



Burke County
Public Library

BASIC COMPUTER SKILLS

On any given day, most of what you do will involve computer systems. The Television channels you watch, the radio stations that you listen to, the car that you drive in, and even the cash register at the local grocery store are all controlled in some way by computer systems! They help us perform tasks, keep track of a great deal of information, and even control the airplanes that fly above us. During the course of this class, you will learn about how they work, how to perform simple tasks, and much, much more.

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Identifying Major Computer Components

As with most products, computers are designed in a variety of ways. There are, however, major similarities regardless of brand. All computers have the following components and mechanisms:

THE MONITOR:

The monitor looks like a television screen and is where you see what is happening on your computer. By using shadows and graphics with over a million colors, much of what you see will appear 3-dimensional.

THE TOWER/CPU:

“CPU” stands for “Central Processing Unit” and houses the machinery that allows your system to work correctly. In a laptop, all the pieces are squished under the keyboard, but in a desktop it is usually a separate unit

THE KEYBOARD:

The keyboard is one of two ways to input data into your computer. It has been modeled after a traditional typewriter.

THE MOUSE:

This is another way to input commands into your computer. Most mice have two buttons, but some feature up to five! On laptops, they are often designed as a “touch pad” with two buttons.

Desktop Computer



Laptop Computer



The following things are important to consider when appraising a computer system:

- *How fast can it perform tasks?
- *How much data can it store?
- *How many programs (i.e. software) can it run simultaneously?

How Computer Systems Work

INPUT/OUTPUT DEVICES

Computer Systems are designed to work with “data.” Data comes in a lot of forms, whether it is typed data (such as a letter to a friend), audio data (like a song), video data (like a popular movie or DVD) and more. Certain types of software programs work with different types of data. For example, the popular iPod device from Apple Computer works primarily with audio data, and Microsoft Word works primarily with written data. The keyboard is just one of the ways in which you can input data into the computer system. Conversely, there are a number of ways to get data *off* of the computer, such as printing it out on paper, copying it to a CD-ROM or DVD, or publishing it to the Internet.

It is a common misconception that computer systems have “a mind of their own.” Although they can perform tasks much easier than humans can (like counting, performing mathematical calculations and more), they **always respond to your commands!** In fact, the computer system will **do nothing that you do not tell it to do.** In this vain, it is important to remember that you are in control of the computer in the same way that you are in control of your car. It won’t move until you put your foot on the accelerator, and it will not stop until you press the brake.

OPERATING SYSTEMS

Computers without operating systems are exactly like televisions without a signal. Yes, it will turn on, but you will be looking at a blank screen with no hope of interacting with it! The most popular operating system on the planet is “Microsoft Windows,” and is utilized by 90% of the world’s computers. It is a very complicated program that **acts as the brains of the computer**, allowing you to run other programs, work on projects, and do basically everything of which computers are capable.

There are other operating systems out there as well – the Apple Computer company uses an operating system called “Mac OSX” which, while looking very different from Microsoft Windows, runs under the same basic principles.

The operating system is so important that computers are sold with them already installed and ready to go. In addition to this, popular software programs are often already on computers, so all you have to do is plug it in! This is the equivalent of buying a television set with cable already installed, as well as several DVD videos stored on it as well.

Do you ever need to mess with the operating system? No. It should run correctly and without error for as long as you have your computer – in fact, if you ever bring your computer to get fixed (for whatever reason), you can bet that the technician will be looking primarily at your operating system (not your programs) in the same way that a mechanic will look at your car engine.



In order to use your computer effectively, you must input commands using both the mouse and the keyboard. Learning just a few certain keys will help to improve your efficiency in typing as well as present you with more options within the program. The following is a list of commonly used keys that have special functions :

- 1. Backspace:** This key deletes backwards as you type.
- 2. Delete:** This key deletes forwards as you type.
- 3. Shift:** This key, when pressed WITH another key, will perform a secondary function. If the key is a letter key, pressing the shift and letter key at the same time will result in a capital letter. There are 2 on the keyboard
- 4. Spacebar:** This key enters a space between words as you type.
- 5. Tab:** This key will force the cursor to indent, or jump forward 10 spaces.
- 6. Caps Lock:** This key will present the capitalized version of each letter key. It is a toggle switch that locks until you press it again.
- 7. Control (Ctrl) & Alternate (Alt):** These keys, when pressed WITH another key, perform a shortcut. There are 2 on the keyboard
- 8. Enter:** This key executes a command (pressed in MS Word, it begins a new line)
- 9. Number keypad:** This is a redundant keypad existing only for user preference. It is not present on all keyboards.
- 10. Arrow keys:** Like the mouse, these keys are used to navigate through the document.

A Word of Caution

Remember that computers are machines just like any other mechanical object. Sometimes, although rarely, they are subject to failure, and certain parts must be replaced. It is important to note that they also need to be maintained, just like your car or other machinery; adding a bit of sporadic care to your computer will return to you in the long run, allowing your system to run smoothly and efficiently. Remember to be careful with foods and liquids!

The Mouse

While the keyboard primarily inputs data (in the form of text and numbers) into the computer, the mouse is used mostly for navigating around the screen. They come in a variety of shapes and sizes, and are entirely designed for comfort.

Each mouse, however different they may be, all feature similar functions. A traditional mouse has two buttons and a wheel between them (gray) that spins called a “trackwheel.” Both buttons perform separate functions, and are known by which side of the mouse they are on.

In other words, pressing the LEFT mouse button is called “left-clicking,” while pressing the RIGHT button is called “right-clicking.” Left-clicking is used far more often than right clicking. For now, know that left-clicking executes a particular task, while right-clicking presents menu options.

CLICKING

One of the most difficult things to learn when starting out with computers is how to use the mouse. It takes coordination, finesse, and precision. Fortunately, **every single time you practice**, you will get better!

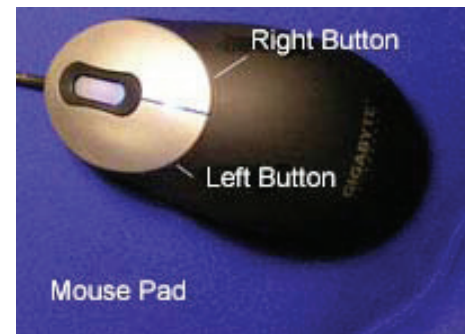
It is important to know that the mouse will change its look and application depending on which environment you are currently in. For example, the mouse will most often look like a pointer: but occasionally will change into something else, like a hand. There are actually a lot of possible combinations, depending on what task you are trying to perform.

The buttons on the mouse will also assume different roles, again depending on which program you are using. If you are working in Microsoft Word, for example, the mouse will offer options **related** to Microsoft Word. Conversely, if you are working in Microsoft Excel, the mouse will offer options related to Microsoft Excel, and so on.

For now, remember these rules:

1. The LEFT mouse button **SELECTS** items.
2. The RIGHT mouse button **GIVES YOU MORE OPTIONS**.
3. Double-Clicking the LEFT mouse button **EXECUTES** options.
4. Double-Clicking the RIGHT mouse button **DOES ABSOLUTELY NOTHING!**

Practice makes perfect. Using the keyboard and mouse may seem difficult at first, but it will become easier over time. **Note: the mouse is intended for you to use with your right hand, regardless of whether or not you are right-handed.**



Starting the Computer and Logging In

TURNING THE SYSTEM ON

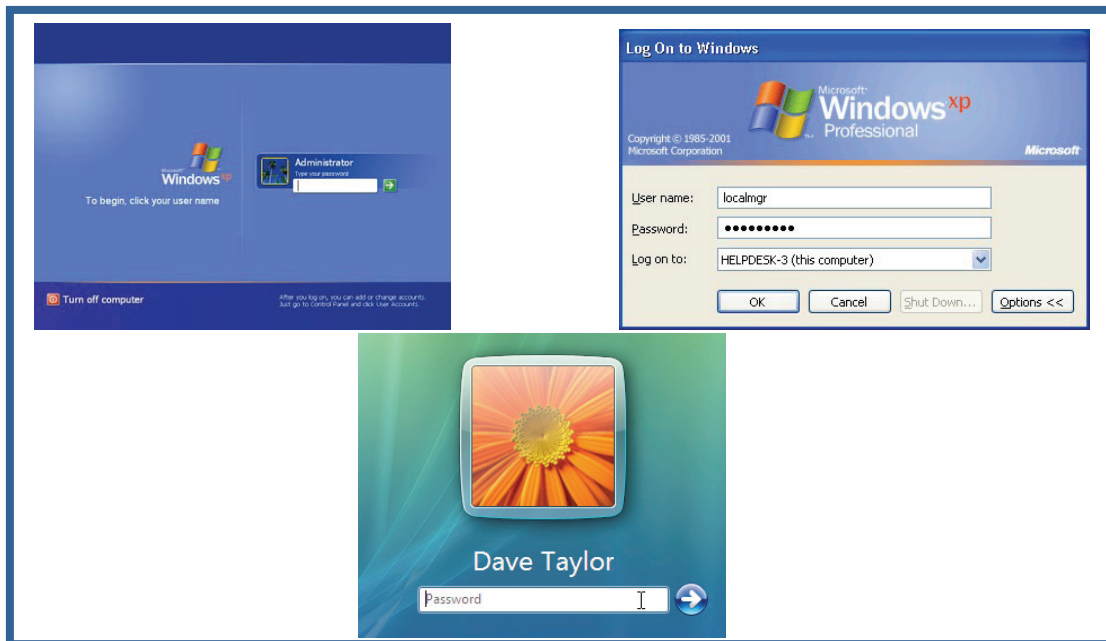
Let's get started! As you sit down at your desk, you can assume that your computer system is in one of two states:

OFF: This is exactly what it sounds like! The computer system is as good as being unplugged from the wall. The monitor is black (nothing on it), there is no “whirring” sound from the CPU, and the system is unresponsive to mouse movements. It is time to locate the POWER switch on the front of the CPU and press it.

SLEEP MODE: Modern computers have a mode called “Sleep” in which the computer is ON, but it has assumed an energy-efficient minimal power mode. To “wake” it up, simply move the mouse around, and it will come back to life at exactly the same place that it went to sleep (in other words, if you were using a word processing program and put it to sleep, it would return to exactly what you were working on upon waking up!).

LOGGING ON

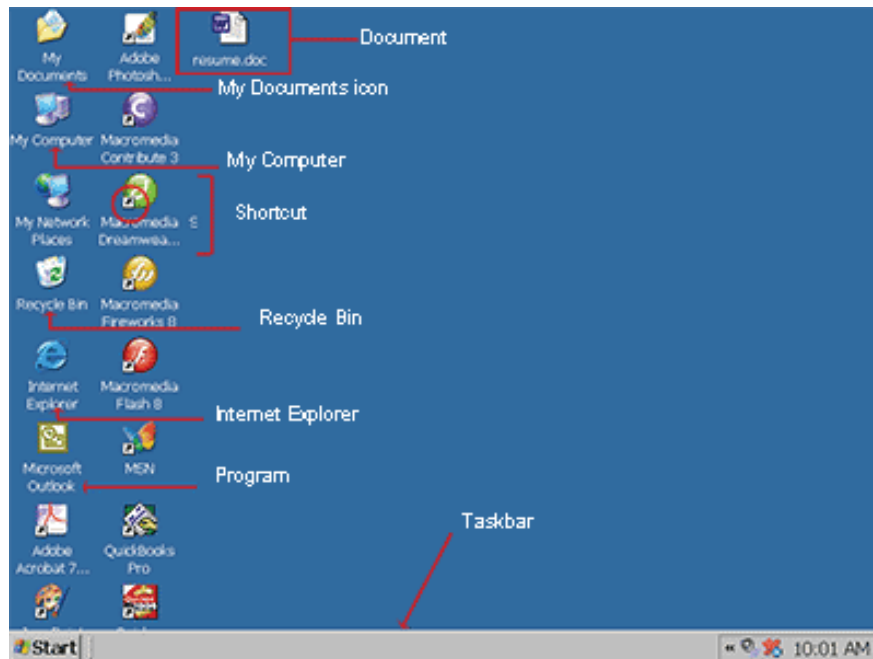
Once you turn the computer on, the monitor will show a series of tasks before it is ready for your commands. This will last about one to two minutes; If the system is performing as it should, however, you will probably come upon a log-in screen like the ones below.



This is called a “Log On” window, and it allows the computer system to be password protected. If you do not see this window upon starting the computer, you can assume that your computer is NOT password-protected and may be used by anyone.

If you are sitting in front of a public computer (such as the one that you might find at a public library), it can be assumed that someone has already “logged on” for you.

The Desktop



The computer will reach what is known as your **desktop** within a few minutes of turning it on. Here you will see a digital representation of a real-life desktop, complete with a workspace, files and file folders, and even a trash can!

One of the neatest features about Microsoft Windows is that **your desktop may not look anything like this one!** While this sounds terribly unfair, it actually means that you are able to **manipulate, alter and change** almost **EVERYTHING** about your desktop environment. If you do not like the color blue as your background, where the icons are, or even what language it is in, you can change it!

Some examples of desktop pictures and looks



Microsoft Windows XP



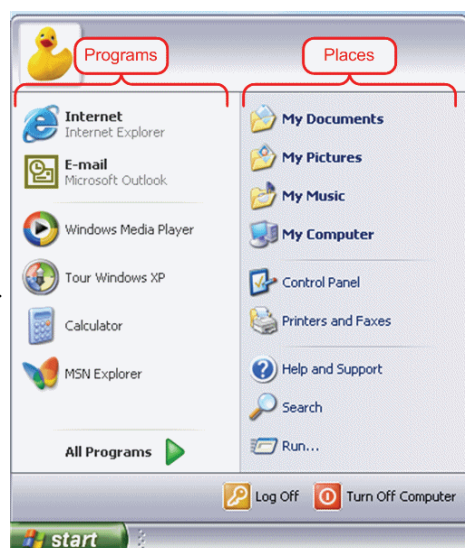
Microsoft Windows Vista/ Windows 7

The Start Menu

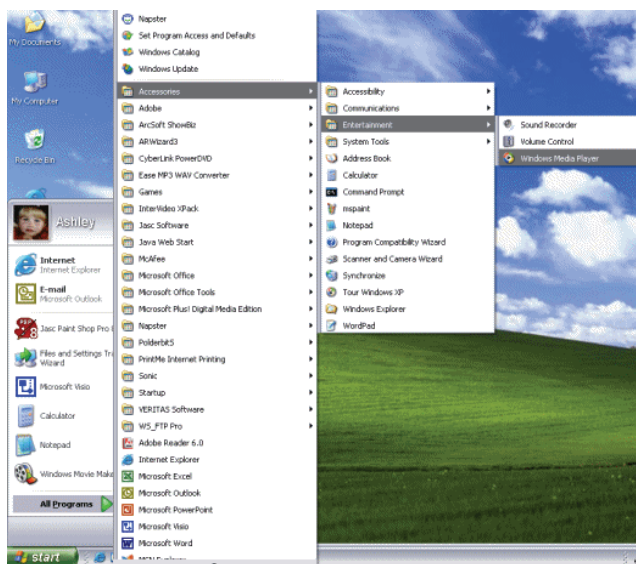
Microsoft Windows is a friendly, colorful and customizable operating system. Due to it being a staple in a business environment, it also is extremely efficient and professional looking. It has, just like any other piece of software, undergone many changes over the past 22 years, and is now being released in a version called “Microsoft Windows 7.” Other versions of the program that you might have heard about include “Windows 3.1,” Windows 95,” Windows 98,” “Windows ME,” “Windows XP,” “Microsoft Windows VISTA,” and the newest version: “Windows 7.”

The **START MENU** is a good place to, well, start! It is found in the lower left corner of your screen – just LEFT-CLICK on it once to open it.

Notice the incredible amount of options that are immediately presented to the user. Popular programs, like Internet and Email software are on the left, while folders, files and help features are on the right.



It is also important to note the “Log Off” and “Turn Off Computer” buttons on the bottom of the menu. Consider these your “ignition” for the computer. If you want to shut it off, this is where you go!



By LEFT-CLICKING on “All Programs,” another menu will spring to life. This is a list of all of the programs that you have installed on your computer. Everything that you would ever need to do with your computer system can be found in the Start menu. This includes finding help, using programs, getting on the internet, emailing, printing, playing videogames, customizing your desktop, and much more!

Both of these start menus are from windows XP, like the desktops, they are customizable. Windows Vista and Windows 7 have start menus with a search box for programs, but otherwise it are very similar!

The Task Bar

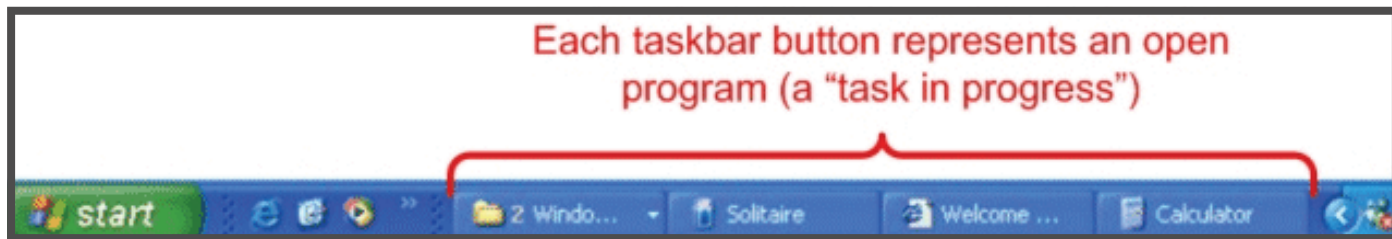
Microsoft Windows is capable of running more than one program at once. In other words, you can write a letter in Microsoft Word, **while** surfing the Internet **while** using Microsoft Excel **while** checking your email and so on!

This is called “Multi-Tasking” and is a feature of all computer systems.

The question that follows is:

How do I know (and keep track of) all of the programs that are running at once?

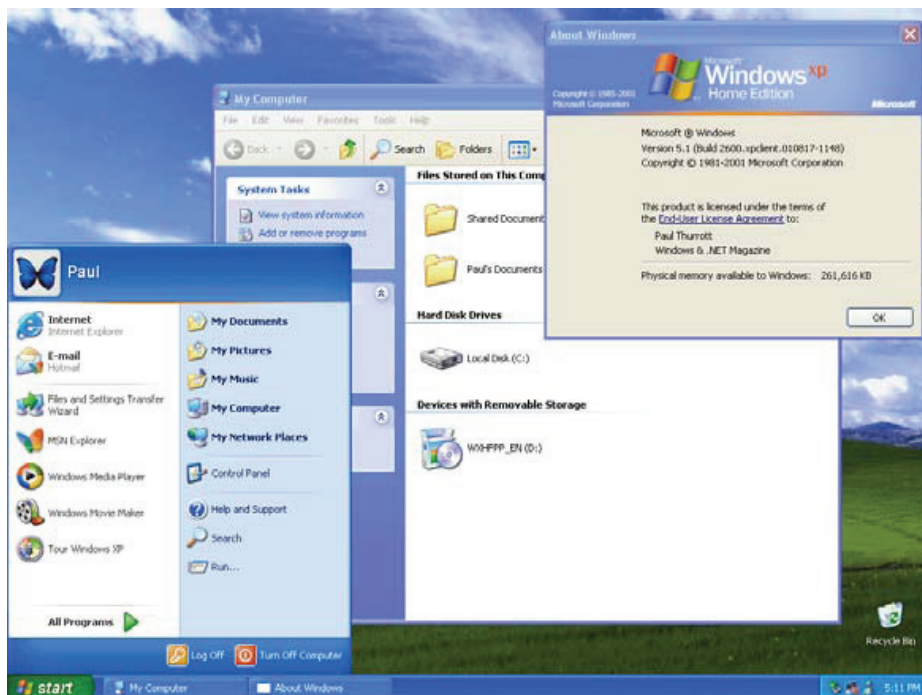
The answer is found in **the Taskbar**, which sits on the bottom of your screen next to the Start Menu. It looks like this:



Windows and 3-D Viewing

Microsoft Windows is called “Windows” for a reason. Programs appear on your screen as “windows,” and are laid 3-dimensionally on top of one another.

The graphic to the right illustrates how “windows” are arranged on the desktop. The desktop is your “bottom layer,” and all of your open windows appear on top.



Using the “Filing System” in your Computer

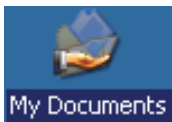
Once you start using the programs on your computer, you can save your work. Each piece of saved work is called a “file” or a “document.” Just as in real life - you can organize these files or documents into folders inside your computer.

Think of it as a virtual file cabinet.

Just as some people keep an organized file cabinet in real life, and others keep a messy one - your computer will reflect your sense of organization. It is always easier to find things if you organize them well!



Most people keep their files or documents organized in their “My Documents” folder.



It should be located on your desktop, or can be found in your start menu under the “Documents” option. Once inside “My Documents” - you can either save all your files or documents in one big pile, or you can make separate folders for each area (for instance, a folder for family correspondence and one for financial records).

Making Folders in Windows XP

- Double-click “My Documents” on your desktop
- Click on the link on the left side of the screen that says “Make a New Folder” and a new folder will appear in your window. Don’t click on anything after you click “Make a New Folder”
- The folder will be ready for a name, so just type in what you want to call it and Press enter on your keyboard.

Oops - I clicked and it won’t let me name it...

- No worries, just right click on the folder with your mouse and choose the “Rename Option.” Then just type the name you choose and press enter!

To Put an existing File in your new folder

- Find the file you want to move into a folder
- Right click the icon for that file - use your left mouse button to choose the “Cut” option
- “Navigate to” (computer speak for find) the folder you want to put the file in
- Right click the icon for that folder - use your left mouse button to choose the “Paste” option

Variation: Click and drag the icon for the file into the new folder. You will see the outline of the file icon move as you drag it, and you will see the folder turn blue when the file icon is on it. Be sure you don’t drop into the wrong folder - it can be tricky to find when that happens.

You can also save a file directly to the Folder of your choice! When you work in a program and choose “Save As” - navigate to the correct folder, name the file, and hit save! Each program is a little different, so refer to the information you have for the program to see how to save a document or file.

Other Programs and Software

Is the software that comes pre-installed on your computer when you buy it all that you get?

NO! There is a TON of software out there, ranging from educational games for infants all the way to professional DVD-production software. If you are interested in a particular type of software, check out these websites:

<http://www.atomicpark.com/>

<http://www.trybestsoft.com/>

<http://www.pcmag.com/>

<http://www.compusa.com/>

<http://www.amazon.com/>

<http://www.microsoft.com/>

If you would like helping choosing a computer to buy, you can check out these websites:

http://www.ehow.com/how_3038_buy-computer.html

http://askbobrankin.com/how_to_buy_a_computer.html

NOTE: In the same way that there are plenty of car manufacturers, there are also plenty of companies that produce computers. Like American cars, however, **most** computers fall into a category called “PC computers.” They are all compatible with each other, and will all run “PC” software.

HOWEVER, there is also a company called “Apple.” Apple’s computers (sometimes referred to as “Macs”) are a different breed of computer system. It is the equivalent of buying a British car – they may look similar, but you will be driving on the opposite side of the road while sitting in the right seat, so to speak. Both types of computers are good and work really well. But 90% of the world’s computers are PCs, and they are what you will find at most libraries and in most homes. It’s a good place to start!

Key Facts About Computer Systems

- *A Computer does not need to access the Internet in order to run properly.
- *A Computer needs an “Operating System” in order to work. Common operating systems include **Microsoft Windows**, **Mac OS X**, and **LINUX**.
- *Printers, Mice, Keyboards, USB devices, DVD burners and more are all called “Peripherals” and may be purchased in order to expand the capabilities of the computer.

Logging Off or Shutting-Down

When you are done with a session, you should always log off a computer or shut it down. If you are in public, log off! (especially here at the library). If you are at home, then you can choose whether to log off and let other family members log in with their own accounts, or shut down completely and save electricity!

In order to **turn your computer off**, simply locate the “Turn Off Computer” or “Shut Down” button located in the Start Menu. Left-click on it once. It will probably bring up a separate box that will ask you what you want to do - choose Shut Down and click ok.



To **Log off**, open the Start Menu and locate the “Log Off” Button. Left-click on it once, and a dialog box will pop up that asks you if you want to log off, press ok and it is ready for the next person. If the Log Off button does not appear in the Start Menu, click the “Turn off Computer” or “Shut Down” button. When the dialog box appears, it will give you the option to “Log Off”. Choose this and click ok.

At the Library: click “done” on the time box at the top of the screen and then click “end now” to finish!

Finding More Help



If you ever get stuck, help is right around the corner. The HELP feature for Microsoft Windows is located in the Start Menu and is called “Help and Support”; all other programs on your computer will also have an individual help feature as well. They are very user-friendly, and, most likely, have a well-prepared answer to your question. In addition to this, most programs come ready with 1-800 numbers to connect with a technician who is readily available to help you on your way.