often have accessibility consultants to help individuals identify the right mix of accessibility features and products. Some centers offer computer training and many organizations have lending libraries, so you can try a product before committing to purchase it.

### In the United States

- **The Assistive Technology Industry Association** (www.atia.org) provides online training and web seminars for learning specific types of assistive technology products.
- **The Alliance for Technology Access** (www.ataccess.org) and the **Assistive Technology Act Programs** (www.ataporg.org/) are other U.S. national networks dedicated to providing information and technology support services to children and adults with disabilities.
- **The Rehabilitation Engineering and Assistive Technology Society of North America**, known as RESNA, (www.resna.org) offers certification programs for assistive technology practitioners. RESNA is another source for identifying AT experts who can assist schools in North America.

## In Asia

- **Tokyo Information Technology Regional Support Center** for persons with disabilities (www.tokyo-itcenter.com/) delivers training, organizes IT support, and has an assistive technology (AT) exhibition room for people with disabilities.
- **Osaka IT Station** (www.itsapoot.jp/) provides work-related training, organizes IT support, and has an AT exhibition room for people with disabilities.

## In Latin America

- **POETA Accessible Centers** in Latin America (http://trustfortheamericas.org) deliver training in information and communications technology, civic education, and job readiness to thousands of at-risk youth and people with disabilities across Latin America and the Caribbean.

## In Europe

- **AbilityNet** in the UK (www.abilitynet.org.uk/) ensures people with disabilities in the UK, whether as individuals or through supporting organizations, have accessible IT that enables and improves their lives. AbilityNet is the leading UK charity for computing and disability, and has a network of centers. A range of free resources are available from their website. AbilityNet also offers advice on web and software accessibility including user testing.
- **ONCE** The Spanish National Organization for the Blind (www.once.es) and its foundation, ONCE Foundation for Cooperation and the Social Integration of People with Disabilities in Spain, provide work-related training and employment for people with disabilities, and universal accessibility, promoting the creation of universally accessible environments, products, and services.
- **Enable Ireland** (www.enableireland.ie/) works in partnership with those who use its services to achieve maximum independence, choice, and inclusion in their communities. Enable Ireland runs a national assistive technology training service specializing in electronic assistive technology, providing advice and training on AT products to Enable Ireland service users and staff.
- **The Organization of People with Disabilities and Their Friends APEIRONS** in Latvia (www.apeirons.lv/) has a goal to integrate people with disabilities into society as well as creating more accepting attitudes towards them from the general public. The organization operates a lab in downtown Riga where people can take classes, learn about accessible technologies, and test various options.
- **The eCentrum project** in Poland (www.idn.org.pl/) specializes in the use of modern technologies in education and mobilization for those living with disabilities, creating e-learning and blended learning educational programs as well as desktop training at several locations throughout Poland.

Windows 10

This guide from Microsoft provides information about accessibility and accessible technology to help educators worldwide ensure that all students have equal access to learning with technology. Microsoft supports the personalized learning vision by providing technology that is accessible to every student—regardless of ability.

For educators new to accessibility and working with students with disabilities, accessibility can seem overwhelming. To help educators teach students with all types of abilities, you will find specific information about each type of impairment and accessible technology solutions.

This guide provides:

- An understanding of accessibility and how it impacts the classroom
- Definitions of impairment types and technology solutions for each type of impairment
- Guidance on choosing accessible technology solutions
- Resources for more information

**www.microsoft.com/enable/education/**