

Using a Laptop Computer

Many students now own a laptop computer, as well as, or instead of a conventional desk top computer. Although both laptops and desktops operate essentially the same with a given operating system (e.g. Windows XP) and application (e.g. Internet Explorer), there are some physical differences which can often confuse a new laptop user. Some of these differences will be explained below, along with suggestions for making the usability appear to be similar.

Differences

The main differences between a laptop computer and desktop computer are:

- **The keyboard.** A regular keyboard has approximately 103 keys. In order to reduce the size of the keyboard, but still keep the key spacing the same as a conventional keyboard, a laptop only has between 80 and 90 keys. To reduce the number of keys, a laptop does not have a separate numeric keypad. Also, the navigation keys which are normally in a block between the main keys and a numeric keypad on a conventional keyboard, are "spread" around the laptop keyboard. This last point often causes confusion, as each different laptop will place the same key (e.g. the "Delete" key) in a different place on the keyboard. If you plan to use the laptop keyboard, you will need to spend quite a bit of time familiarizing yourself with the position of the keys.
- **The mouse.** Most modern laptops come equipped with a "touchpad" type of mouse. Below the touchpad are typically two buttons, which represent the left and right buttons of a conventional mouse. These touchpad mice normally come with special utilities that allow advanced users to use double-clicking, right-clicking, and scrolling, directly from the touchpad. It is normally easier for beginners to turn off these advanced features, and just use the touchpad for movement, and the buttons for the right-click, left-click and double-clicking actions.
- **The display.** The display on a laptop is always a flat panel type of display. Flat panel displays are manufactured with a specific number of pixels. Typical laptop displays will be 1280x1024 pixels, 1280x800 pixels, 1024x800 pixels, etc. with a diagonal screen size of between 14 inches and 17 inches. Unfortunately, this screen resolution cannot be changed, as is often possible with a desk top computer and a separate monitor. For those people that prefer the text and icons on the desktop to be much larger, and are used to their computer monitor being set to 800x600 pixels, the laptop display may be quite difficult to read. It is possible by going to the advanced desktop settings, to adjust the size of many of the fonts and icons. However, it will not re-create the overall larger picture obtained with the 800x600 resolution monitor.

- **The power source.** A laptop has the unique ability to operate from its internal batteries. When the laptop is being operated from the internal battery only, it will typically run the processor at a slightly reduced speed and will power down the hard disk and the display after a few minutes of no use. Then, the laptop will typically go to standby mode within 10 minutes of no use and into hibernation 15 to 30 minutes later. These settings can be adjusted from “Power Options” in the control panel. Just be aware that the times just mentioned, are typically the default settings when you first get the laptop computer.

So, once you have learned the layout of your laptop keyboard, learned how to use a touchpad mouse, have strong enough glasses to read the laptop display and keep the laptop plugged into its power supply, you'll find no difference in running your laptop computer with the same programs, as running them on a desk top computer. On the other hand, the laptop takes up significantly less space and can be carried with you when you travel.

Alternatives

If you wish to avoid some of these differences, it is very simple and inexpensive to add an external regular keyboard and mouse to your laptop computer. A conventional keyboard that has a USB connector that can plug directly into your laptop, can be purchased from \$15. Similarly, a regular mouse also with a USB connector that can plug directly into your laptop, can be purchased from \$10. For \$45 you can buy both a keyboard and mouse that operate by wireless and have the advantage of being cordless.

All laptops, also come with a connector to use an external monitor. However, to purchase a new monitor can be quite expensive. If you already own one, then this can be used, and may improve the "readability" of your screen.

Summary

The main difference in using a laptop compared to a desktop computer, is in the layout of the keyboard and the use of the mouse. If desired, an external keyboard and mouse can be purchased and attached to the laptop, making these differences disappear.