

PATHWAYS
How to Access Electronic Information

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Library Action Committee
Book and Periodical Council
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Barbara Sale-Schon, Chair, Library Action Committee

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Introduction

More and more information is available in electronic form. Some sources, like library catalogues, are easy to use whether one is familiar with computers or not.

The intent of *Pathways: How to Access Electronic Information* is to introduce the various forms of electronic information. It is a first step in the use of computers to access information from your home, at your library, or through another institution. You will find tips on what is available and where some of the difficulties lie.

The first part of the book provides basic information on OPACS, CD-ROMS, online resources, networks such as the Internet, and copyright issues to be considered in using the new technologies. The two appendices feature "Health and the Computer" and a statement from the Canadian Library Association on "Information and Telecommunication Access Principles". The booklet concludes with a glossary of some technical terms, a selected bibliography of Canadian and us books and periodicals, and an index.

Technical terms in italics appear in the glossary.

OPACs

OPAC (Online Public Access Catalogue) is a term used to describe any type of computerized library catalogue.

Online Public Access Catalogues allow you the flexibility to:

- find out what the library has to offer
- check the status of an item (checked out, on shelf, on *hold*, and so on)
- check your own library record for fines, reserves, or overdues
- reserve an item
- look up community information
- use CD-ROM *databases* (such as indexes or encyclopedias)
- link up with library catalogues or databases in other communities

If you have a computer with a *modem*, check for the telephone access number of your library; then you may be able to perform many of these activities from home.

Some opacs are more user-friendly than others. In some libraries there are instruction sheets right at the terminal. In addition, guides to using the opac, called "help screens", appear on the screen when you ask for them while you are searching.

A library's card catalogue allowed a search by title, author and subject, but that 3x5 card catalogue is almost gone. The same information is available *online* with some subject expansion. In some systems, you may be able to search by a combination of fields such as title and author, thus narrowing your search. As well, you may be able to search by *keyword*.

Before you start your search, check to see if there is a subject heading list or thesaurus. The obvious word to you may not be the subject heading used in that database. For example, information on "cars" may be listed under "automobiles".

Keyword Searching

In most systems the first option on the menu is a keyword search, such as a title or any word from the title. You can also ask for books on a special subject by keyword. For example, have you ever wondered whether the library has information on baseball uniforms? Try a keyword search combining the two words "baseball" and "uniform".

Exact Word Searching

Exact word searching recognizes characters from left to right. The system seeks an exact match. Therefore, a search for

Blue Jays uniforms will only retrieve the exact words

Blue *Jays* uniforms - it will not retrieve Blue *Jay's* uniforms.

There is no forgiveness - check your spelling! And watch for differences in spelling conventions---Canadian vs US or British.

Truncation

Many opacs offer a *truncation* option. This allows you to broaden your search. For example, a search for refer? will retrieve *reference*, *cross reference*, *personal reference*, *referrals*, and so on.

Community Information

OPACs can provide access to information about community activities and services. Some libraries offer this service.

Gateways

Gateways are paths to other sources of information. Some libraries offer connections to computer *networks* such as *freenets*. A *freenet* is a community-based computer network made available at either no cost, or nominal cost (that is, a basic membership charge) to residents and visitors by dedicated volunteers and public-spirited sponsors. *Freenets* provide community information and bulletin-board services. In addition they provide access to the Information Highway or the Internet.

Dial-in Access

Many libraries offer remote access to their opacs through personal computers if you have a modem. From home you can browse the collection, place a reserve or hold on a book, or check your personal record for overdue books, fines and so on.

Magazines and Journals

Magazines and journals may appear in the main catalogue. For additional information about the subjects covered in the journal, or to get the full text of an article, check to see if the library has the journal available. For certain uses there will be a copyright fee. This fee may be covered by the library.

Information NOT in the OPAC

Not everything the library holds is in the catalogue. If you can't find it, ask.

CD-ROMs

CD-ROM stands for "*Compact Disc-Read Only Memory*".

Most people are familiar with CD-audio, the compact disc that has replaced vinyl records. A CD-ROM disc looks just like a CD-audio disc and is as easy to use. CD-ROMS are quickly changing the way that you can find information either through your

library or your personal computer.

One of the most exciting features of the CD-ROM is its immense storage capacity. One CD-ROM can store several years worth of a major daily newspaper or an entire encyclopedia! CD-ROM technology offers many enhancements including voice, sound, graphics, photography, and animation. When these are combined, what you see, hear, and read is referred to as *multimedia*.

For example, if you are interested in the Beatles, you can look them up in a CDROM encyclopedia. What you will get is written information, photographs, and sound. By using a *mouse*, you can select a picture of the Beatles and, with some simple commands, it will become a music video.

Learning Tools

Information is available in many forms through CD-ROMS. For example, a teaching guide to fly fishing "Learning Fly Fishing" contains almost an hour of video with sound and close to 40 illustrations, such as photos, paintings, and schematic drawings. It also includes text about fly rods, species of fish, and how to tie flies. There is even a glossary of fishing terms. So if you don't understand the meaning of a word while you are reading, a click of the mouse gives you a definition right on the computer screen.

Information research tools

Many CD-ROMS in libraries are information *databases*. These databases are indexes of newspapers, books, magazines, or even television programs. Some indexes may only show you in which magazine you can find the article, while others may include a summary, the full *text*, or a portion of a television program. Other databases provide statistical or business information such as stock prices, financial or census data. Special subject databases cover areas like education, history, psychology, religion, and business. Some Statistics Canada information is available on compact disc.

For Canadian information, look at the *Canadian Periodical Index (CPI)*, a bilingual index of over 400 English and French language journals.

How to use CD-Rom databases

CD-Rom databases may be searched in a number of ways depending on the database and your needs. Usually, you can search by:

- Title
- Author
- Subject or Keyword
- Magazine title
- Year of publication

Before you start your search, check to see if there is a subject heading list or thesaurus. The obvious word for you to look under may not be the subject heading used in that database. For example, if you wanted information on cars and no entries were listed, it may be because that particular database has used the term "automobiles".

Help is Available

If you need help, remember that the library staff is there to assist you. Some libraries ask you to make an appointment; some limit the amount of time you may spend searching databases.

Usually, you won't have to pay to use CD-Rom databases. If you wish to print out your findings, however, there may be a charge. Some libraries allow you to copy to your own floppy disc.

Currency of information

CD-ROM products have the ability to hold vast amounts of information that can be accessed in a matter of seconds. CD-ROMs are updated periodically, but if you want up- to-the-minute information, another option is available. This is often referred to as "going *online*." (See "Online Resources" for more information on searching online.) Many producers of CD-ROMs are also responsible for the production of online resource data.

Search strategy

CD-Rom databases are *menu* driven. A menu is a step by step series of options from which you choose to reach your goal; it is fairly straightforward to use. Different databases have different search strategies and commands. Follow the menu. Consult instruction sheets and ask library staff if you need help.

After you have completed your search, the next step is to obtain the books, newspapers, or magazine articles that you need. If your own library does not have the books or magazines identified, request them through interlibrary loan (ILL).

Online Resources

Online refers to being connected by modem to your local freenet, or to an information provider such as a commercial service or university.

Online database searching is a skill requiring training and experience. Otherwise, it can be a waste of money with questionable results. For this reason, libraries that offer online searching have library staff perform the actual search. However, you can access online information from home: all you need is a personal computer, a modem, and an account with a supplier of a *gateway* to the online databases. The supplier may search for you or provide training. For more information ask your library for names and addresses of service providers. Some of these are: InfoGlobe, Compuserv, Dialog, and Infomart.

Government information, such as that from Statistics Canada, can be searched online. You may want to locate product descriptions, or demographic information for market research. This type of information can especially benefit the person either starting or expanding a small business.

Online database vendors charge by *connect time*, usually by the minute. It can be expensive. Some charge as much as \$300.00 per hour to connect to the database, plus telecommunication charges. The database you are searching may be located in California or Australia. You also may be charged for the number of records you *download* on disc or print out. Some databases supply only summary information whereas others supply full text.

Check with your local library for availability of online searching and its cost. Usually libraries will charge you the connect time cost; some also charge for staff time. Many libraries absorb costs for the first few minutes of a search; short searches will often be free to the user. If your local public library doesn't offer online searching, ask the staff to direct you to other agencies.

A major difference between CD-Rom and online information is that the first is usually free to the library patron, and the second is not.

Updating Frequency

Online systems are updated in real time (like wire services), or twice-daily, daily, weekly or even monthly in some instances, depending on the database.

Coverage

Usually online versions of databases cover a longer time period than the same database on CD-ROM. For example, the online version Of CBCA (Canadian Business and Current Affairs) includes information as far back as 1967, whereas the CD-ROM version Of CBCA provides coverage only from 1974. Both these versions offer more information than the printed Canadian Index.

Networks

A communication system that links two or more computers.

Many people are using the Information Highway or the *Internet*. This section explains how it started, and how you too can "surf the net".

More and more people are interested in using networked information resources. You need time to learn, try things out, ask questions. It's fun, frustrating and time-consuming. You'll need to read more and learn more than we will be able to describe to you in this section. See the bibliography for some suggestions about books and magazines.

The Internet

The Internet refers to the world's largest network of networks. It is made up of local, regional, and national networks. The Internet started when the United States Defense Department's Advanced Research Projects Agency Network (ARPANET) began to communicate using four computers. Gradually, other networks joined in, and today an estimated 12,000 networks make up the Internet. The Internet is expanding exponentially both in the number of users and the amount of information available. And as people use the Internet, information comes and goes—what is there today, may not be there tomorrow!

Access to the Internet

There are lots of ways into the Internet. People at universities and colleges, with specialized research needs, have used the Internet for a long time. More recently, many campus library systems have provided access through their *OPACS*.

A number of commercial vendors provide access for a monthly or annual fee which depends on the services you use. To find commercial vendors in the Yellow Pages, look under "Computers". Another good source for commercial vendors is *Canadian Internet Handbook* by Jim Carroll and Rick Broadhead.

Some public libraries already provide Internet access to the public. (See Appendix 2 for a statement from the Canadian Library Association.)

Freenets also provide access to the Internet. They are community-based computer networks made available at no cost by dedicated volunteers and public-spirited sponsors.

What do freenets give you?

- community information
- bulletin board services
- access to the information highway-the Internet
- worldwide electronic mail
- online public access resources

What can the Internet do for you?

Some of the features available are:

e-mail (electronic mail)

Perhaps the most popular service of the Internet, e-mail allows you to send mail to any Internet user. The advantages of e-mail are that it is fast and cheap. You require a computer with a modem plus a *gateway* (such as a freenet or a commercial service bureau) and an e-mail address. You also need the e-mail address of the institution or person you want to communicate with.

LISTSERVS are electronic mailing lists on practically any subject imaginable. Sometimes they are called discussion groups or e-mail conferences. To join a **LISTSERV**, send a short e-mail message to the **LISTSERV** address requesting a subscription. You will then be sent news and information regarding that **LISTSERV** via e-mail. Whether you are interested in chess, computer games, or even "a thought for the day", there is a group waiting for you.

USENET is a global collection of over 2000 news groups that cover a wide range of topics. These are often known as **BBSS** or *Bulletin Board Systems*. Subjects range from the serious to the bizarre - "frequent flyers", desktop publishing or even mass transit today.

Searching the Internet

As you use the Internet you will learn how to use some of the following tools to get from your own computer to an outside information source and bring back what you want.

World Wide Web (www)

World Wide Web was developed at CERN, the European Laboratory for Particle Physics, in Switzerland. It is a graphics interface that helps you find resources on the Internet. Unlike **GOPHER**, which is text-based, it uses *hypertext* technology that allows you to select words or images. You are then linked or cross-referenced to related documents, text, files, **audio** or images. As you make these choices you are browsing the Web. At the same time you can read your e-mail and answer it. A high-speed *modem* and computer plus an appropriate connection to the Internet (SLIP/PPP or dedicated connection) may cut the waiting time to transfer graphic images over the system to your own computer.

GOPHER

GOPHER is an information search and retrieval system that is menu driven. Named after the University of Minnesota's mascot, where the software was developed, there are now hundreds Of GOPHER sites world wide. With GOPHER you can retrieve files, access databases, browse library catalogues throughout the world. And you can find interesting information which can be printed or mailed to you via e-mail.

VERONICA (Very Easy Rodent-Oriented Net-Wide Index to Computerized Archives) indexes information on GOPHER servers. Keyword searches are available on the gopher directories.

TELNET

TELNET is a way to login to a remote computer. If you know the e-mail address of the host or remote computer, you can TELNET directly to it.

File Transfer Protocol (FTP)

You use FTP to transfer or download files from anywhere by copying from any computer on the Internet to your own. You use it to transfer shareware programs, discussion papers, electronic journals, and so on.

Unlike other Internet tools, FTP uses commands rather than a menu. It isnot for the faint of heart. You should be familiar with basic UNIX and MS-DOS commands if you are going to manipulate the files you retrieve.

ARCHIE (Archive Server Listing Service) is a companion program to FTP. It provides indexes to the directories.

We have touched on the highlights of the Internet. See the bibliography for furtherreading.

Copyright and the New Technologies

Copyright is literally the "right to copy" a creative work. The copyright owner can permit or deny someone else the right to use a work. This can include uses such as copying, adapting or translating the work. Canadian copyright is protected by the Copyright Act of Canada, a federal law in force since 1924. Internationally, there is reciprocal copyright protection with most of the developed countries in the world.

Copyright law is old. Originally, interpreting the law was fairly straightforward. For example, a work was a novel, painting, sculpture, or musical composition. To use that work meant to copy out portions by hand, to photograph the painting or sculpture, or to arrange the music for different instruments. You needed the permission of the copyright owner to use the work in any substantial way.

But art and technology have changed significantly over the last hundred years. Understanding of copyright law has become blurred because of the many new kinds of creative works and technologies. Luckily, the same basic rules about copyright still apply. Copyright still protects creative works. Use of the work is still controlled by the owner of the copyright.

Let's look at a newer art form, the music video. All kinds of creative work go into making a music video. Music, of course, but also still photos, movie clips, singing and dancing, perhaps the spoken word, all appear in these videos. The law of copyright says that the copyright owner of each of these separate works must **give** permission for the use of her work. And, when the music video is finished, it is a new copyright work, a "compilation", with all the implied rights.

Multi-media, CD-ROM, online databases, and other such formats contain creative works that may include contributions by many copyright owners. When the copyright owner of such a work gives permission to use the work, the permission is usually limited to a few activities and there is often a fee attached. It is important to check and comply with the conditions of use before using these new technologies. If you are creating your own CD- ROM or online product, ensure that you receive permission from all the contributing copyright owners.

Appendix I

*Health and the Computer*¹

The age of the computer is upon us, and many of us spend each and every day in front of a video display terminal (VDT) using our eyes and our wrists and fingers and very little else. Computer workstations have evolved ergonomically (and still are) but they cannot solve the problem of a sedentary workforce which sits all day. Ergonomics (from the Greek words "ergon" meaning work and "nomos" meaning knowledge) combines biological and engineering sciences to examine human behaviour in relation to work,

Ergonomics operates on the principle that machines and tasks should be designed to meet human needs. With the rapid spread of technology, the idea of fitting the machine to the person, rather than the other way around, has taken on a challenging dimension.

Work Systems

When building or renovating a specialized work area, it is a good idea to consult a specialist in ergonomics as it is more cost-effective to plan ergonomically at the design stage than to make modifications afterwards.

Benefits

The goal of designing any work system should be, not only to maximize employee productivity, but to improve job satisfaction and minimize occupational safety and health hazards. Poor ergonomics in the workplace has been linked to occupational ailments such as stress, visual fatigue, back strain and shoulder, arm and hand strain. Repetitive strain injuries (also known as cumulative trauma disorders) are becoming increasingly significant in compensation claims. These include carpal tunnel syndrome (compression of the hand's median nerve), tendonitis and tenosynovitis (inflammation of tendons and surrounding tissues), and vibration white finger (affecting the circulation of hands).

Everything in the work environment: lay-out, tools, equipment, furniture, machines, temperature, lighting, acoustics, etc. affects a person's well-being on the job. Well designed tasks that also allow for personal challenge and the use of individual skills will result in high motivation and job satisfaction.

¹Reprinted with permission from Occupational Safety and Health, Treasury Board of Canada.

Since well-designed workstations encourage high-quality work and good working conditions keep employees both physically and psychologically healthy, then it makes good business sense to think "ergonomics" when replacing equipment, setting up a new workplace or planning changes to the old one.

Key Considerations for office Workplaces

1. Equipment should be selected for ease of use and be easy to install, operate and maintain. Shared equipment should be readily adaptable to different operators and to different tasks.

2. Visual displays should be easily read. Lay-out, viewing angle, size of characters, contrast, illumination level, glare and colour should all be considered. The shape and placement of controls, screens, keyboards, and document holders should also minimize employee effort. Eye exercises and periodic changes of activity help to prevent eye strain.

3. Furniture should be arranged to allow for ease and efficiency of movement, taking into consideration the visual field, sequence and frequency of use, communication, reach requirements and storage facilities. Work surfaces should be able to accommodate materials related to the task, and allow for sufficient leg clearance underneath. Chairs should be adjustable with attention given to seat height, shape and angle; seat cushion; back and arm rests; and chair base.

4. Lighting levels for Video display Terminal (**VDT**) work should generally be lower than for paperwork. Consideration should also be given to contrast, daylight, glare, luminaires, ambient and task lighting. VDTs should be placed away from windows.

5. Sound levels in offices are usually well below those permitted by law. However, office sounds can be a source of annoyance, distraction and fatigue. Design considerations to minimize noise include placement and grouping of workstations, routing traffic, placement of screens, use of sound absorptive materials, parabolic louvers for lights, and masking background noise.

6. Generally, the most comfortable air temperatures are in the low to mid 20s (C) depending on the relative humidity, proximity to radiant heat sources and amount of clothing. Air should be distributed to all workstations. Legislation ensures that concentrations of chemical, biological and physical agents in the workplace are controlled in accordance with prescribed standards.

7. Jobs requiring static positions for lengthy periods have the potential to disturb normal functioning of the circulatory, musculo-skeletal and other body systems. Prolonged inactivity as well as **repetitive activity** are causes for initial discomfort that can eventually lead to illness or injury. Sedentary and repetitive jobs should allow for activities that enable periodic changes in posture. Exercises also help to increase circulation and prevent muscle strain.

Considerations for Other Workplaces

Adaptability to the employees using it should be the key consideration when purchasing equipment for the workplace. In general, machines, furniture, tools and vehicles should be designed to avoid unnecessary or excessive strain of the muscles, joints, ligaments, and circulatory and respiratory systems.

1. **Position work activities** so that they remain within the workers's normal range of motion and minimize awkward bending, crawling and reaching motions. Motions that raise arms above the shoulders should be avoided.
2. Mechanized lifts should be used for **material handling** wherever possible. Employees should be instructed about the appropriate lifting method for lighter manual handling. Mechanical clamps eliminate the need to hold objects manually.
3. To reduce repetitive strain injuries, workers doing **repetitive physical work** could be rotated periodically or have their tasks combined with other tasks requiring different skills.
4. When selecting **handtools**, consideration should be given to right or left-handedness, weight, wrist angle, grip shape, size and span, pressure and pinch points, and vibration.
5. **Protective clothing, equipment and safety footwear** must be chosen to **fit** the employee as well as the task if they are to be effective and not become an additional hazard.

Conclusion

Ergonomics is applied everywhere today: in trades and transportation, in sports and recreation, in institutions and homes, and in all types of workplaces. Even minor ergonomic changes in the workplace can bring substantial returns and eliminate safety hazards or long-term health problems.

Managers, supervisors and employees have a role to play in the ergonomics of their work environment. The benefits of applying ergonomic principles are the same as those of occupational safety and health, i.e. improved performance, less lost time, lower turn-over rate and replacement costs, reduced compensation claims, a safe and healthy environment and a happy workforce.

This article was written for those working in offices, however many of the factors apply to the home computer user Contact your local public library for further information on ergonomics.

Appendix 2

Information and Telecommunication Access Principles

The following principles were approved by the Canadian Library Association Executive Council June 18, 1994.¹

Preamble

The convergence of computers and high-speed telecommunication networks provides increased opportunity for public access to information and participation in the democratic processes of society. Conversely, access and participation could be reduced through the imposition of user fees and centralized control.

Librarians, libraries, and library organizations will work to assure the 'public good' is represented in all government and corporate initiatives for information dissemination and telecommunications policy. Co-operation with other organizations and public interest groups to protect social interests will strengthen the efforts of the library community.

All people have the right to:

1. Literacy.

The opportunity to learn to read and write is fundamental for all people.

Basic literacy includes numeracy and information literacy. Literacy is an important requirement for participating in the economic, social, cultural, and political life of the country.

Everyone should have the opportunity to acquire the necessary skills to find and use information.

2. Universal, Equitable, and Affordable Access

Access to information and telecommunication network services should be available and affordable to all regardless of factors such as age, religion, ability, gender, sexual orientation, social and political view, national origin, economic status, location, and information literacy.

Diverse sources of information should be developed through encouraging non-profit organizations and community groups to provide information and opinions and by preventing information monopolies.

Opportunities should be created for broad public participation in the determination of information and telecommunication policy.

¹The information and Telecommunication Access Principles may be photocopied, with permission of the Canadian Library Association.

3. Communicate

Individuals have the right to create, exchange, access, and receive the widest range of ideas, information, and images.

Individuals should have the right to choose what information to receive and what not to receive and what information to give and not give including that which others may find objectionable.

4. Public Space on the Telecommunications Networks

Government information is fundamental to participation in the democratic process and should therefore be accessible in a current, timely, accurate, and comprehensive manner.

Access to government information should be guaranteed through active programs of dissemination.

Opportunities to communicate electronically with elected and appointed government representatives is a vital extension of democracy.

Government policies should encourage and support archiving of information in support of the collective human memory.

Government policies should encourage and support the development of community information networks, such as Freenets.

Government should provide resources for libraries and other community organizations to make electronic access to information available and to provide training to the public in the use of such technology.

Individuals have the right to know the positive and negative personal and social consequences of the introduction of information technology.

Individuals have the right to a safe ergonomically-sound environment and appropriate training or re-training when new technologies are introduced.

Social policies accompanying the introduction of new and more efficient information technologies must emphasize benefits to the whole population, such as greater leisure time and shorter work weeks rather than narrow economic interests.

5. Privacy

Privacy of personal information should be carefully protected and extended.

Personal data collected should be limited to the minimum necessary.

Prior written approval of the individual affected must be obtained. Personal information collected for one purpose cannot be traded or sold without the express written permission of the individual affected. Individuals should have the right to examine personal information collected by government and corporations and have mistakes corrected at no charge.

Glossary of Technical Terms

:-) This is a smiley symbol, one of the ways a person can portray mood. It is called an emoticon and there are literally hundreds of them from the obvious to the obscure. This particular example expresses "happiness". Don't see it? Tilt your head to the left 90 degrees.

Abstract

A short statement giving the main ideas of an article or a book; a summary.

ARCHIE

An index system that looks for files and directories in a database of countless anonymous m sites. Invented in Canada by Peter Deutsch of McGill University. (See also File Transfer Protocol [FTP]).

Baud rate

The speed at which modems transfer data.

BBS (bulletin board system)

An electronic bulletin board system that is a message database where people can leave messages for others, usually grouped by topic. Thousands of local BBS systems are in operation throughout Canada and the us.

Citation

A quotation or reference given as an authority for facts or opinions.

Connect time

Actual time that you are connected to an online database (important if you are paying long distance charges!)

Database

An organized collection of information or data.

Descriptor

A precise subject term chosen to define the topic.

Downloading

The electronic transfer of information from a remote computer to your computer. The reverse is called Uploading.

e-mail (electronic mail)

A system whereby a computer user can exchange messages with other computer users (or groups of users) via a communications network. Electronic mail is one of the most popular uses of the Internet.

Field

Space reserved for storing specific information in a database program, for example, a person's name or postal code.

File Transfer Protocol (FTP)

A set of rules permitting a user on one Internet host to access and transfer files to another host over the network. FTP is the name, not only of the protocol, but also of the program used to execute the protocol. (See Protocol.)

Flame

To express a strong opinion or criticism of something, usually as an inflammatory statement in an electronic mail message.

Freenet

A community-based bulletin board system, providing community-related information and in many cases links to the Internet and USENET.

Full text

The complete text of a newspaper, periodical, or book.

Gateways

A system by which two incompatible networks or applications can communicate with each other.

GOPHER

Allows users to browse various types of data. The menu system is presented to the user in a hierarchical arrangement of documents and by using a client-server communications model.

Hold

To reserve a library book that you want to borrow.

Host

The central or controlling computer in a network of computers. It provides services that other computers can access via the network.

Hypertext

A method of accessing information so that the user chooses the order in which information is received regardless of how the topics were originally organized. The World Wide Web is a Hypertext system.

Internet

A series of interconnected networks that includes local area, regional, and national networks. It supports electronic mail, remote login, and file transfer services.

Keyword

Any term used for searching a database by topic or content.

LISTSERV lists

Mailing lists that act as newsgroups. Messages sent to a LISTSERV address are sent to everyone who has subscribed to the list. Responses are sent back to the LISTSERV address.

Login

Also known as logon. To establish a connection to a computer system or on-line service before using it. Many systems require the user to type an identification number or a password before the system can be accessed.

Lurk.

To read messages in a USENET newsgroup without contributing.

Menu

A list of commands and options available within a program.

Modem

A device used by one computer to communicate to other computers through the phone line. Modems come in various speeds, or **baud rates**.

Mouse

A hand-held device used to control the pointer on the computer screen.

Multimedia

Software which combines two or more media such as video, audio, and graphics.

Netiquette

A pun on "etiquette". Guidelines for conducting oneself on electronic communications. CAPITALS indicate screams.

Network

A communications system that links two or more computers. It can be as simple as a cable strung between two computers a few feet apart or as complex as hundreds of thousands of computers around the world linked through fibre optic cables, phone lines or satellites.

Online

When your computer is hooked up to your printer and is ready to print, it is online. Also refers to being connected to a modem service such as your local Freenet.

OPAC

Online Public Access Catalogue-a term used to describe any type of computerized library catalogue.

Protocol

1. Message formats and the rules two computers must follow to exchange messages.
2. The method used to transfer a file between a host system and your computer.

There are several types of protocols such as FTP.

Public Domain

Software in which the copyright owner has waived rights and can be copied and used by anyone.

Remote Access

Access to a computer not directly wired to your own. Remote access requires communications hardware, software, and actual physical links; these can be as simple as telephone lines or as complex as a TELNET login to another computer across the Internet.

Shareware

Software that you can legally copy but must pay for if you use regularly. Once you pay for shareware you will get a manual, telephone support and future upgrades.

Site License

A software license allows installation of a specified number of copies of a software package at a specific location.

Snail mail

The traditional postal service.

TELNET

A program that allows a computer user at one site to connect to and work on a computer at another site. TELNET requires Internet access, that is, you must be on a TCP/IP network with a gateway to the Internet. Unlike FTP and electronic mail, TELNET gives access to the remote host's applications, such as library catalogues, databases and gophers.

Transmission Control Protocol/Internet Protocol (TCP/IP)

The standard protocol which allows computers of different types to communicate across a network.

Truncation

Search technique using the stem of a word, such as "pollut" which will retrieve "polluter", "pollution", "polluted" and any other words containing "pollut".

USENET

Consists of several thousand subject areas known as newsgroups. Topics range from locksmithing to religion to bowling. As a user of the Internet, you can subscribe to any of the USENET newsgroups carried by your Internet service provider.

VERONICA

An index system for keyword searches of gopher directories and items from most of the gopher servers. VERONICA is an acronym for Very Easy Rodent Oriented Netwide Index to Computerized Archives.

WORLD WIDE WEB (WWW)

The www project merges the techniques of information retrieval and hypertext, to form an easy but powerful global information system. It was developed at CERN, the European Laboratory for Particle Physics, in Switzerland.

Selected Bibliography

This is a dynamic area so check with your library or bookstore for additional material.

Books

Carroll, Jim and Rick Broadhead. *The Canadian Internet Advantage: Opportunities for Business and Other Organizations*. Scarborough, Ont.: Prentice Hall, 1995

----. *Canadian Internet Handbook*. 1995 cd. Scarborough, Ont.: Prentice-Hall, 1995.

Dyson, Peter. *The PC User's Pocket Dictionary*. 1994.

Eddings, Joshua. *How the Internet Works*. Emeryville, CA: Ziff-Davis Press, 1994.

Gilster, Paul. *Finding it on the Internet: the Internet Navigator's Guide to SearchTools and Techniques*. 2nd ed. Etobicoke, Ont.: Wiley, 1996.

Galton, Gwen and Lynn Morgan. *The Internet: Beginner's Guide and Workbook*. 2nd ed. Mississauga, Ont.: Gwen Galton Associates, 1995.

Henderson, Harry. *Internet How-to*. Corte Madera, CA: The Waite Group, 1994.

The Internet for Dummies. Foster City, CA: IDG Books, 1994.

Kent, Peter. *Complete Idiot's Guide to the Internet*, 2nd ed. Indianapolis, IN: Alpha Books, 1995.

Laquey, Tracy. *The Internet Companion Plus., A Beginner's Start-up Kit for Global Networking*. 2nd ed. Reading, MA: Addison-Wesley, 1994.

Multimedia & CD-ROM for Dummies, interactive Multimedia Value Pack. Foster City, CA: IDG Books, 1994.

Periodicals

Computing No.: *Canada's Personal Computing Magazine*. North York, Ont.: Moorshead Magazines Ltd.

Information Highways. Toronto, ont.: TCE information Group.

Internet World. Westport, CT: Meckler.

Wired. San Francisco, CA: Wired Ventures Ltd.