



Introduction to Using a Computer or Computing Device

Lesson Length: 2 hours

(for 2 one-hour classes, divide the curriculum after Topic 3)

Lesson Plan:

The following text will lead you (the instructor) through the topics that are to be taught. This is not, however, a script. So how should you use this?

1. Read through this entire packet of information about this lesson and familiarize yourself with its various elements. If there is a topic covered that you do not feel comfortable with, take time to explore relevant links in the lesson or in the “Additional Resources”. You’ll feel more comfortable delivering the material to your students if you are confident in your knowledge of the topics!
2. Likely as you read through this packet, you thought of on-topic examples or stories that you want to share. Scribble a few notes or keywords in the margins of the lesson, so you remember where you want to insert those stories.
3. Talk through the lesson out loud, as if you were teaching it to someone. Undoubtedly, this will seem very unnatural and that is okay. Every instructor goes through this step – even if the person has taught the same topic multiple times. Even if you do this quickly, it will help you further understand the lesson and how to approach each topic.
4. Try any exercises that are included so that you know what the results will be. Again, make any notes that will be helpful to you.
5. Relax...take a deep breath...smile...and...teach!

Participant Prerequisites:

A person that signs up for this workshop does not need any prior experience using a laptop or desktop computer, or another type of computing device. However, understanding the content of this workshop is a prerequisite for the other three workshops in this series:

- How can I use the Internet to communicate with others?
- What is the Internet and how do I use it to locate useful information?
- How do you use word processing software?

Anyone who needs know how to use a computer should take this workshop. A person who needs to send an email message, use a computer to complete a job application, or wants to use the Internet should take this workshop in order to learn important basics.

Instructional Aids, Materials or Tools Needed:

- As you read through this lesson in advance, note (and do) anything that you need to do in advance (e.g., have the computers turned off). This will help the lesson go smoothly.
- This lesson plan uses a PowerPoint presentation. Make sure that you have a copy of that presentation on the instructor's computer in the training facility.
- Copy handouts, based on the PowerPoint presentation, for each participant. If a master copy is not available, print the handouts using the print option in PowerPoint. Print two (2) slides on each page in grayscale (not color).
- Make copies of the "Basic Computer Terminology" handout from Lockport Public Library, which is available at http://www.nysl.nysed.gov/libdev/nybbexpress/curriculum/lockport/lpl_basicc.pdf
- It may be helpful if you have information handy about the computers that are being used for the workshop. For example, how much memory do they contain? How fast is the CPU? If you do not have this information in the library, it is available from the manufacturer's web site. If the training center contains different models of computers, you may want to have this information for one of the computers in the room, as a representation of what all of the computers likely contain.
- Each participant will need a desktop or laptop computer. If using laptops, make sure that the laptops are either fully charged or are connected to an electric outlet.
- It is preferred that participants, who are using laptops, use an external mouse, rather than the touchpad. An external mouse is easier on a person's hand.
- In order for the instructor to be able to demonstrate techniques easily, the instructor should have a PC that is connected to a projection unit. If the instructor does not have access to this, then the person may need to spend time one-on-one with some participants to ensure that instructions are understood.
- If the session has over 10 participants, the instructor may want to enlist the help of another person who can circulate around the room and help participants who get stuck with a command or exercise. That person should be instructed to talk the participant through getting unstuck, rather than touching the keyboard or mouse to fix the situation for the participant.

Class Structure (Agenda):

The class is divided into major questions that you will want your students to be able to answer by the end of your two hour session. Each major question is its own topic and goal (or preferred outcome) and an explanation on how to achieve that goal. Most topics also include a demonstration or a class exercise. Although there are not specific question and answer periods in each topic, it will be helpful if you answer questions as they arise. There also may be additional instruction resources with each topic as well as more general resources available at the end of this document.

Major Questions (Topics) include:

1. What is a computer or computing device?
2. How do you begin using a computer?
3. How do you use a mouse and other peripheral devices?
4. What is the difference between an application and a document or file?
5. How do you open and close applications and files?
6. How do you organize your files?
7. How do you install software or applications?
8. How do you turn off the computer?
9. How do you stay safe on the computer?
10. What kind of computer should you buy if you could?

Instructional Goals (Outcomes):

After completing the session:

- Participants can explain what a computer is, what other devices can act like a computer, and why software is important.
- Participants can demonstrate how to turn on a computer and explain what the “desktop” is.
- Participants can identify a mouse, keyboard and other input devices.
- Participants can explain the difference between a file and an application.
- Participants can open and close applications and files using the commands in the application’s menu.
- Participants can demonstrate how to organize computer files into folders similarly to paper files, so they can be easily retrieved.

- Participants can explain how software helps them use the computer and demonstrate how additional software can be added to a computer, if desired.
- Participants can demonstrate how to turn off computing devices and explain when it is necessary to do so.
- Participants can explain basic safety concepts of computing like viruses and anti-virus software, and privacy/security issues.
- Participants can describe what kind of computer they might purchase for themselves, where to get one and how much it might cost.

TOPIC 1: What is a computer or computing device?

GOAL:

- Participants can explain what a computer is, what other devices can act like a computer, and why software is important.

ASK:

- Can you point at the computers that are in this room?
 - They will likely point to the laptops or desktop they are using.
- What do computers allow someone to do?
 - Expected responses:
 - Get on the internet
 - Write letters
 - Play games
 - Watch videos
 - Talk to people

EXPLAIN:

Generally, these are the types of devices that we are talking about today:

- Smartphones
- eReader
- Tablets
- Netbooks
- Laptops
- Desktops

Can you do those things on a smaller computer than these? Can you do those things on a cell phone?

- The answer is “yes”, since those devices also function as computers.
- You may want to tell the participants that not all cell phones do the same things. Many cell phones are “smartphones”, which mean that they function similar to computers.
- Here are definitions that may help answer questions that arise about cell phones:
 - *The definition of a smartphone is a cell phone that can also function as a portable media player, digital camera, video and audio recorder, and Internet device. Smartphones connect to the Internet using local Internet access (wi-fi or wifi) and the telephone network (mobile broadband). A smartphone may be able to do many of the tasks that a computer can do.*
 - *Many people also own “feature phones”. The definition of feature phone is a cell phone that has additional functionality that a standard cell phone does not. A feature phone may have some of the same features as a smartphone, but with some limitations (which will be different depending on the phone). Feature phones are less expensive than smartphones.*
 - *A basic (or standard) cell phone can make phone calls, send and receive text messages, and perform a few other functions. It cannot do any of the tasks that a computer can do.*

EXPLAIN:

- Talk about what a computer can do.
 - It is an electronic device that we can interact with and make it do “things”.
 - We can use it to play a game, watch a movie, write a document, edit photo, read a digital book (ebook), apply for job, etc.
 - Show pictures of computer hardware (e.g., PC, Mac, smartphone, tablet, ereader).
 - Explain that the hardware is the actual physical computer equipment.
- Computing devices all have ways for us to interact with them. The way that we interact with them is through “**peripheral devices**”. These include: keyboard, mouse, trackpad (touchpad), touchscreen, joystick, and microphone (**input devices**), and the screen (monitor), speakers, and printers (**output devices**).
 - Show images of different ways of interacting with devices.
- Every computer has a “**brain**” that takes what we do with the peripheral devices and makes things happen. That brain is sometimes called a **CPU** or Central Processing Unit. It is not terribly important to remember that term, but it is good to know that a faster, more powerful CPU will result in a computer that can do more and do it more quickly.

- Computers also have “**storage space**” in the form of hard drives and memory chips. This is where all the documents we create, the photos we edit, the movies we record, and more are stored. This storage space is just like a big filing cabinet. Later we will talk about how we organize all our stuff on the computer.
 - Mention that there are other types of storage devices too: DVD’s, CD’s, USB drives, external drives, etc.
 - The term “USB” stands for “universal serial bus”, which is the way the drive connects to the computer. People also call USB drives terms like “flash drive” (which refers to the type of memory that it contains) or “thumb drive (which refers to its size) or “jump drive”.
 - If you have them available, show the participants these different storage devices.
- One last important piece: “**Software, programs, applications or apps.**” These are the sets of instructions that we interact with to do specific tasks. Applications that they may have heard of include:
 - Internet Explorer, Firefox and Chrome which are Internet browsers
 - Microsoft Word which is used to write documents
 - Photoshop which is used to edit photographs
 - Solitaire – one of the most popular computer games!
- People are often confused by all the different types of computers and devices, as well as all the operating systems and software. This is understandable!
 - A good analogy that works for most people is grocery shopping. Every store is different. There are huge grocery stores and small convenience stores, and stores of many sizes in between. In each store, you won’t always find the same brands or even all the same products, but we all have enough experience to go into any grocery store, figure out where things are, and find what items that we need. Sometimes we find a brand that we are familiar with and other times, we find what we want, but it is a different brand than what we normally purchase. With computer software, you may find that the computer that you are using doesn’t contain the same exact software that you are used to. However, on every computer, you will likely find software that does what you need. The key is to be patient with yourself and with the computer.

TOPIC 2: How do you begin using a computer?

GOAL:

- Participants can demonstrate how to turn on a computer and explain what the “desktop” is.

CLASS EXERCISE:

- First things first! Turn on the computers. (This assumes that the computers are turned off.)
- Explain that the switch will be in different places on different devices.
- Tell them where the on-off switch is on the computer.
- Have them find the on switch for the computer - and the monitor - and turn them on.
- Every computer takes some time to turn on. Explain that this is normal.
 - Tell them that as the computer turns on, it is running a quick diagnostic and sometimes updating installed software.
 - As the computer turns on, it also loads the software that gives it its basic functionality. This software is referred to as the operating system. It is the software that allows the computer to operate.
 - Explain that people generally do not watch the computer as it “boots up”, but often do something else. You might tell them what you do while your computer is booting up (or turning on).

EXPLAIN:

- The **Desktop** is basic starting point and is what they see on the screen.
- Explain the basics of the PC desktop:
 - Background – Often blue. Some people customize their background so that it includes an image (wallpaper).
 - Desktop icons for folders, files and shortcuts – If there are icons on the instructor’s desktop for folders or files, point them out. The shortcuts are icons for specific applications.
 - Recycle Bin – When a file is deleted, this is where it goes. Just like a trash can at home, the recycle bin can be emptied, which will permanently delete its contents.
 - My Computer – If this exists on the desktop, it allows the user to quickly view the folders that are on the computer. Folders are how files are organized on the computer. (This is discussed later in the workshop.)
 - Task Bar (or taskbar) – Located at the bottom of the screen, the taskbar displays the Start menu and any programs that are currently running. You can use the icons in the taskbar to move from one program to another.
 - Start menu (lower left corner) – The Start menu is the main gateway to your computer's programs, folders, and settings. It is a place to start, when you are trying to access something on the computer.

ADDITIONAL RESOURCES:

- Intro to Computers (by Moore Memorial Library) is a PowerPoint presentation on using Windows 7.
www.nysl.nysed.gov/libdev/nybbexpress/curriculum/mm_pc.pps
- Computer Basics (by Halifax Public Library) is a four-page handout that may be a useful resource for the instructor. [Windows XP]
<http://www.halifaxpubliclibraries.ca/assets/files/computers/Basics.pdf>

- Computer Basics (by Brooklyn Public Library) is a one-page handout that may be a useful resource for the instructor and workshop participants.
<http://www.brooklynpubliclibrary.org/sites/default/files/files/4470%20FL-Computr%20Basics%20patron%20handout.pdf>

TOPIC 3: How do you use a mouse and other input devices?

GOAL:

- Participants can identify a mouse, keyboard and other input devices.

Note: If a participant has never used a computer before, this section will be important. In fact, the person may want to spend time at the end of the class practicing his/her mouse skills. If a participant has used a computer before, you might suggest that the person try these exercises anyway, since everyone can benefit from a little practice.

Be patient through this section. Be ready to spend time with individual participants, who require assistance. Allow the participants to make mistakes. Get them back on track telling them what they need to do. Do not take the mouse and do it for them.

EXPLAIN:

- The keyboard allows us to type information into the computer.
- The mouse allows us to move the cursor (or pointer) that is on the computer screen.
- We can move the mouse in order to select something that we want to work on. We can also use the mouse in order to give the computer a command.
- We can move the cursor using the mouse or a trackpad (or touchpad). Most people find that using the mouse – rather than the trackpad – is easier on their hands.

DEMONSTRATE:

- Being able to use the mouse is a basic skill for interacting with many computers. It can also be extremely frustrating for someone who has never used one before.
- Show how to hold the mouse and roll it around to see the arrow move across the screen.
- The arrow you see is called the **cursor** or **pointer**.
- Have them move the mouse over an icon, stop and left click once to highlight the item.
- Have them move the item to the recycle bin (or some other folder you have put there ahead of time). Once the item is in the folder, have them **double click** to open the folder.
- Explain that the frame that they have just opened is called a **window** and that they can have multiple windows open at once.
- Point out the each window that is open has a corresponding box on the **taskbar** at the bottom of the desktop.

- Practice with jigsaw puzzles and mouse-aerobics exercises (see Additional Resources for “*Exercises for using computer keyboard and mouse.*” Links to these exercises are also available on the DigLitNY.org web site.)
- Have them study the keyboard, noting the most used keys like Shift, Space, Backspace, Enter and Delete.
 - Encourage your class to take free keyboarding classes either online or at the Library to increase their skills!

TOPIC 4: What is the difference between an application and a document or file?

GOAL:

- Participants can explain the difference between a file and an application.

EXPLAIN:

- Explain the difference between an application (a.k.a. software or app) and the documents or files that you create with them.
- Microsoft Word and Excel have easy to understand physical counterparts and make good analogies for this.
 - A word processor is like a blank pad of paper. You can use the paper to write a letter, a note, a resume, or a grocery list. But the pad is just a blank pad until you do something with it. Same with a word processor, it opens to a blank page and waits for you to write your grocery list or Great American Novel. When you are done working on your novel for the day, you save your work so you can come back to it next time. That work gets saved in a document file that is separate from your word processor and separate from the other documents you create using the word processor.

ASK:

Do you know of any software applications?

- If people do not know of any, that is okay. It could be that some participants will mention games or types of software (e.g., software for sending email).

EXPLAIN:

Some applications do not actually create files. Some are just used to provide access to information and services. For example:

- Internet browsers let us browse and search the web (e.g., Internet Explorer and Firefox).
- Some software allows us to make phone calls or video calls using the Internet (e.g., Skype).
- Antivirus and security software that helps to keep our computers safe.

TOPIC 5: How do you open and close applications and files?

GOAL:

- Participants can open and close applications and files using the commands in the application's menu.

DEMONSTRATE:

Demonstrate two different ways to open an application directly.

1. Using the mouse, left click once on the Microsoft Word application icon on the desktop, then hit (press) the Enter key.
2. Using the mouse, click twice quickly (double click) on the Microsoft Word application icon.

PRACTICE:

- Have the participants open Microsoft Word by either of the methods above.
- With the application open:
 - Have them type a few lines of text. Tell them to not worry about the accuracy of what they type. No one will judge if it is correct or not.
 - After they have typed in some text, have them save the file using the command File, then Save. Microsoft Word will create a file name automatically; however, have them change the file name to their first name.
 - Show the participants how they can tell where the file has been save at on the computer's hard drive.
 - Hint: Have them save the file to the desktop. This will make the reminder of this demonstration easier for you and them.
 - Close the file (using the command File, Close), but not the application.
 - Using the command File, Open have the participants open the file that they had created.
 - They will need to have remembered where the file was saved. Note that there is more on organizing files and folders in the next section.
 - Close the file and the program.
 - Now show them how to open a document by using the same methods (1 & 2) above. Point out that when they open a file or document that the application also opens automatically.

TOPIC 6: How do you organize your files?

GOAL:

- Participants can demonstrate how to organize computers files into folders similarly to paper files, so they can be easily retrieved.

EXPLAIN:

- If you have ever used a filing cabinet to organize papers into folders, then you can organize your documents on your computer. It uses the same familiar strategy.
- Individual files can be gathered together in folders that relate to projects or topics that are relevant to your life. For example, you could have a folder of family photographs.
- As the number of files and folders on your computer grows, you can group a bunch of related folders into a larger folder. This is similar to places several paper file folders into the same file drawer.
 - For example, if you take a lot of photographs, you might start by putting them all into a folder called My Pictures. But as you save more and more photographs, it will become harder to find what you are looking for. Then you might want to create folders inside this folder, which are referred to as “sub-folders”. This would allow you to organize your photographs by years or even by events (like Thanksgiving or baby shower). All of those sub-folders can be stored in the My Pictures folder. This is similar to what we do with printed photos when we put them in photo albums or organize them in photo boxes with dividers.
 - Note: If you have a blackboard (or whiteboard), you might want to draw a representation of files and files folders, and demonstrate how they can be grouped together.

PRACTICE:

- Have the students create a folder and use their name as the folder name. (or something similar)
 - The method for creating the folder will differ with operating system. Make sure you know how to create folders on your class computers. Some possibilities are:
 - Right click, New, Folder
 - Organize menu, New
 - Note: Use whichever method you are most comfortable with. You do not need to show the students more than one method.
- Have students find the document that they created earlier and move it to their folder.
 - Again, several methods are possible, including:
 - Right click, Cut, then Paste in new folder
 - Open multiple windows, drag file from one folder to the next

Note: Use whichever method you are most comfortable with. You do not need to show the students more than one method.

Finally, allow participants to practice opening and closing files and folders, as well as finding them on the computer.

TOPIC 7: How do you install software or applications?

GOAL:

- Participants can explain how software helps them use the computer and demonstrate how additional software can be added to a computer, if desired.

EXPLAIN:

- What makes a computing device smart is not the device itself, but the software that is on it.
- There are thousands of different software applications for your computer, tablet device (e.g., iPad or Kindle Fire), or smartphone.
- On your own computing device, you may decide to install as many or as few applications as you desire. What is important is that you understand what you are installing and why.
 - For example, you may want to type letters on your home computer. In order to do that, you would want software that allowed you to type text, make it look nice, save it for later use, and print it. You may want basic functionality or something with lots of bells and whistles.
 - You could purchase software (like Microsoft Word) or decide to use free software (like Open Office). Whichever you decide to use, you will need to spend a little time understanding its pros and cons (or positives and negatives).
 - If you need advice about software, consider talking with family members or friends, or talking to members of the library staff. The library staff can at least tell you what we are using on our computers and why.
- When you install new software on your computer, the software will provide instructions for you on the screen. All you will need to do is to follow the instructions.
- If you suddenly see a message on your computer about software that wants to be installed and you do not remember acquiring it, write down the name on the software and then cancel the installation process. Once the process has stopped, talk to whomever you share that computer with about what occurred. If it is software that neither of you use, or remember seeing on the computer, you may have a computer virus. Antivirus software (e.g., McAfee) can remove computer viruses.
- Because we are using computers in the library, we are not going to actually install any software today. However, remember that software is what allows computers to work and that no matter what you need is, there is software for it.

TOPIC 8: How do you turn off the computer?

GOAL:

- Participants can demonstrate how to turn off computing devices and explain when it is necessary to do so.

EXPLAIN:

- Every computing device – including desktop and laptop computers, tablet computers, ebook readers (or ereaders), and cell phones – can be turned off. In fact, every computing device benefits from being turned off regularly.
 - For example, cell phones may need to be turned off – and back on – in order for them to install updates.
 - Desktop and laptop computers also install updates to their operating systems when they are turned off.
 - Occasionally a computer will “act as if it needs a rest” (for example, being sluggish). In this case, it is signaling that it needs to be turned off.
 - Turning off a computing device is also called “powering it off.”
 - When you turn a device off and immediately back on, that is called rebooting.
 - To “boot” a computer is to start it. To “reboot” a computer is to restart it.
- If you travel by plane, you will need to turn off all of your computing devices including cell phones, MP3 players (audio players), game consoles, ereaders, and laptop computers.

DEMONSTRATE:

- Because the participants will need to use their computers for the concluding exercise, do not have them turn off their computers. Instead, demonstrate for them how it is done.
- When each participant has finished the concluding exercise (quiz), have the person turn off his/her computer.

TOPIC 9: How do you stay safe on the computer?**GOAL:**

Participants can explain basic safety concepts of computing like viruses and anti-virus software, and privacy/security issues.

***Note:** This topic is also covered in the workshop “What is the Internet and how do I use it to locate useful information?” Because security is important, it is recommended that this section not be skipped, even though participants who take all of the workshops will hear it twice.*

ASK:

Have you ever heard of someone getting their identity stolen? Can you imagine how it happened?

- Besides computers, students may answer that someone had stolen something out of a mailbox or car

EXPLAIN:

Unfortunately there are people out there on who would do you harm with computers. You'll need to protect yourself and your computer and be constantly aware of your digital safety.

Here are some things to consider:

1. Protect yourself against Identify theft.
 - Do not send personal or financial information through email – or through the Internet – unless you are absolutely positive it is secure. Typically, email systems are not encrypted or coded so they cannot be discovered by someone else. This means that they are not secure. It is a good habit to avoid sending any private information through email, such as your social security number or credit card number.
 - Do not send personal or financial information over unsecure websites. A website is (reasonably) secure if the URL begins with <https://> and if there is a locked padlock in the bottom right corner of the browser window. This means the data is encrypted after you send it and it stays encrypted until it reaches its destination.
 - Passwords should be a combination of lower case letters, upper case letters, numbers and/or special characters.
 - Stay safe on public computers.
 - Never walk away from your seat without logging off when you leave.
 - Beware of the "remember me" option. This option allows internet browsers to remember your login and password to secure sites. Do not use this feature when accessing sites containing restricted or high risk information. In particular, do not use this feature when on a public access computer.
2. Do not download anything if you don't know the person who sent it to you.
3. Protect your computer and files by using virus protection on your personal computer and upgrade the virus 'definitions' regularly. Viruses make your computer slow down by running process like sending spam emails to your contacts and adding themselves to files that you might share. Free virus protection software is available, try http://www.pcworld.com/reviews/collection/1597/free_antivirus_software.html for recommended sources.
4. Computers break. Back up your data to a USB drive, CD or cloud based back-up service (through the Internet).

TOPIC 10: What kind of computer should you buy if you could?**GOAL:**

Participants can describe what kind of computer they might purchase for themselves, where to get one and how much it might cost.

EXPLAIN:

Now that you know a little about computers you might want to get one for yourself. While you can always come to the public library and use ours, you may enjoy it so much that you want to learn more and are willing to invest a little money in your new hobby.

ASK:

What would you do on your own computer if you had one?

Participants might respond with the following answers. Suggest them if they don't!

- Put all my old family photos on it
- Watch movies
- Play games
- Find other people who are interested in the same things I am
- Read the news
- Read a book
- Write a book

EXPLAIN:

Let the students know that the best rule of thumb when buying a computer is to first figure out what you want to use it for and then pay as much as you can for it. Using the above examples, or your own if you need to do so.

Put all my old family photos on it

- A desktop computer with lots of storage space (big hard drive)

Watch movies

- Perhaps a wide-screen laptop with a DVD player or internet connection for streaming movies

Play games

- A desktop computer with a fast processor brain and great graphics. A tablet is great for kid's games on the go!

Find other people who are interested in the same things I am or read the news

- A tablet, smart phone or netbook and wireless internet connection to visit social networking sites in the coffee shop

Read a book

- An ereader and your public library card!

Write a book

- A laptop or desktop with word processing software

Now let them know that because the hardware's technology will be even bigger and better next year, it is a good idea to go ahead and get the latest product or the best they can afford. Why? Because it will not go out-of-date quickly.

Do let them know that computers do not last forever and that any computer that they purchase will need to be replaced, even if it is years from now.

DEMONSTRATION:

- Since participants will likely ask, talk to the participants about the prices of computing devices.
- Go to <http://www.google.com/shopping> and type in a product type (e.g., smartphone) in order to find the most popular items for your keyword search. If the item is a phrase (e.g., smart tv), type it within quotation marks (e.g., "smart tv").
- Here are some sample prices that you can use as you talk about purchasing a computer. (All prices are from March 2012.)
 - "smartphone" - While a smartphone may have a retail cost anywhere from \$275 to \$650, if you sign a contract with your cell company, a smartphone will cost an average of \$135. However, that is just for the phone. You will also need a cell phone plan and a data plan. The data plan allows you to use the Internet on your smartphone. A data plan usually runs about \$10 to \$30 dollars per month, depending on how much data you send and receive.
 - "ereader" – The most popular ereaders at Google Shopping right now are \$90 to \$185. In order to read a book on it, you will need to download books from your library (ebooks) or purchase ebooks from an online bookseller. An ereader needs wifi or a data plan in order to connect to the Internet. (Wifi is wireless high-speed access to the Internet.)
 - "netbook" – The most popular netbooks at Google Shopping cost between \$250 and \$300. In order to use the Internet, it needs Internet access (wifi or wired Internet access).
 - "tablet pc" – The most popular Tablet at Google Shopping costs \$370. In order to use the Internet, it needs Internet access (wifi or wired Internet access).

- “laptop PC” – Currently a good laptop PC costs \$579 to \$800. In order to use the Internet, it needs Internet access (wifi or wired Internet access).
- “desktop PC” – Currently a good desktop PC costs \$600 to \$1200. In order to use the Internet, it needs Internet access (wifi or wired Internet access).

Encourage the students to investigate different products, reading reviews and making informed decisions. Show them how to click through and see the available vendors and purchasing options.

ADDITIONAL RESOURCES:

- Article: Smartphone sales rise as average cost drops to \$135, GigaOm, <http://gigaom.com/mobile/average-smartphone-cost-135-dollars/> *last accessed 3/7/2012*