clever • skilled • creative

INCLUSIVE TOOLS AND SETTINGS

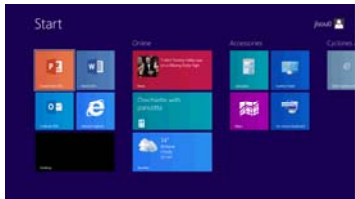# IN WINDOWS 8

Queensland Government

Computers currently used in schools are designed to make it quick and easy to access, manipulate and work with information available on the computer, network or Internet. As students are required to access and use more and more information, finding and working with the files and programs on our computer can be a challenge for many students, even before they get to work with the information.

Microsoft Windows 8 is an operating system intended for use with new style devices – touch /mobile devices. Windows 8 uses the functionality of tablet and mobile devices where touch is the main input. Windows 8 can also be used with a desktop or laptop and mouse. There are two ways to display and interact in one.

- Traditional or 'Desktop" display
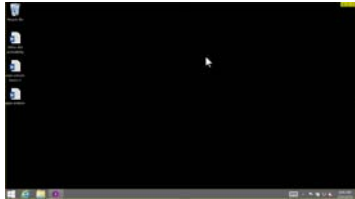
- Modern or 'Metro' (app screen) display

Similarities to Windows 7
- Windows 8 has all the functionality of Windows 7 on Desktop display (except for the Start button).
- Windows desktop interaction and setup are the same.
- Desktop layout is very similar.
- Traditionally software (e.g. MS Word, IE, etc) function on desktop.
- All traditional Windows tools still available (Control Panel, My Computer, Accessories).
- Previous Windows Accessibility tools still available.

New to Windows 8
- Faster start up and app opening.
- Touchscreen input.
- The start screen replaces the start button; this enables a faster start up and opening of apps. Scroll to various pages (mouse or touch).
- No 'Stop' function in Start (mobile devices typically don't shut down). Two options for stopping – Desktop Press Alt F4 to bring up Shut Down options (Shut Down, Restart, Switch User, Log off).
- Modern or 'Metro' (App screen) display.
- Apps function like mobile apps.
- Pages of apps.
- Enhanced search facility.
- Built in mouse and touch functionality (with touch hardware).
- Operation and setup of Metro.

'Metro' Display layout and features

Windows 8 provides both a desktop and a metro (app) display. The Metro display is similar to a display on an ipad or android device. The metro display can be set up with as many or as little apps as needed. Program or app icons can be rearranged, grouped and resized to suit the student's needs. Icons can be pinned to the task bar.

Start Page

- The windows start page key or icon ▣ is located in the lower left hand corner of the desktop - this brings up the metro display.
  - To change between Metro and desktop display, press the windows icon on your keyboard ▦ , click or touch the windows icon on the left bottom tool bar, or alternatively click or touch the 'Desktop' icon on the screen (in Metro display).
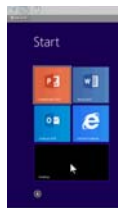

Navigation

Multiple Windows programs, files and apps can be opened at one time to make it easy and quick to move from one program to another. The following shortcuts allow you to change how you access the various programs, files and apps currently open in Windows. Being able to quickly and easily access various files allows students to reduce the amount of time it takes to access information on their computer. It also allows students to work easily between programs when they are taking information from one file or program to another.

- Move from one app to another by clicking or touching the left top corner of the screen.

  - To view or display apps or programs which are currently open, move the mouse curser down to the two rectangles on the very left of the screen. It then displays a list of thumb nails of all of the apps you currently have open. Click to select the next app you wish to move to. Or use a swipe action of the finger from the left of the screen across, to access the list of apps.
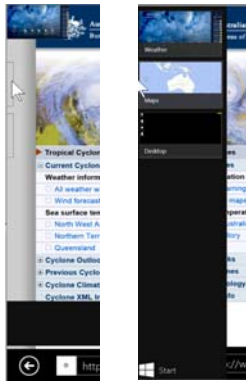
Alternatively use the keyboard - hold down the Windows key on your keyboard and press the Tab key to view and scroll through open apps.

Apps

- Apps can be rearranged on the screen, grouped and named.

- Apps can be displayed in 4 different sizes on the screen (small / medium / wide / large). To resize or uninstall apps –right click or touch and hold on the icon to bring up a menu on the lower screen.

- To display all apps –click on small arrow on screen, or using touch - swipe upwards. Select an app with a right click, or by touching and holding. This brings a menu up on the lower screen with options to 'Pin to Start', 'Pin to Taskbar' or 'Clear selection.

- To add a label to groups of apps on the start screen – right click or touch on a space, click on 'customise' from the lower tool bar. This allows you to type a label for a group of apps.

- Close apps with a right mouse click. Or hold finger over app and touch 'close'.

- To work with 2 apps at the same time, to view as a split screen. Move cursor to top right corner, right click on the word document – click on 'Insert left'.

The split view border can be altered to suitable viewing of each page. The pages can be resized for easier viewing, by clicking on the vertical centre black line and dragging one way or another.
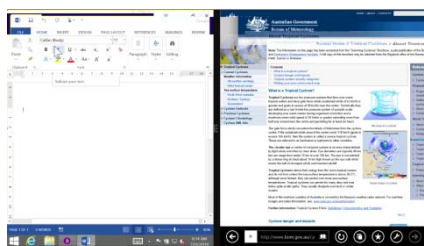
- When viewing web pages in the 'app' view, the URL is not displayed as it is in Windows 7. The URL is can be accessed by moving the mouse cursor down to the lower edge of the screen and click. A tool bar appears with the URL and tool icons – 'Pin to start', favourites' etc.
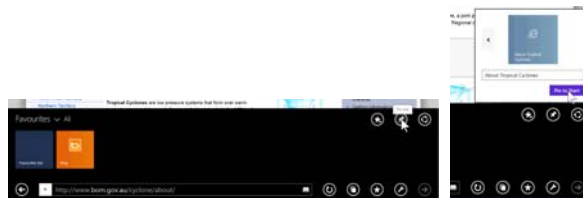
 To add another tab, click on or touch the + icon.

- For magnification there is a Zoom function – either use the scroll wheel on the mouse or use fingers to pinch to enlarge screen.
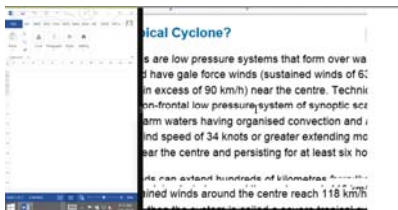
- Pin to start page- direct links to web sites, files, and folders.
  - To pin webpage: In the web browser, click on the thumb tack icon, a box pops up, insert a name, click on 'pin to start'.

  - To pin folders to start page: Go to Documents, right click on the folder or touch and hold with finger – select 'pin to start'.
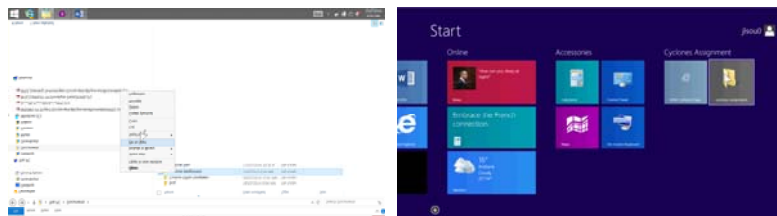

Charms bar

The charms bar is quick access to get to five commonly used actions – Search, Share, Start, Devices, and Settings. They are always available at the right side of the screen, no matter where you are in Windows.

To bring up the charms bar - place pointer to the top or bottom right side of screen / or using touch - swipe in from the right side of the screen.

o Search: a comprehensive search tool to find apps and information. Type a word in the search window to bring up a list of content with that word.
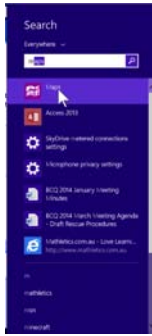
o Share: Click on button to bring up options for sharing (social media, mail, music, people, reading list).

o Start: Allows you to move back to start page.
o Devices: A range of devices can be connected (printers, scanners etc).
o Settings: Change general settings, view history, turn off device.
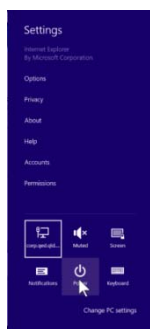
   The options shown in settings will vary according to which app is currently open and displayed.

o Change PC settings (details in next section)

Windows 7 inclusive tools available in Windows 8

Internet Explorer Tools

To change or simplify the way the information on the screen is displayed - click on lower tool bar to bring up a box - "Switch to Reading View". Click on this box to change the way the website is displayed. It shows the images, and it breaks down the text to make it easier for students to read.
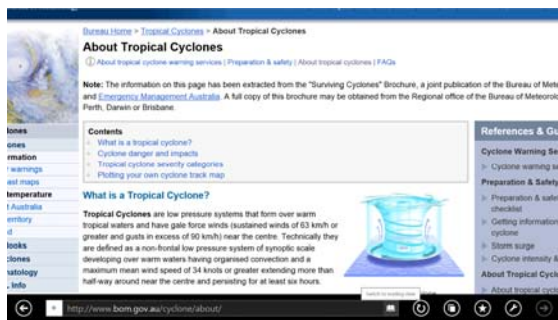
Reading view

Reading view can be set up in Settings / 'options' on the Charm Bar. This option allows you to set up the font size, colour and style of display to suit the student.
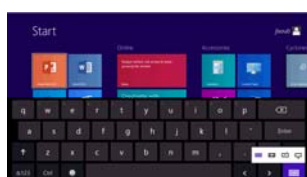

Keyboards

To set up onscreen keyboard: Go to Charm bar / Settings. Click on the keyboard icon to display Touch keyboard and handwriting panel option.

To select from a range of keyboard settings, click on the keyboard icon in the bottom right hand corner. This gives option for a standard keyboard, a split keyboard or a handwriting keyboard.

- o The handwriting recognition option which is very accurate at recognising a student's on screen handwriting. Click on the insert tab to insert the text into a document.

the dog ran
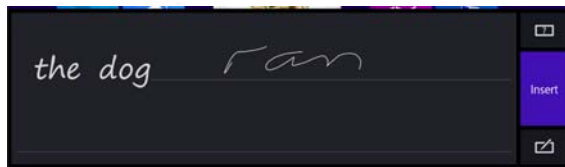
PC Settings

Change PC settings by clicking on the words 'Change PC settings' located at the bottom of the settings tab.
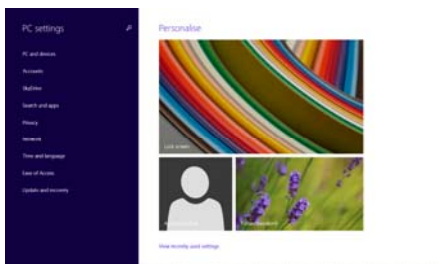

- Personalise 'Lock screen", Account picture, Picture password. Options to change background colours to suit a student's viewing or contrast needs.

PC and devices

Lists options which can be changed or adjusted to suit individual student needs.
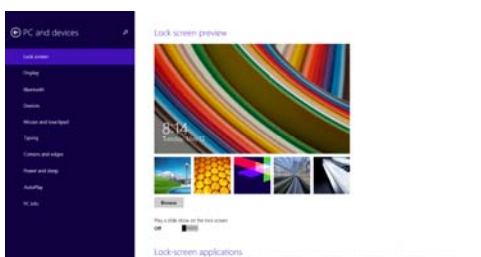
- Lock screen.
- Display.
- Bluetooth.
- Devices.
- Mouse and touchpad: Change from right to left hand mouse. Turn touch pad off.
- Typing: Spelling - Auto correct misspelt words, highlight misspelt words. Typing – shows text suggestions. Touch keyboard – play key sounds.
- Corners and edges: app switching on or off; corner navigation on or off.

Ease of Access ⊕

Specifically set up to support students with special needs. This section provides access to a range of tools that can significantly enhance the capacity to engage with Windows 8 and software being used. The various tools in the Ease of Access Centre can be selected directly or the student can explore a number of options without knowing what tools they need (e.g. Make the computer easier to see).

The quickest and easiest way to open the Ease of Access Centre is to use the keyboard shortcut:

Windows logo key ⊞ **+ U**

Alternatively go to **Settings** in the charms bar, tap or click on **Control panel,** and then **Ease of Access Centre**.

All The tools provided are not necessarily the most effective of these type of tools on the market but give the teacher an idea as to whether a student would be able to benefit from using this type of tool before they spend large amounts of money.

- o **Narrator:** allows students to hear text and controls on the screen.
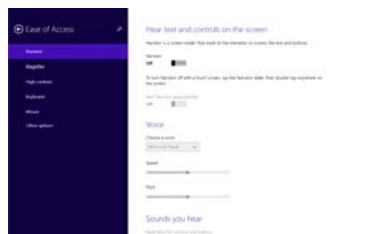

Metro display   Desktop display
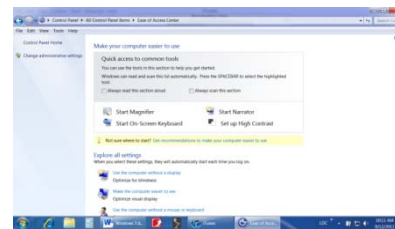
- o **Magnifier:** The magnifier increases the size of information on the screen, or portions of the screen. This allows students with low vision to engage with text and images that are too small for them to see effectively. The amount of magnification and size of the magnification window can be changed to suit the student. When using touch device you can control the Magnifier from the edges of the screen. Use the borders to move around the screen. You can change the level of magnification by clicking or touching the + or – in the corners of the borders. You can also quickly change the zoom level by moving two fingers closer together or farther apart on one of the borders. There is also an option to invert colours.
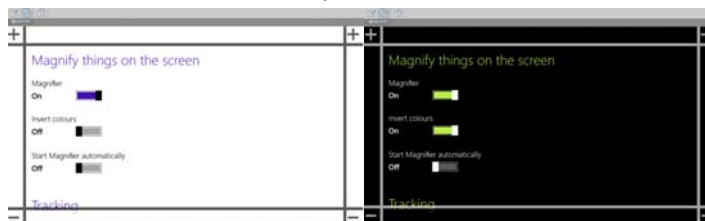
- o **High contrast:** This heightens the colour contrast of some text and images on your screen, which helps make those items easier to identify. Students can select a theme to suit their viewing needs.

o **Keyboard:** The on-screen keyboard allows students to type without using a keyboard. The on-screen keyboard can be used with most applications where you can enter text. The keyboard can be resized to suit the need of the student and has the capacity to use word prediction to increase the student's output. To open on-screen keyboard – swipe in from the right edge of screen, and then tap search.
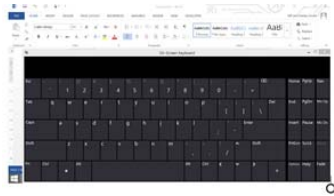
There are four main ways the student can interact with the keyboard.

- *Touch.* The student touches the key they want and it is typed into their document.

- *Mouse click*. The student clicks on the key they want to select and it is typed into their document. Any mouse device including mouse pads, trackballs, touch screens and Interactive Whiteboards could be used to select the key from the on-screen keyboard

- *Hover*. The student moves the mouse cursor over the key they want to select and leaves it there. After a short amount of time (from 0.5 seconds to 3 seconds) the key is selected. This allows students who cannot activate a mouse click to still enter text to the computer.

- *Scan*. Some students cannot engage with any keyboard or mouse device. They may only be able to activate a switch device that can be connected to the computer. Students who are using switches can still enter text to the computer

Sticky Keys

Many students have difficulty holding down multiple keys when they need to carry out keyboard functions. For example, in order for a student to log into a Windows network, they need to hold the Ctrl and Alt keys down and press the Del key. Many students cannot do this. Sticky keys allow the student to press the three keys one after the other and it holds the keys down for the student.

The Sticky Keys function can be accessed either through the Ease of Access control or by pressing the Shift key five times in a row.

Toggle Keys

On some computer keyboards it is difficult to determine if the Caps Lock or Number Lock has been activated. Toggle keys provide a sound signal when the Caps Lock or Number Lock. It provides a high tone when the Caps Lock (or Number Lock) is turned on and a low tone when the Caps Lock is turned off. This is useful when the student needs to type in capitals and they cannot tell if the Caps Lock is turned on. It is particularly useful when the student is entering a password that is case sensitive. Filter keys – ignore brief or repeated keystrokes.

Mouse functions: Change pointer size and colour.

Other functions: Visual options (play animations /show notifications) and Touch feedback can be set to on or off.

Control Panel

Windows Control panel in Windows 8 is similar to Windows7. Allows quick access to common tools and options.

Inclusive Considerations

Windows 8 has all functionalities built into one operating system (OS), reduces the need for a range of devices. Consider the type of access the student may require – do they require a mouse, touch or switch access. App icon size can be changed to a suitable size for the student, and apps can be grouped and labelled for easier access. App icons can be accessed instantly rather than having to go to the start button. Apps can be hidden from the start screen and desktop to avoid confusion. Touch uses edges of the screen and mouse uses the corners.

# Handy Programs

Screen snipping
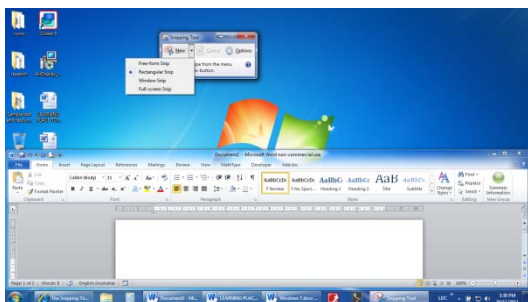
Screen snipping allows you to capture the image of the current screen and paste or save the image to another program. The Screen Snipping tool is similar to the "Prnt Scrn" button on your keyboard but has more functionality. The snipping tool is found in the Apps list under the heading 'Windows Accessories, or can be located by searching with the Quick Search. The snipping tool was used for the screen shots you see in this document. You can choose four different ways to capture a section of the screen. You can also add drawing to the screen shot. To capture a screen shot:
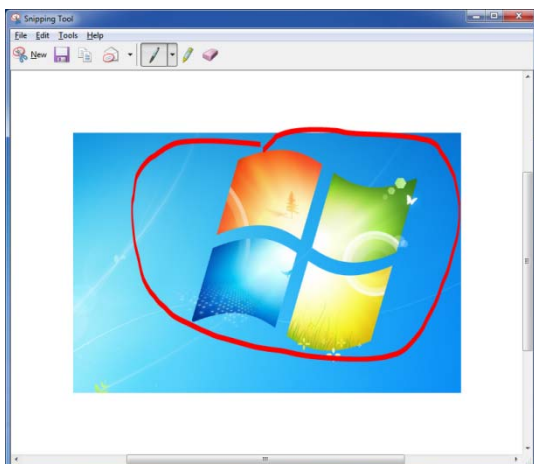
1. Open the Snipping tool.
2. Click on New and choose the type of capture (Free-form, rectangular, window or full screen). The screen will fade and the cursor will change to a cross.
3. Draw the area around the part of the screen you want to capture. The section will be opened in the Snipping Tool window.
4. Add any annotations to the capture.
5. Save the image as an image file or copy the image to another program such as MS Word.

Sticky Notes
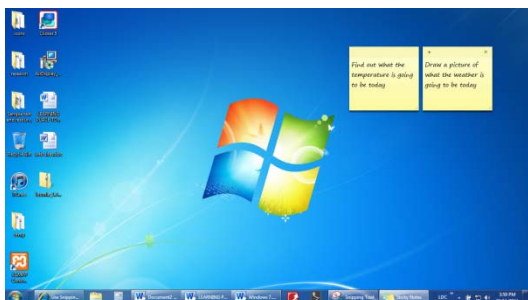
For many students, the use of notes, reminders and lists of procedures assists them in being organised. Windows comes with a Sticky Notes accessory that allows students or teachers to add notes to their desktop that they can refer to for their work. The notes only take text, so you can't use pictures if the student has difficulty with reading text. You can use the Narrator screen reading software to have text on the note read. You can change the colour of the note to identify different types of notes. You also have some limited functionality in changing the font (bold, underlined, bullets, etc.). The note can be copied to or pasted from another text tool (e.g. MS Word).

To create a note:

1. Find the Sticky Notes tool from the list of apps under the heading ' Windows Accessories' or search for the Sticky Notes tool in the search window. Touch or click on the Sticky Notes icon and a new sticky note will be displayed.
2. Type your message/note onto the sticky note page (it appears as a handwritten note).
3. To create another note click on or touch the + sign in the top left corner of the note.
4. To change the colour of the note, right click or touch and hold on the note and choose the colour.
5. To change the text formatting, highlight text and use the appropriate keyboard shortcut (e.g.: Ctrl B for Bold).

Personalization of Desktop display

Users are able to change the layout and display of the Windows 8 desktop. There are many things you can change and some of these tools allow you to make the environment more accessible. Some of the options that can be changed which can enhance student capacity to engage with the desktop display are listed below. The method described below uses the right click or touch and hold on the desktop to access the function.

It should be noted that some of these features may not be automatically available to the student if the school operating environment (such as DET's MOE) has removed access to these features.

Change icon size

This makes the icons on the desktop larger (to give the student a larger target to select with the mouse) or smaller (to give the student more icons on the desktop instead of having to go to the Apps list to locate a file.

1. Right click on the desktop.
2. Choose View
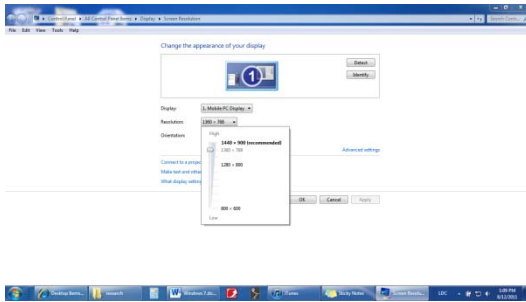3. Select the icon size you want to use.

Display/hide desktop icons

Sometimes you want to hide the desktop icons to prevent the student from accessing certain files, or to remove distractions from the desktop.

1. Right click or touch and hold on the desktop.

2. Choose View
3. Select "Show desktop icons"

Screen resolution

You may need to change the resolution of the screen to better display certain files or software.

1. Right click or touch and hold on the desktop
2. Choose Screen resolution
3. Set the resolution to suit.
4. Click the Apply button. The resolution will change to the new setting. If the setting is not suitable, cancel or wait for 15 seconds and the resolution will revert to the previous setting.
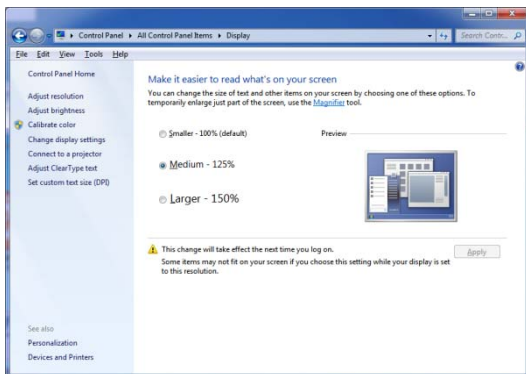
Display

The display allows you to change the visuals and sounds on your computer – including Desktop Background colour, window borders and task bar colour and screen saver, and changing the size of the text and some other features that are displayed in windows. This function makes it easier for many users to read the text displayed in menus, icons and windows.

1. Select the Personalize option from the Desktop right menu.
2. Choose Display on the bottom left menu.
3. Change the size of all items on the desktop (Smaller – Larger).
4. Or change the text size only.

Other controls to support student access

There are two other controls that can be changed to suit the student and enhance their engagement with the computer.
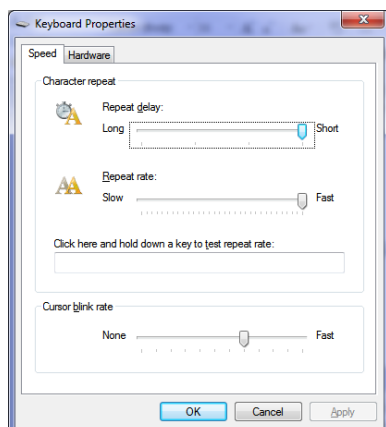
Keyboard

You can change how the keyboard functions with student input. There are two main functions that you can change in the general keyboard area. Other functions are described later in the Student Support section.

Repeat delay

When a student holds down a key on the keyboard for an amount of time, that key will repeat. Often students unintentionally hold a key down for too long, making it repeat. This requires the student to spend time deleting the extra keystrokes. If you slide the Repeat delay button to the left (towards long), the amount of time between when the student first presses the key and when it begins to repeat is increased. This may be enough to stop the student from accidentally repeating a key.

Repeat rate

The repeat rate determines how often it repeats a key in a given amount of time. Setting the repeat rate to fast will make the letter or number repeat very quickly. If students are repeating keys, slide the Repeat rate to slow (slide to the left). This will mean fewer letters are typed in the same amount of time if the key begins to repeat, and will reduce how many corrections the student may need to make.
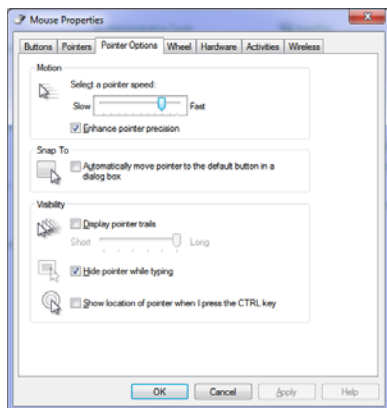
Mouse
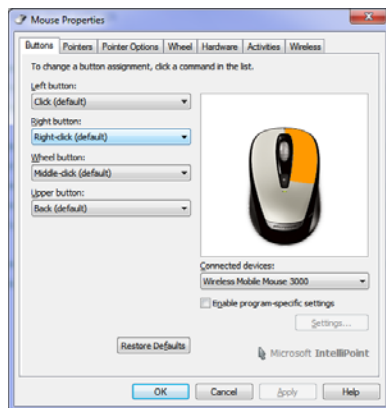
There are a range of mouse settings that can be changed to suit the student. The options available may depend on the type of mouse you have connected. Some functions may not be available on all computers and for all mice. The functions described below will be available for all mice attached to a Windows 8 computer.

Buttons

You can change the function that each button on the mouse carries out. This is useful if you have a student that requires a specific function to be put onto a different button. For example, you can change the click function to be on the right mouse button for left handed users. You can make both the left and right mouse buttons carry out a regular mouse click for students that cannot isolate one button from the other.

Pointers

The pointer options are described above in the Personalisation section.


Pointer Options

The pointer options allow the student to change how the pointer functions on the computer screen.

- *Pointer speed*. This determines how far the pointer moves on the screen when the mouse is moved a set distance. This is useful for students who have specific motor needs. Students with poor gross motor skills or who have limited movement in their hand can increase the mouse speed so they don't have to move he mouse as far. Students who struggle to select small targets on the screen can have the mouse slowed down to give them a larger margin of movement.
- *Visibility*. This places a string of cursors behind the main pointer as it moves around the screen and helps students to see the direction the mouse is moving.
- *Show location of pointer*. This allows students who have difficulty seeing the cursor to locate the cursor. When the Ctrl key is pressed, a series of concentric circles form around the cursor and zoom in to the location of the cursor.
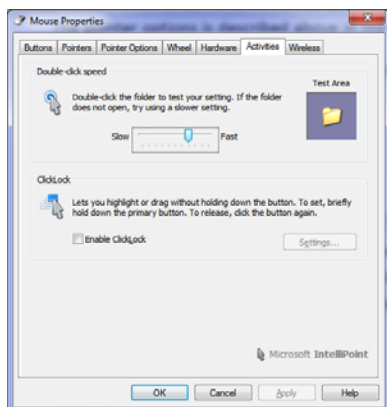
Activities

The mouse activities allow additional functions of the mouse to be changed.

- *Double-click speed*. Some students find it difficult to click the mouse button fast enough for the system to recognise the action as a double-click. You can change the amount of time between the first and second clicks so it recognises the two clicks as a double-click action, rather than two single clicks.
- *ClickLock*. Some students can have difficulty holding down the mouse button while they are dragging. The Click lock allows the student to hold the button down for a short amount of time, and then take their finger off the mouse button. Windows 7 will then hold the button down for the student.

Student Support

Besides the regular functions and controls that can also benefit students with special needs, there are a number of tools and functions specifically designed to enhance access for users that may have specific needs.

Speech Recognition

Windows 8 comes with the capacity for a student to speak into a microphone connected to the computer and the computer then typing what the student has said into a document. This process significantly reduces the amount of time and errors a student may make when entering text.

There are numerous considerations that need to be taken before a student is able to successfully use speech recognition in a classroom environment and before the software is able to accurately recognise their speech. Information regarding making speech recognition successful can be found in other documents.

Additional support

There is additional support available in the form of a range of video tutorials in many of the features listed above. The tutorials are available at www.microsoft.com/enable/demos/windows7.