

Web Browsing Competency Levels for Students

Entry Criteria

1. The browser is installed.
2. Internet is connected.
3. Student is familiar with basic computer terminology.
4. Student has basic computer skills.
5. Student knows how to use computer peripheral devices.
6. Student is familiar with general OS use.

Exit Criteria

1. Student can comfortably use the browser, navigate URLs, search information needed, save and print information and can do limited troubleshooting.
2. The student appreciates the difference between different kinds of data (text, images, video and audio) and associated operations for its access and explicit downloading.
3. The student is aware of Internet dangers including viruses
4. The student is aware of Internet ethics from both the pornography and plagiarism context

Competency Levels

Level 1:

The student understands the concept of the Internet, browsers and URLs.

1. Understand the concept of WWW/Internet, and also the benefits
 - a. The student should understand that when computers are connected together they form a network and that the Internet is a global network of computers. The student should also understand that the World Wide Web consists of hyper text documents linked together that can be accessed using a browser.
 - b. The student should be aware of the benefits available through use of the WWW, e.g.,
 - i. Instant availability of all kinds of information from all over the world
 - ii. Information available from educational institutions from all over the world, including course materials
 - iii. Access to other specialized websites for news, entertainment...
 - iv. The student should be aware that information can be shared over the web.
2. Understand the concept of the browser as a tool and the URL as an address to navigate the web.
 - a. The student should know that the browser can be used to access and navigate through the web
 - b. The student should know that a URL is a unique identifier required to identify and access different websites. The student should also be familiar with the format of a URL
3. Open the browser
 - a. Quick launch
 - b. Desktop icon
 - c. Start menu

Level 2:

The student can access a location on the Internet by typing in its URL and can navigate using the browser's basic functionality.

1. The student can type a given URL in the address bar and access the site.
2. The student can navigate the web using the browser buttons (Back, Forward, Reload etc.).
3. The student should be able to identify and understand the status bar.
4. The student should also be able to open a new window or a new tab and enter another URL in it.

5. The student should understand the concept of a homepage
 - a. The student should understand that the browser may or may not be set to a default page known as the homepage
 - b. The student should understand that the homepage may be changed if required and the student should be able to change the homepage.

Level 3:

The student should be aware that data of different types is available on the Internet and should be able to identify and use the components of a web page.

1. The student should understand the different types of data that is available on the web
 - a. Text
 - b. Images
 - c. Video
 - d. Sound
2. Can scroll through a page and understand its components (note that all websites will not contain all the mentioned components and to understand all these components the student will have to have browsed through a set of websites)
 - a. Web menus
 - b. Images
 - c. Banners
 - d. Links
 - e. Pop ups
 - f. Buttons
 - g. Text boxes
 - h. Drop down lists
 - i. Combo boxes
 - j. Video
 - k. Audio
 - l. Animation
3. The student should be able to use all the items mentioned above.
 - a. Web Menus: The student should be able to navigate through a website using its menu, understanding the concept of home for the website, using it's own links (Back, Forward, Back to Top), and also using the 'Back', 'Forward' and 'Reload' buttons of the browser.
 - b. Images: The student should be able to recognize images as part of a webpage, and should identify which images are actually links and are therefore clickable, and will take them to a new page.
 - c. Banners: The student should recognize banners and should know that they are clickable.
 - d. Links: The student should know that links point to a new URL, and clicking on a link will take them to a new page. The student should also be familiar with the two ways of opening new links (in a new window or in a new tab). The student should also know that some links can also point to other types of files that may be downloaded.
 - e. Pop ups: The student should be able to recognize useless pop ups, understand that some parts of the popup may be clickable, and also be able to close them.
 - f. Buttons: The students should be able to recognize and click buttons where required.
 - g. Textboxes: The students should be able to enter text in text boxes.
 - h. Drop down lists: Students should be able to select items from drop down lists.
 - i. Combo boxes: Students should be able to select items from combo boxes.
 - j. Video: Students should be able to play video content on the web
 - k. Audio: Students should be able to play audio content on the web
 - l. Animation: Students should recognize animation

Level 4:

The student should be aware of search engines and should be able to use at least one (e.g., Google) effectively.

1. Student should be aware of common search engine URLs, e.g.,
 - a. www.google.com
 - b. www.yahoo.com
2. Students can use appropriate keywords and get search results
3. Student can navigate results to access desired information
 - a. Student should recognize the list of search results obtained (may be on multiple pages)
 - b. Student should be able to access any of the web pages included in the search results, and navigate through the results.
4. Can do advanced search using Google
 - a. Understands the benefit of advanced search (i.e., knows that the search can be narrowed down and targeted information can be obtained)
 - b. Find Results
 - i. With all of the words
 - ii. With the exact phrase
 - iii. With at least one of the words
 - iv. Without the words
 - c. Language
 - d. File format
 - e. Date
 - f. Occurrences ... (include all from Google)

Level 5:

The student can reasonably judge the reliability of different web sites and be able to save, print data.

1. Can differentiate the quality of content and the reliability of the retrieved information
 - a. Student should be able to identify personal web pages
 - b. Student should be able to identify academic websites
 - c. Students should be able to identify well-known news and information websites (CNN, BBC)
 - d. Students should be familiar with reliable and well known web services, e.g. Yahoo and Google.
 - e. Students should be able to identify freely hosted websites by looking at the quality and number of advertisements, and should then be careful in using information obtained from such web sites.
 - f. Student should be somewhat familiar with domain names and know that reliable and established companies usually have their own domain names.

Level 6:

The student is able to use and manage the information .

1. Can save data
 - a. Can save web pages
 - b. Can save images from web pages (being aware that they may have copyrights and cannot be re-used)
 - c. Can save documents from the web
 - d. Can save audio files from the web
 - e. Can save video files from the web
2. Can print information from the web
 - a. Can print web pages

Level 7:

Student can manage frequently visited websites using bookmarks, can adjust simple browser settings and do minor troubleshooting.(his/her favorite web sites and be aware of dangers. H should be aware of plagiarism and copyrighted web sits.)

1. Is able to bookmark pages and also able to categorize and manage bookmarked pages using Bookmark Manager.
2. Can understand and change browser settings
 - a. Set and change homepage
 - b. Change appearance as desired
 - c. Locate and delete temp files, cookies and history
3. Troubleshoot minor problems (identify and fix)
 - a. Identify if connection to the Internet is disrupted and then re-connect, check if the network cable is connected and if the Internet account is functional.
 - b. Identify if the typed URL is correct, and fix it if there is a common problem like a space in the URL.
 - c. Identify if a popup blocker is working and stop it or activate it as desired.

Level 8:

The student should be aware of the dangers of web browsing, and should be aware of the concept of plagiarism and copyrights.

1. Dangers
 - a. Students should be able to identify and avoid dangerous websites (virus)
 - b. Students should be using the browser popup blocker
 - c. Students should be selective about subscription and giving out their email addresses and other personal information.
 - d. Students should be aware of the presence of pornographic websites and should take appropriate measures so that they do not inadvertently access them.
 - e. Should be aware that many downloads available (especially music) are illegal, may be virus-infected and should be avoided.
2. Ethics
 - a. Students should be aware of plagiarism, and proper referencing procedures.
 - b. Students should be aware of copyrighted and licensed material and should be aware of how it should be used.