

Manufacturing Curriculum:

Technology Awareness and
Skills Module

Supplemental Resources from
the Adult Education Field

Statewide Manufacturing Curriculum: Technology Awareness and Skills Module

For use with **Outcome #1** – Use a mouse effectively – **Mouse functions**

Visit this site for information and practice in using a mouse:

<http://www.pbclibrary.org/mousing>

Submitted by: Brett Bane, Illinois Central College

Statewide Manufacturing Curriculum: Technology Awareness and Skills Module

For use with **Outcome #3** – Use keyboard to develop and/or improve typing skills – **Ergonomics**

Visit this site for a workstation ergonomics checklist and resources:

http://www.safetyworksmaine.com/training/online_classes/vdt/VDT-Main.htm

The checklist is printed below.

Submitted by: Brett Bane, Illinois Central College



SafetyWorks!

MAINE DEPARTMENT OF LABOR



The following computer workstation checklist will help you to identify some important risk factors that can contribute to work-related discomfort or problems. Complete this checklist to determine if your workstation is properly designed for your work tasks. Contact your supervisor for follow-up by the SafetyWorks! Consultants if you or your supervisor needs assistance.

Date: _____

Name & Job Title: _____

Department: _____

Telephone: _____

Supervisor: _____

Telephone: _____

POSTURE	YES	NO
Is your head in an up right position when you view documents or your computer screen?		
Are your shoulders in a relaxed position when you place your hands on the keyboard?		
Are your arms close by your side in a relaxed and comfortable position when you use the keyboard or mouse?		
Are your elbows bent at a 100-110 degree angle when you use the keyboard or mouse?		

KEYBOARD AND MOUSE	YES	NO
Are the home row keys on your keyboard positioned directly in center front of your trunk?		
Are the keyboard height and slope both easily adjusted?		
Is your mouse within close reach and at the same level as your keyboard?		
Are the keyboard and mouse within close reach?		

CHAIR	YES	NO
Is the height of your chair adjusted so that your feet are positioned flat on the floor or on a footrest?		
Are your hips as far back in the chair as possible so that your back is touching the chair back?		
Does the back of your chair support your lower back?		
Is the chair backrest height adjusted to provide maximum support for your back?		
Is the size of your seat long and wide enough to support your hips and thighs?		
If you have armrests, do they allow you to rest your arms comfortably?		

COMPUTER SCREEN	YES	NO
Is the top of the screen slightly below eye level?		
Is your computer screen at a proper tilt and height to allow you to view it without raising or lowering you chin?		
Are you sitting directly in front of your computer screen?		
Is the computer screen at approximately arm's length reach away from you (18-30 inches)?		
Are your source documents positioned on a stand placed between the monitor and keyboard?		

LIGHTING	YES	NO
Is there sufficient light for you to complete reading tasks without straining your eyes?		
Is there sufficient lighting without glare on the screen from windows, lights, and surfaces?		

WORK TECHNIQUES	YES	NO
Are your shoulders relaxed when keying and using the mouse?		
Are your elbows positioned close to your side when keying or using the mouse?		
Are fingers and wrists in neutral or straight alignment when typing (not turning side to side or going up or down)?		
Are you hitting the keyboard keys with as light a force as possible when keying?		
Are you holding your mouse loosely with your hand and fingers in a relaxed position when moving the mouse around the screen?		
Are you trying to keep your fingers relaxed when keying or using the mouse, i.e. not positioning or hovering your fingers or knuckles above the keys?		
Are you avoiding awkward postures such as an extended finger or thumb when keying or using the mouse?		
Do you take a brief 1-2 minute break from keying or using the mouse every 30-45 minutes?		
Do you take stretch breaks intermittently throughout the day?		
Do you avoid cradling the telephone between your head and shoulder when talking or listening to others?		
Do you know how to adjust your chair, keyboard tray, and other workstation accessories?		
Are you aware of how to report ergonomic problems and obtain help or information on ergonomics?		

For more information or to make an appointment for consultation contact:
 SafetyWorks! * Maine Department of Labor * 45 State House Station * Augusta, ME 04333-0045
 Phone (207) 623-7900 * Toll-free (877) SAFE-345 * TTY: (800) 794-1110 * Fax (207) 623-7938

Statewide Manufacturing Curriculum: Technology Awareness and Skills Module

For use with **Outcome #4** – Use Windows to open programs, move between programs, and create folders – **Using Windows**

Visit this site for help in using windows:

<http://www.dummies.com/how-to/content/helpful-hints-for-working-in-windows-7.html>

Printed below are the helpful hints you can find at this site.

Submitted by: Brett Bane, Illinois Central College

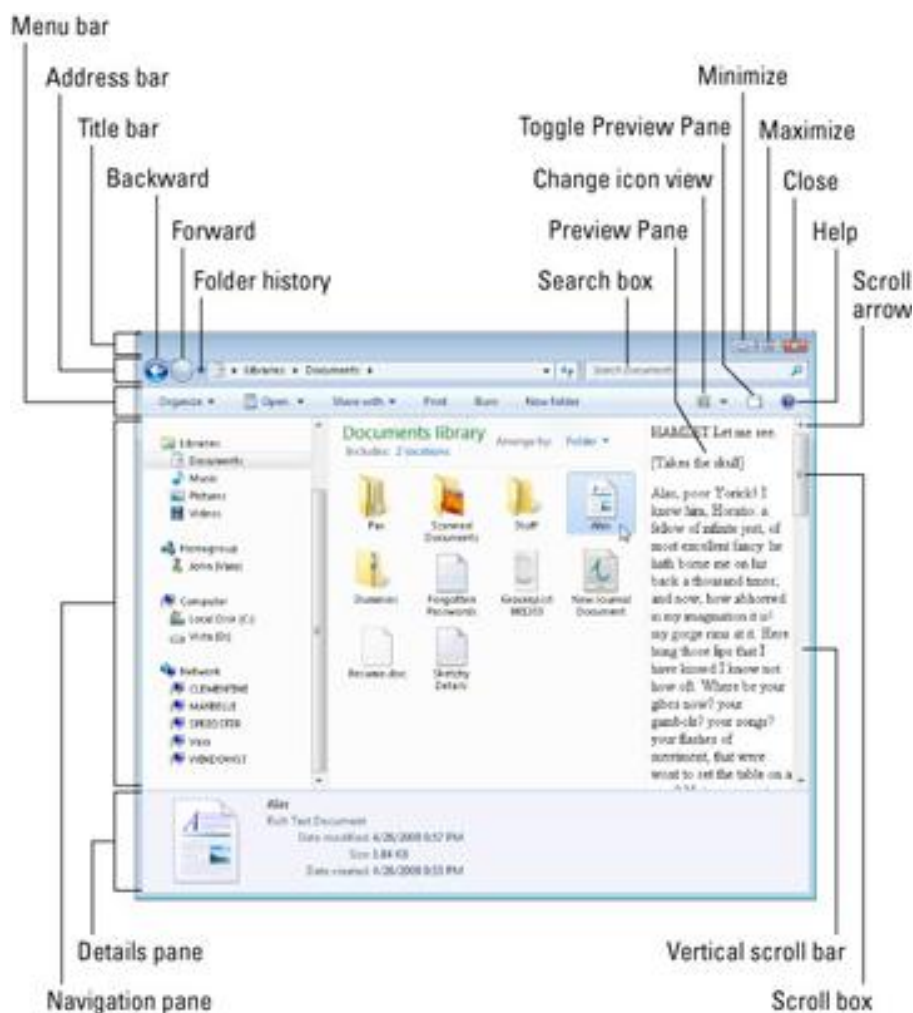
Helpful Hints for Working in Windows 7

By Andy Rathbone

Part of the Windows 7 For Dummies Cheat Sheet

Many people are dragged into using Windows 7 without a choice because their new computers probably came with Windows 7 installed. Working in Windows 7 isn't so hard if you consider the helpful hints in this list. You'll save time and prevent a headache or two!

- Don't know what a certain button does in a program? Rest your mouse pointer over the button for a few seconds. A helpful box often pops up to explain the button's purpose.



- If you're baffled, try pressing F1, that "function key" near your keyboard's upper, left corner. A Help window appears, often bringing hints about your current problem.
- To see what you can do with something in Windows, right-click it. A menu appears, listing all your available options.

- Press Alt to reveal any hidden menus in any program, including Media Player.
- To find lost windows on the desktop, hold down Alt and press Tab. Windows displays thumbnail images of open window. Keep holding down Alt, press Tab until Windows selects your desired window, and then let go of Alt to bring that window to the top.
- To share files with all the users of your computer, copy them into one of Windows' Public folders: Double-click the name of any of your libraries, and two folders appear. The folder named Public is accessible to everybody on your PC (and even a network).
- If your computer acts weird after you install new hardware or software, use System Restore to set it back to a time when it worked. Click All Programs from the Start menu, click the Accessories menu and choose System Tools, and then click System Restore.
- Retrieve accidentally deleted files and folders by opening the Recycle Bin on your desktop. Right-click the deleted item and choose Restore to return it to its original location.
- To return to an older version of a file you've changed, right-click the file and choose Restore Previous Versions. When Windows lists the date of the version you want to retrieve, click the Restore button.

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For use with **Outcome #5** – Create passwords, define privacy terms and virus protection – **Create password, understand privacy and virus protection**

Visit this site for help in virus protection: FREE software!

<http://windows.microsoft.com/en-us/windows/security-essentials-download>

Submitted by: Brett Bane, Illinois Central College



Create strong passwords

A strong password is an important protection to help you have safer online transactions. Here are some steps to create a strong password. Consider using some or all to help protect you online:

- **Length.** Make your passwords at least eight (8) long.
- **Complexity.** Include a combination of at least three (3) upper and/or lowercase letters, punctuation, symbols, and numerals. The more variety of characters in your password, the better.
- **Variation.** Change your passwords often. Set an automatic reminder to update passwords on your email, banking, and credit card websites every three months.
- **Variety.** Don't use the same password for everything. Cyber criminals can steal passwords from websites that have poor security, and then use those same passwords to target more secure environments, such as banking websites.

There are many ways to create a long, complex password. Here are some suggestions that might help you remember it easily:

What to do

Example

Start with a sentence or two.

Complex passwords are safer.

Remove the spaces between the words in the sentence.

Complexpasswordsaresafer.

Turn words into shorthand or intentionally misspell a word.

ComplekspasswordsRsafer.

Add length with numbers. Put numbers that are meaningful to you after the sentence.

ComplekspasswordsRsafer2013.

More strategies for strong passwords

Test your password with a password checker

A password checker evaluates your password's strength automatically. Try our password checker.

Avoid common password pitfalls

Cyber criminals use sophisticated tools that can rapidly decipher passwords.

Avoid creating passwords that use:

- Dictionary words in any language.

- Words spelled backwards, common misspellings, and abbreviations.
- Common letter-to-symbol conversions, such as changing "and" to "&" or "to" to "2".
- Sequences or repeated characters. Examples: 12345678, 222222, abcdefg, or adjacent letters on your keyboard (qwerty).
- Personal information that could be guessed or easily discovered. Your name, birthday, driver's license number, passport number, or similar information.

<http://www.microsoft.com/security/online-privacy/passwords-create.aspx>

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For use with **Outcome #6** – Navigate the Internet, locate a website, and save to the Favorites folder – **navigating the Internet**

Submitted by: Brett Bane, Illinois Central College

SAMPLE OF ACTUAL COMPANY POLICY

INTERNET ACCEPTABLE USE POLICY

STATEMENT OF POLICY

Along with the development of our technology comes Internet access for Company X employees. We hope that the Internet will help support our business and also be an educational tool. However, the Internet also exposes the company to serious risks, and you play a critical part in our risk control effort.

This policy identifies the principal risks, communicates the company's guidelines and spells out the employees' responsibilities. Company X maintains the right to change this policy at any time with such prior notice, if any, as may be required or practicable under the circumstances.

YOUR RESPONSIBILITY

You are representing the company when you use the Internet. This means you are obligated to use it in an effective, professional, ethical and legal manner, and only for the benefit of the company and for our customers. You have a responsibility to maintain and enhance Company X's public image while using the Internet.

To ensure your responsibility, the following guidelines have been established.

Acceptable Use

Employees using the Internet with the company's resources do so to satisfy a clear Company X business need, and they are encouraged to do so. While occasional incidental use for personal reasons is permitted, any personal use must comply in all respects with the company's policies and guidelines.

Personal use may be restricted if the resources consumed are excessive, interfere with your work productivity, or do not follow Company X guidelines.

Unacceptable Use

You are prohibited from using Internet-related systems and resources for personal gain or advancement of individual views. For example, you should not use the company's technology resources or systems for such purposes as commercial ventures, religious or personal causes or outside organizations or other similar, non-job-related solicitations.

Please note that electronic mail and Internet usage are not private. People who operate the system do have access to all. Anywhere you go on the Internet can be traced right back to Company X and can be monitored by Company X.

The Internet should not be used for illegal purposes. It should not be used to transmit threatening, obscene, or harassing messages. It is not acceptable to use an Internet account so as to interfere with or disrupt network users, services, or equipment. Disruptions include, but are not limited to, distribution of unsolicited advertising, propagation of malicious computer

software including viruses, worms, and Trojan Horses, and using an account to make unauthorized entry to any other machine or file accessible via the Internet or Company X internal networks.

The Internet shall not be used to send, post, or download information that contains pornographic, obscene, derogatory, suggestive or offensive language or images. It is forbidden to access or display these types of materials. Care should be taken to avoid accessing or displaying any material that may be offensive to others.

Viewing or transmitting pornographic, profane or derogatory material and visiting non-business related sites other than described under "ACCEPTABLE USE" are unacceptable activities. Company X will take whatever measures it deems necessary to prevent such use, including termination.

Also, it is not acceptable to intentionally seek information about, obtaining copies of, or modify files, other data, or passwords belonging to other users, unless explicitly authorized to do so by those users.

DOWNLOADING FILES

To protect the integrity of our network, permission from Company X IT people is necessary before downloading anything off of the Internet and prior to installing any programs. Exempt from this are vendor websites or Microsoft updates from windowupdate.Microsoft.com at Microsoft ONLY (all other Microsoft downloads, such as from download.Microsoft.com, need prior approval).

COPYRIGHTS

All communication and information accessible via the Internet should be assumed to be private property of those who put it on the network. All employees obtaining access to other companies' or individuals' materials must respect all copyrights and may not copy, retrieve, modify or forward copyrighted materials, except with permission, or as a single copy to reference only.

Monitoring

All Internet tools and electronic mail are properties of Company X and should be used accordingly. Company X reserves the right to review any material on user accounts and to monitor fileserver space in order for Company X to make determinations on whether specific uses of the network are inappropriate.

Abuse of Privilege

Abuse of computing privileges & violation of this Internet policy will be subject to disciplinary action, including the possibility of termination and /or criminal prosecution. If necessary, Company X reserves the right to advise appropriate legal officials of any illegal violations.

While this policy identifies specific examples of Internet misuse, Company X retains the right of discretion and judgment with regard to what constitutes Internet misuse.

Martin Equipment, Goodfield, Illinois

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For use with **Outcome #11** – Enter data on an electronic employment application form;
copy and paste resume into an online application – **enter data on electronic forms**

<http://www.amgraf.com/employ06/employ02.html>

Submitted by: Brett Bane, Illinois Central College

Statewide Manufacturing Curriculum: Technology Awareness and Skills Module

For use with **Outcomes #1, 2, 3, 4, 5, 6, 7**

E-Mail and Drop Box Accounts

We begin our first week of class by establishing a professional e-mail for each student and instead of giving each student a USB Drive for all of the files and papers they will accumulate for the class, we sign them up for Drop Box.

Drop Box is a Cloud based file storage website that is secure and gives 2MB of storage free just for signing up. We use it to hold all of our files for the class. To date no account has been hacked. However, we warn students against saving any vital information or bank information just in case someone does hack the accounts.

We use Yahoo.com, but any e-mail website will work. When setting up the accounts we use the student's first letter in their first name and their full last name with the first letter acronym of the school, Prairie State College (PSC) in our case and the e-mail sites designation. Example: wkubanpsc@yahoo.com. You should not have to worry about not having enough e-mail addresses to go around as the school acronym makes the addresses so unique that unless you have two students with the same name you will not even have to use any numbers in the addresses. I have included our sheet for students to set up the e-mail addresses and their Drop Box accounts.

www.yahoo.com/mail

www.dropbox.com

Submitted by William G. Kuban, Prairie State College

Statewide Manufacturing Curriculum: Technology Awareness and Skills Module

For use with **Outcomes #1, 2, 3, 4, 6, 7, 8, 9, 10, 11**

Microsoft Office

We use Microsoft Office training tools from Microsoft.com. It is easier than coming up with your own training as Microsoft has all of the training modules you will ever need in the version of software your program uses.

I use one class to introduce each application of Microsoft Office and give the students additional in class computer time to finish their assignments. Do not be afraid to encourage the students to come in on their own time as this helps them to understand that some of their assignments require additional time and will help to prepare those who will go on to college to do complete their assignments.

I have included all of the training modules that I use with the school's computers. We are currently running Microsoft Office 2007 at our school. I would recommend using the training based on whatever version your school is currently using that way the students can practice on the computers in class, and if they have a different version somewhere else, they will have to do their work at school.

We use the training for Word, Excel and Power Point. You can use the training for Outlook or one of the other applications if you have time in your class. Just go to this link to start downloading the training based on your version of Office <http://office.microsoft.com/en-us/support/training-FX101782702.aspx> .

Submitted by William G. Kuban, Prairie State College

Statewide Manufacturing Curriculum: Technology Awareness and Skills Module

For use with **Outcomes #1, 2, 3, 6, 7, 11, 15**

Other Computer Activities

There are Power Point Presentations about the Computer, the Internet, its history and use. These presentations can be updated, as Technology changes and evolves. Included are files on Social Media Use and Guidelines, and a dictionary of Computer Terms for the students who need to understand what all of the computer jargon means. We have included other activities for internet browsing, search engines and downloading a variety of images including pictures.

Submitted by William G. Kuban, Prairie State College