Catholic District School Board Writing Partnership

Course Profile

Introduction to Information Technology in Business

Grade 9 or 10
Open

· for teachers by teachers

Course Profiles are professional development materials designed to help teachers implement the new Grade 9 secondary school curriculum. These materials were created by writing partnerships of school boards and subject associations. The development of these resources was funded by the Ontario Ministry of Education. This document reflects the views of the developers and not necessarily those of the Ministry. Permission is given to reproduce these materials for any purpose except profit. Teachers are also encouraged to amend, revise, edit, cut, paste, and otherwise adapt this material for educational purposes.
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Unit 3: Knowledge Management: Accessing the Global Network of People and Information

Time: 31.25 hours
Unit Developer(s)
Toronto Catholic District School Board
Development Date: July 1999

Unit Description

Students learn how to productively explore the resources of the Internet. Students learn how to search, collect, analyse, validate, and synthesize data permitting them to make pragmatic and ethical business decisions. Students demonstrate an understanding of the Internet's limitless potential to link data, information, and people in order to seek the truth and build knowledge.

Strand(s) and Expectations

Ontario Catholic Graduate Expectations: 1d, 2c, 3b, 3c, 3d, 3e, 4a, 4f, 5g, 7b, 7i.
Strand(s): Information Management, Software Applications, Electronic Communication, Electronic Research and Ethical Issues
Overall Expectations: IMV.01X, SAV.02X, ECV.02X, .03X; EEV.01X, .02X, .03X.
Specific Expectations: IM1.01X, .03X; .05X; IM4.03X, .04X, .05X; SA2.02X, .03X; SA3.03X; EC2.02X, .03X, .04X; EC3.02X, .03X, .04X, .05X; EE1.01X, .02X, .03X, .04X, .05X; EE2.01X, .02X, .03X, .04X; EE3.01X, .02X, .03X, .04X.

Activity Titles (Time + Sequence)

Activity 1	Introduction to the Internet, Intranet, and Extranet	300 minutes
Activity 2	The Internet: Legal, Ethical and Moral Issues	225 minutes
Activity 3	Researching the WWW Productively	750 minutes
Activity 4	Collaborating Using E-Mail and Other Electronic Tools	225 minutes
Activity 5	Applying Collaborative Research Skills to Create Knowledge	375 minutes

Unit Planning Notes

Since this unit is the first in Phase 2 of this course profile, teachers are encouraged to examine Unit 5 before starting, as modifications have been made to Unit 5. Some of the activities in Unit 5 are designed for concurrent delivery with earlier units but not all expectations (CO1.02X, CO1.03X, CO1.04X) were referenced in Phase 1. Teachers may wish to develop appropriate tools to ensure that these expectations are assessed and evaluated.

This unit requires advanced preparation. The teacher guides the direction of student research but remains flexible in order to encourage student creativity. The information gathered through the research and collaboration activities in Activity 5 will be organized and edited in order to provide the content for a project in Unit 4.

Prior Knowledge Required

Students use basic word processing and file management skills that were developed in Units 1 and 2.

Teaching/Learning Strategies

- This unit provides opportunities to generate, select, and develop project ideas related to the unit's expectations and the students' interests. Teachers demonstrate research and collaboration techniques as often as possible to model the appropriate strategies. Student activities emphasize "learning by

- Throughout the activities in this unit students should be reminded to update their glossaries and technical journals. Teachers check these for completeness at regular intervals.
- Where appropriate throughout this unit, have students continue to develop their keying skills and to monitor their own progress.

Assessment/Evaluation

Formative

- teacher observational checklists
- teacher observation
- student checklists
- technical journal
- glossary
- student-teacher conferencing
- group reporting/presentations
- terminology quizzes
- lab exercises (scavenger hunts, guided practice)
- activity journals

Summative

- tests
- case studies
- research assignments
- article assignment
- oral presentation
- activity journals
- quizzes

Resources

Internet

The Internet and Business
IMS INTERNET MARKETING SERVICES - This Internet marketing service provides businesses with information on how to use the Internet to improve business.
http://www.erehwon.com

General – Education

ALPHABET SUPERHIGHWAY - This educational web site, sponsored by the U.S. Dept. of Education, assists teachers in creating, locating and communicating information through on-line activities.
http://www.ash.udel.edu/ash/

EDUCATION AND THE INTERNET: OPPORTUNITIES AND PITFALLS
http://teachers.work.co.nz/internet_education.html

INTERNATIONAL SCHOOL WEB SITE DIRECTORY
http://web66.coled.umn.edu/schools.html

LEARNING RESOURCE SERVER – Provides links to some of the most exciting uses of technologies for learning on the Internet (College of Education, University of Illinois)
http://lrs.ed.uiuc.edu/

TEACHER NET
http://www.teachernet.com

THE COMPUTER LEARNING FOUNDATION - The Computer Learning Foundation is an international, non-profit educational foundation, dedicated to improving the quality of education and to preparing youth for the workplace through the use of technology. Users may review foundation articles, browse and order resource materials, find out about activities and competitions, locate lesson plans and learn of new Foundation projects and materials as they are announced.
http://www.computerlearning.com

CANADA'S SCHOOLNET - Established in 1993, Canada's SchoolNet is designed to promote the effective use of information technology among Canadians by helping Canadian schools and public libraries connect to the Internet. Through its partnerships with provincial and territorial ministries of education, library authorities, education and library associations and the private sector, Industry Canada's SchoolNet has successfully made Canada the first nation in the world to connect its schools and libraries to the Information Highway.
http://www.schoolnet.ca/

EPALS CLASSROOM EXCHANGE - Connect with classrooms from 100 countries speaking over 100 languages. 13,547 classrooms, representing more than 900,000 students, are now registered with ePALS!
http://www.epals.com

EDUNET - Explore some of the best educational content through EduNET's 10 Learning Categories. Check out the EduNET Bookstore for recommended educational reading. Preview the Education Directory of Schools (Ontario) available on CD-ROM.
http://www.edunetconnect.com/

EDUNET CHOICE AWARDS - Awarded to sites for providing and maintaining valuable educational content. Click on Previous Winners to look at good sites.
http://www.edunetconnect.com/choiceaw.html

MEDIA AWARENESS NETWORK - The Media Awareness Network (*MNet*), with education and community partners, is launching an Internet education campaign in Ontario. The purpose of the campaign is to raise awareness about the challenges that are arising as children and young people go online. *Web Awareness '99: Knowing the Issues* features activities and events hosted by schools and local libraries throughout the province.
http://www.media-awareness.ca/eng/webawareness/webindex.htm

THE HISTORY OF THE INTERNET- This site provides a very detailed, almost year-by-year history of the development of the Internet.
http://www.davesite.com/webstation/net-history.shtml

For Beginners

BEGINNERS' CENTRAL - This site is dedicated to helping people learn how to use information available on the Internet in a coherent manner.
http://www.northernwebs.com/bc/

THE HELPWEB - A guide to new users of the Internet.
http://www.imagescape.com/helpweb

THE INTERNET TOURBUS - This is a virtual tour of the best of the Internet.
http://www.tourbus.com/

INTERNET 101 – This is a high quality on-line guide to the internet.
http://www2.famvid.com/i101/internet101.html

LEARN THE NET – This outstanding web site has some very user-friendly information about all aspects of the Internet.
http://learnthenet.com

Netiquette

THE NET: USER GUIDELINES AND NETIQUETTE -By Arlene Rinaldi and Florida Atlantic University
http://www.fau.edu/netiquette/net/index.html

WHAT IS NETIQUETTE - 15 MINUTE SERIES
http://www.sl-regional.k12.ma.us/lab323/15min/NETIQETE/sld01.html

NETIQUETTE: LIFE ON THE INTERNET
http://www.screen.com/start/guide/netiquette.html

NETIQUETTE - "Netiquette" is network etiquette, the do's and don'ts of online communication. Netiquette covers both common courtesy online and the informal "rules of the road" of cyberspace. This page provides links to both summary and detailed information about Netiquette for your browsing pleasure.
http://www.albion.com/netiquette/index.html

Ethics

THE 10 COMMANDMENTS FOR COMPUTER ETHICS – from the Computer Ethics Institute, Florida Atlantic Institute.
http://www.fau.edu/netiquette/net/ten.html

Glossaries

GLOSSARY OF INTERNET TERMS - Extensive set of Internet terms
http://www.matisse.net/files/glossary.html

Searching and Researching

THE SPIDER'S APPRENTICE - Suggestions for searching the web more efficiently.
http://www.monash.com/spidap.html

WHERE THE WILD THINGS ARE – This is a librarian's guide to the best information on the Internet. Click on *Internet Resources* for information on the social impact of the Internet, technical assistance and viruses. Click on *Training Resources* for a wealth of training information.
http://www.sau.edu/CWIS/Internet/Wild/index.htm

TEN C'S FOR EVALUATING INTERNET SOURCES
http://www.uwec.edu/Admin/Library/Guides/tencs.html

EVALUATING WEB RESOURCES
http://www2.widener.edu/Wolfgram-Memorial-Library/webeval.htm

INTRODUCTION TO SEARCHING THE WEB
http://www.library.ubc.ca/home/websearch/#formore

EVALUATING INTERNET RESOURCES
http://www.albany.edu/library/internet/evaluate.html

SEARCHING THE INTERNET: RECOMMENDED SITES AND SEARCH TECHNIQUES
http://www.albany.edu/library/internet/search.html

Free Electronic Greeting Cards On The Internet

BLUE MOUNTAIN ARTS
http://www.bluemountainarts.com/

123 GREETINGS
http://www.123greetings.com/

CARDMASTER
http://www.cardmaster.com/

AWESOME CYBER CARDS
http://www.marlo.com/

E-CARDS
http://www.e-cards.com/

HOWAREYOU
http://www.howareyou.com/cards.shtml

WEBCARDZ
http://www.paradocs.com/webcardz/

Free Posting For Web Pages

ANGELFIRE
http://www.angelfire.com

GEOCITIES
http://www.geocities.com/

TRIPOD
http://www.tripod.com

ONE STOP
http://home.onestop.net/

Free Chat Rooms

INTERACTIVE NET
http://www.talkroom.com

PARACHAT
http://www.parachat.com/

INTERNET CHAT EXCHANGE
http://www.spin.de/commline/ice.html

NEWSLET
http://www.chatplanet.com/

General Lesson Plans

STEPHANIE'S PAGE OF LESSON PLANS
http://bulldog.unca.edu~srashley/lesson.html

LESSON PLANS ON THE INTERNET
http://www.swift.cps.k12il.us/swift/lessons.html

ASK ERIC LESSON PLANS
http://ericir.syr.edu/Virtual/Lessons/

Free Downloads

DOWNLOAD ZONE – Educational Shareware, Freeware, and software
http://www.angelfire.com/ks/tonyaskinner/download.html>

Free E-Mail Providers/Services

EVERYTHING E-MAIL – This web site offers just what it states… everything you would want to know about email. It also offers an e-postcard service.
http://everythingemail.net

CANOEMAIL
http://canoemail.com

HOTMAIL
http://www.hotmail.com

EXCITE MAIL
http://www.mailexcite.com

ROCKETMAIL
http://www.rocketmail.com

MAILCITY
http://www.mailcity.com

NETADDRESS
http://wwwnetaddress.usa.net

FRIENDLY E-MAIL
http://wwwthekeyboard.com

YAHOO! MAIL
http://www.mail.yahoo.com

MY OWN E-MAIL
http://www.betty-boop.com

GLOSSY E-MAIL
http://www.glossy.com

SUPERNEWS E-MAIL
http://www.supernews.com

EUDORAMAIL
http://www.eudoramail.com/

Print

Bix, Cynthia, et al. *Kids do the Web*. San Jose, CA.: Adobe Press, 1996.

Carrol, Jim, et. al. *1998 Canadian Internet Handbook. Educational Edition*. Scarborough, ON: Prentice Hall Ginn, 1998.

Cram, Carol M. *World Wide Web*. North Vancouver, BC: Capilano College, 1997.

Lamb, Annette. *The Magic Carpet Ride*, 2nd ed. Emporia, Kansas: Prepublication Printing, 1998.

Perkins, Joyce and Jernigan. *Activities for the Internet: An Introduction*. Cincinnati: South-Western Educational Publishing, 1998.

Poindexter, Sandra. *E~Course Netscape Navigator*. Cambridge, MA, Course Technology, 1997.

Norton Peter. *Essential Concepts Third Edition*. New York: Glencoe/McGraw-Hill, 1999.

Video

Videotapes listed below may apply to earlier units of this course.

Caught in the Net

Cybernation

Day of Reckoning

Digital Design

Infologic Series

Internet for Educators

Venture: Technology and Change

Webheads

All from the TCDSB Professional Library. See Appendix XXIII for detailed information.

HYPERSTUDIO TRAINING VIDEOS - OSAPAC has purchased a licence for training videos for HyperStudio; duplicating masters have been shipped to school boards (as per announcement on site listed below, July 1999).
http://www.haltonbe.on.ca/OSAPAC/osapacE.html

Activity 1: Introduction to the Internet, Intranet, and Extranet

Time: 300 minutes

Description

This activity is designed to introduce students to basic concepts and terminology associated with the Internet, Intranet, and Extranet. Through teacher-led discussions, and guided exploration exercises, students begin the journey to learn how the myriad of Internet applications can enhance personal and business productivity. This activity encompasses a brief overview of the Internet (e.g., history, how it works) and terms (See Appendix I – Internet-Related Terms.). In order to provide students with a 'taste' of the diversity of information available on the Internet, they are given an opportunity to explore various sites.

Strand(s) and Expectations

Ontario Catholic School Graduate Expectations:

Students will:

- read, understand, and use written materials effectively;
- use and integrate the Catholic faith tradition, in the critical analysis of the arts, media, technology, and information systems to enhance the quality of life;
- create, adapt, and evaluate new ideas in light of the common good;
- demonstrate flexibility and adaptability;

- apply effective communication, decision-making, problem-solving, time and resource management skills;
- respect the environment and use resources wisely.

Strand(s): Electronic Research and Ethical Issues, Electronic Communications

Overall Expectations:

- analyse the various uses of the Internet in a business environment (EEV.02X).

Specific Expectations:

- explain how a stand-alone computer is connected to the Internet; (EE2.01X)❖
- compare the services provided to businesses by a variety of Internet Service providers; (EE2.02X)❖
- explain the ways in which organizations can use the Internet and Intranet; (EE2.03X)❖
- compare the ways the Internet and Intranet are used in a variety of organizations; (EE2.04X)❖
- describe the tools used to communicate electronically in business (e.g., fax, e-mail, voice mail, bulletin board, discussion group, the Internet, Intranet, Extranet); (EC2.01X)❖
- compare a variety of electronic communication tools in terms of their uses and benefits to business. (EC2.02X)❖

Planning Notes

- To stimulate interest, use a teacher-prepared visual aid that illustrates various Internet terms on the first day of this unit. For ideas see: http://discoveryschool.com/schrockguide/brush/board.html.
- Students have already been exposed to the Internet (see Unit 1, Activity 3: Accessing the World Wide Web), so the topic is not an entirely new one. In preparing for this activity, teachers consult several sources that provide information on the history of the Internet and Internet-related terms. (See Appendix I - Internet-Related Terms.)
- In preparation for this activity, teachers may choose to assign the discussion questions (see Teaching/Learning Strategies 1) as homework in advance of the lesson.
- For the Internet scavenger hunt (Teaching/Learning Strategies 4) teachers have the option of preparing their own hunt, perhaps tailored to the interests of their students, or using scavenger hunts already developed. Three Internet scavenger hunts can be found in Joseph Cordi's *Internet Cookbook*. Another print source is *The Teacher's Complete and Easy Guide to the Internet* by Ann Heidi and Linda Stilborne. An Internet source is Internet Scavenger Hunts – http://www.angelfire.com/ks/tonyaskinner/scavhunt.html. It is suggested that the difficulty of the exercise be graduated.
- To augment understanding of the security of an Intranet and an Extranet, teachers may identify in advance a site (e.g., local school board Intranet site or some other locally relevant site) that requests authorization in order to access. Some working examples (as of July 1999) are: webserver.ehvert.com, intranet.tcdsb.on.ca and canadatrust.com (select *easyweb*).
- Teachers remind students to update glossaries and technical journals as required.

Prior Knowledge Required

Teachers should reinforce the school's Acceptable Use Policy (AUP) (This policy was already covered in Unit 1, Activity 3 but the start of Unit 3 may be an opportune moment to refresh the students' understanding of it.)

Teaching/Learning Strategies

1. Introduction

Begin with a class discussion of the Internet. The discussion should centre around the following points:

- What is the Internet?
- How does society benefit from the use of the Internet?
- How did the Internet develop as a business tool?
- How does business benefit from the use of the Internet?
- How do students benefit from the use of the Internet?

Following the discussion, students brainstorm, in groups, how a typical high school student would go through a day in the year 2010. They must try to incorporate the use of the Internet in as many ways as possible. Each group then prepares an hour-by-hour log and presents it to the class. The group who has incorporated Internet usage into the day most often could win a small prize.

2. World Wide Web

The World Wide Web allows for computer connections that are non-linear and almost endless. To illustrate the concept of the World Wide Web, it is suggested that teachers use an analogy to demonstrate that information can be gathered divergently. For example, the teacher could involve the class in planning a trip. In rapid-fire order, the teacher asks questions such as:

- Where would you like to go for a holiday?
- Why do you want to go there?
- Why not to (*another place*)?
- What clothes will you bring?
- How much money will you need?
- What will you see?
- At which hotel will you stay?
- Do you have to worry about natural disasters?
- Do you have to worry about wars?

Once the trip has been planned, the teacher then points out that just as the questions were not asked in any particular order, the World Wide Web allows one to access information on the Internet in an unrestricted order.

3. Let's Go Somewhere!

The teacher guides students to visit a few WWW sites. Possibilities include:

- http://www.disney.com (various sites to explore)
- http://www.littlejason.com/lemonade (a business game in which students compete with each other)
- http://canada.gc.ca/ (provides a wealth of information about Canada's government)
- http://www.vatican.va/ (The Vatican)
- http://home.golden.net/~wts/youth.html (CATHOLIC YOUTH IN CANADA)
- http://pauline.org/saintday/index.html (The profiles of the saints are taken from the book Saints for Young People for Every Day written by Sr. Susan Helen Wallace, FSP.)
- http://www.march21-2000.com (Racism - Stop It! Action 2000)
- http://www.interlog.com/~uarr (Urban Alliance on Race Relations)

Through this activity students gain further practice at using the main features of their Internet browsers (e.g., back and forward buttons, home, stop, reload) and come to understand the concept of hyperlinks.

4. Let's Find Some Information

Students, individually or in groups, undertake an Internet scavenger hunt. This could be a graduated exercise. For example, the first set of questions could direct students to a specific site to search for answers and the second set of questions could direct students to various sites to seek specific information.

5. How the Internet Works

How is a Computer Connected to the Internet?

Using Appendix II - How Is a Computer Connected to the Internet?, teachers outline how a computer is hooked up to the Internet. Terms covered include: Interface Card, Modem, Service Provider, IP Address, Browser, HTML, Hyperlink. (See Appendix I – Internet-Related Terms.)

Comparison of Internet Service Providers

Using a local computer magazine (e.g., *Toronto Computes*) or the Internet, have groups of students research various service providers to compare the features that they offer to home and business users (e.g., cost, speed of transmission, number of e-mail addresses, space for web pages).

Findings are presented in table format and submitted for evaluation. (See Appendix III.)

Internet, Intranet, and Extranet

Using Appendix IV – The Internet, Intranet, and Extranet, teachers explain the interrelationship among the Internet, Intranet, and Extranet. In order to experience the security features of an Intranet or Extranet, students attempt to access an Intranet or Extranet site (see Planning Notes) at which they will be unsuccessful. The result of this attempt, will be an error message such as the following:

HTTP Error 401

401.1 Unauthorized: Logon Failed

This error indicates that the credentials passed to the server do not match the credentials required to log on to the server.

Please contact the Web server's administrator to verify that you have permission to access the requested resource.

A follow-up discussion as to the possible reasons for security on an Intranet and an Extranet should lead to the types of information exchanged by each medium. For example:

Medium	Available to	Information Exchanged/Relayed
Internet	Public	• Promotional material • On-line catalogues • E-Commerce
Intranet	Individuals within an organization	• Internal newsletters • Upcoming meetings
Extranet	Selected business partners e.g., suppliers	• Purchase requests • Price lists

Have students prepare a chart similar to the one shown above filling in additional examples where appropriate.

As an additional resource to illustrate the use of the Internet, Intranet, and Extranet in business, refer to the following:

GRAPHIC: HOW A MYTHICAL MERCHANT USES THREE AVENUES OF THE NET FOR E-COMMERCE. Visit this site to link to an excellent graphic (.pdf format) that illustrates the use of the Internet, Intranet, and Extranet for E-commerce.

http://www.businessweek.com/1998/25/b3583001.htm

(Select Extranets, then GRAPHIC: How a Mythical Merchant Uses Three Avenues of the Net for E-Commerce (.pdf) at bottom of page)

Accommodations

- Invite peer tutors or gifted students to act as lab assistants during this activity.
- Simplify terminology or use everyday analogies to explain terminology.
- Simplify the Internet scavenger hunt (e.g., limit the number of sites or questions).
- For further strategies see Accommodations (General) on page 7, Phase 1.

Assessment/Evaluation

Formative

- teacher observational checklists (EE1.01X, EC2.02X)
- terminology quizzes (EE2.02X)
- completion of scavenger hunt(s) (EE1.01X)

Summative

- test (EE2.01X, EE2.02X, EE2.03X, EE2.04X, EC2.01X)
- research assignment (EE2.02X)

Resources

Internet

Glossaries

INTERNET 101 BASIC TERMINOLOGY - Many pages of Internet-related terms.
http://www2.famvid.com/i101/terms.html

GLOSSARY: INTERNET TERMINOLOGY - Many pages of internet-related terms.
http://www.library.nwu.edu/iesca/glossary/interms.html

The Internet and Business

GRAPHIC: HOW A MYTHICAL MERCHANT USES THREE AVENUES OF THE NET FOR E-COMMERCE. Visit this site to link to an excellent graphic (pdf format) that illustrates the use of the Internet, Intranet and Extranet for E-commerce.
http://www.businessweek.com/1998/25/b3583001.htm
(Select Extranets, then GRAPHIC: How a Mythical Merchant Uses Three Avenues of the Net for E-Commerce (.pdf) at bottom of page)

General - Education

BUSY TEACHERS' WEB SITE K-12 - A subject directory of resources for teachers.
http://www.ceismc.gatech.edu/busyt/

Print

Heide, Ann and Linda Stilborne. *The Teacher's Complete and Easy Guide to the Internet,* 2nd ed. Toronto, Canada: Trifolium Books Inc., 1999.

Cordi, Joseph. *Teachers' Internet Cookbook: A Recipe for Internet Implementation for the Absolute Beginner*. Toronto, Canada: Baxter Group Publishing Company, 1998.

Video

See Appendix XXVIII - Video Resources, for a detailed list of video resources.

Activity 2: The Internet: Legal, Ethical, and Moral Issues
Time: 225 Minutes

Description
In this activity students investigate legal, ethical and moral issues pertaining to Internet use. Students are presented with several scenarios that require the identification of legal, ethical, or moral implications. A foundation of ethical principles is presented to the students that can serve as a guide for socially responsible use of the Internet. Students then proceed to investigate specific issues including "Acceptable Use " policies, network security, cyber-crime and copyright.

Strand(s) and Expectations
Ontario Catholic School Graduate Expectations:
Students will:
- think reflectively and creatively to evaluate situations and solve problems;
- make decisions in light of gospel values with an informed moral conscience;
- demonstrate a confident and positive sense of self and respect for the dignity and welfare of others;
- achieve excellence, originality, and integrity in their own work and support these qualities in the work of others;
- act morally and legally as individuals formed in Catholic traditions;
- accept accountability for their own actions;
- contribute to the common good.

Strand(s): Electronic Communication, Electronic Research and Ethical Issues
Overall Expectations:
- demonstrate an understanding of the legal issues relating to electronic communication; (ECV.03X)❖
- analyse the ethical issues concerning use of electronic information. (EEV.03X)❖

Specific Expectations:
- investigate and describe legal issues related to electronic communication; (EC3.04X)❖
- describe the major issues related to security on the Internet, Intranet, Extranet, and e-mail (e.g. privacy, credit card use and use of firewalls); (EC3.05X)❖
- explain the purpose and content of an Internet acceptable use agreement; (EE3.01X)
- apply copyright rules, regulations, and conventions to reference material obtained from electronic sources. (EE3.04X)❖

Planning Notes
- Teachers review the school's or school board's "Acceptable Use Policy".
- Teachers preview each of the suggested web sites in Teaching/Learning Strategies 2 and 7. For example, the United Nations has produced a report that provides an excellent overview of computer crime.
- Teachers select appropriate articles that discuss legal and ethical issues in relation to the use of computers (e.g., network security, cyber-crime) to be used in Teaching/Learning Strategies 5 and 6. Each of the major newspapers and magazines serve as valuable sources. (See Resources, Unit 1, p. 11, and/or consult with your school teacher/librarian.)
- Teachers make copies of secondary school law textbooks or law dictionaries available for reference.
- Teachers may wish to consult with the school teacher/librarian re: guidelines for proper referencing of print and Internet sources (See Teaching/Learning Strategy 6)

- Before developing this activity teachers may wish to consult the web site, http://www.mapnp.org/library/ethics/ethxgde.htm , which provides a practical guide to business ethics. This site discusses ten interesting myths about business ethics.

Prior Knowledge Required

Ideally, a school's or school board's "Acceptable Use Policy" was distributed and signed by the student and his/her parent/guardian at the outset of the course. Therefore, students should possess a general familiarity with its contents. The students are to know how to access the Internet from their computer.

Teaching/Learning Strategies

1. **Decision-Making Case Studies**
   Teachers begin this activity by providing brief scenarios that require students to make moral, ethical, and/or legal decisions, such as the following:
   - accessing another student's or teacher's computer upon gaining knowledge of their password;
   - changing another student's password;
   - accessing a web site that contains pornographic images of a sexual or violent nature;
   - accessing a web site that contains hate literature;
   - computer "hacking";
   - accessing confidential files;
   - using pirated software;
   - sending racist, sexist, or derogatory e-mail;
   - copying music from the Internet;
   - creating or intentionally spreading a virus.

   Students identify the moral, ethical, or legal principles that are violated in each of the situations. Discuss the rationale for objections to these behaviours. Distinguish among the concepts of ethical, moral, and legal behaviour, noting that what may be legal, may not necessarily be moral or ethical. Establish definitions of the terms moral, ethical, and legal. The teacher may wish to distinguish between the concepts of private and public morality (See Talos, et. al.)
2. **Commandments for Computer Ethics**
   Using Appendix V – The Ten Commandments for Computer Ethics, discuss each of the suggested "Commandments". Ask students to identify additional "commandments" that might be desirable. Refer to a commentary on the "Ten Commandments for Computer Ethics" by visiting the following web site: http://www.ccsr.cms.dmu.ac.uk/resources/professionalism/codes/cei_command_com.html.
3. **Acceptable Use Policy**
   Lead the students in an evaluation of the school's or school board's "Acceptable Use Policy".
4. **Computer Crime within the Criminal Code of Canada**
   Provide students with a copy of selected excerpts from the *Criminal Code of Canada* that concern the abuse of computers (see Appendix VI – Computers and the Criminal Code of Canada). Distribute this worksheet and have students provide examples of these offences.
5. **Security Issues**
   Distribute newspaper articles to groups of students that investigate issues of network security (e.g., privacy, firewalls). Assign the same questions to each group, such as:
   a) What is the source of the article?
   b) What is the security issue?
   c) Who are the parties involved?
   d) What solutions are proposed to the problem?
   Have a member from each group report the group's answers to the class.

6. **Cyber-crime**
   Define the term "cyber-crime". Distribute newspaper articles to groups of students that investigate cyber-crime incidents (e.g., credit card fraud). Students prepare a keyed summary of the incident that they selected. A brief presentation may follow the exercise. Ensure that students reference their sources in proper format.
7. **Copyright**
   Define the term copyright. Emphasize the ethical principles that underlie the acknowledgement of copyright: respect and integrity for the intellectual output of the creator. Discuss examples of works that are subject to copyright (e.g., books, songs). The recent Sarah McLachlan case could be cited as a musical example of alleged copyright infringement (refer to http://caldercup.com/jammusic/sarahmclachlan/home_trial.html). Provide examples of how a person could infringe copyright by using computers. Have students access the Harvard University web site (http://eon.law.harvard.edu/property/respect/main.html) to examine a case of copyright infringement using a computer (e.g., "Coca Cola assignment" case study). Teachers should note the following ways by which copyright can be infringed on the Internet:
   - A copier may pass off an original creator's work as his/her own.
   - A copier might reproduce an image exactly, alter it slightly, or distort it until it is not recognizable as the original.
   - A copier may reproduce the style of the original creator and thereby lead readers to believe, falsely, that his work is the original creator's.
   - A copier may fail to credit the original creator on his web site or may give the creator unwanted credit for the distorted copy.

Accommodations

- For further strategies see Accommodations (General) on page 7, Phase 1.
- Teachers could invite a law teacher and a religion teacher to the class to conduct a panel discussion of legal, ethical, and moral issues in relation to computer use.

Assessment/Evaluation

Formative

- teacher observation (ECV.03X, EEV.03X, EC3.04X, EC3.05X, EE3.01X)
- group oral report (ECV.03X, EEV.03X, EC3.04X, EC3.05X, EE3.01X)

Summative

- case summary (EC3.04X, EC3.05X, EE3.04X)
- worksheet (EC3.04X)

Resources

Internet

Edwards, L.and C. Waelde (ed.). *Law and the Internet: Regulating Cyberspace.*
This book, which provides a comprehensive analysis of law and the Internet, can be reviewed at AMAZON.COM
http://www.amazon.com

COMMENTARY ON "THE TEN COMMANDMENTS FOR COMPUTER ETHICS"
http://www.ccsr.cms.dmu.ac.uk/resources/professionalism/codes/cei_command_com.html

CRIMINAL LAW AND THE INTERNET
This resource is a chapter from a computer law textbook, *The Internet and Business: A Lawyer's Guide to the Emerging Legal Issues*, by M. Rasch
http://143.107.73.75/Norbies/InetLaw/chp11.html

CASE STUDIES ON MORAL ISSUES INVOLVING INTERNET USE (Harvard University)
http://eon.harvard.edu/property/respect/main.html

CATHOLIC CHURCH TEACHINGS
http://198.62.75.12/www1/cdhn/part1_2html

AUSTRALIAN COMPUTER SOCIETY - Professional Code of Computer Ethics
www.acs,org.au.search/search.html

COPYRIGHT GUIDELINES FOR USING MATERIAL FROM INTERNET
http://www.library.bsu.edu/©)

ETHICAL PRINCIPLES AND CASES
http://onlineethics.org

U.S. FEDERAL GUIDELINES FOR SEARCHING AND SEIZING COMPUTERS
http://www.usdoj.gov/criminal/cybercrime/search_docs/toc.htm

R.C.M.P. TECHNOLOGICAL CRIME WEB SITE
http://www.rcmp-grc.gc.ca./html/cpu-cri.htm

THE UNITED NATIONS REPORT ON COMPUTER CRIME
http://www.ifs.univie.ac.at/~pr2gq1/rev4344.html#crime

RESOURCES FOR CATHOLIC EDUCATORS - Provides over 3200 useful links (e.g., dogma, clipart).
http://www.silk.net/RelEd/chdoc.htm

Articles on the Internet

NEWS ARTICLES ON SARAH MCLACHLAN COPYRIGHT CASE
http://caldercup.com/jammusic/sarahmclachlan/home_trial.html

NATIONAL POST
http://www.nationalpost.com/news.asp?s2=national

Lemay,T. "How Secure is Your Plastic", June 4, 1999 (Credit Card Fraud)
Akin, D. "Hot Time for Hackers", July 10, 1999 (Computer Hacking)
Flynn, L. "Add-Blocking Software a Challenge to Web Industry", June 8, 1999 (Firewalls)

Print

Talos, et.al. *Understanding the Law.* Scarborough, ON: McGraw-Hill Ryerson Inc., 1987.

Martin's Annual Criminal Code. Aurora, ON: Canada Law Book Inc., 1998.

Activity 3: Researching the WWW Productively

Time: 750 minutes

Description

Due to the sheer size of the World Wide Web (WWW), finding specific documents can be a daunting task. Using a variety of search methods, students learn how to research and retrieve Internet information productively and efficiently. This activity concludes with an exploration of various web pages to determine bias, validity, and usefulness.

Strand(s) and Expectations

Ontario Catholic School Graduate Expectations:

Students will:

- read, understand, and use written materials effectively;
- create, adapt, and evaluate new ideas in light of the common good;
- think creatively to evaluate situations and solve problems;
- demonstrate flexibility and adaptability;

Strand(s): Information Management, Electronic Research and Ethical Issues

Overall Expectations:

- demonstrate an understanding of the information technology terms used in business; (IMV.01X)❖
- use a variety of electronic media to find relevant information. (EEV.01X)❖

Specific Expectations:

- define key information technology terms (e.g., Internet, Intranet, Extranet, infrastructure, syntax, work environment); (IM1.01X)❖
- identify the forms and applications of electronic media that can be used to gather information (e.g., CD-ROMs, the Internet, search engines); (EE1.01X)❖
- describe the function of search engines; (EE1.02X)❖
- use a variety of search engines to locate web sites.;(EE1.03X)❖
- demonstrate an understanding of the criteria required to evaluate electronic media for usefulness, validity, bias, and confidentiality; (EE1.05X)❖
- determine criteria to evaluate web sites in terms of validity, bias, and usefulness. (EE3.02X)❖

Planning Notes

- The teacher should become familiar with the common principles of efficient and productive research. Two sites that deal with Internet searching strategies are:
  http://www.rice.edu/Fondren/Netguides/strategies.html
  http://www.albany.edu/library/internet/research.html
  (More resources are listed at the end of the activity).
- The teacher is to be aware of common search techniques such as the use of quotations, and boolean operators. Teachers may wish to consult a web site such as http://starthere.com for further help on searching. An interactive tutorial on search engines is located at: http://www.learnthenet.com/english/ (Select *Digging for Data, Interactive Search Engine Tutorial*). Teachers may consider using this tutorial with their students in Teaching/Learning Strategies 4 and 6.
- In Teaching/Learning Strategy 2, teachers are presenting an overview of the ways in which to access information on the Internet. Some of the methods surveyed are developed in this activity or are dealt with more extensively in upcoming activities in this unit.

- As an introduction to search engines (Teaching/Learning Strategy 3), teachers may wish to use the analogy presented in Appendix VII - The Search for Chip Case. Alternatively, teachers may wish to prepare an example more tailored to the interests of their students.
- In Teaching/Learning Strategy 3, students are to access a number of search engine sites. Web addresses for many of these sites are listed in the Resource section.
- Students have already done Internet scavenger hunts in Unit 3, Activity 1. Teachers may wish to utilize the strategy again in this activity but in a more complex form. (See Teaching/Learning Strategy 3). For sources of Internet scavenger hunts see Joseph Cordi's *Teacher's Internet Cookbook: A Recipe for Internet Implementation for the Absolute Beginner* and/or Internet Scavenger Hunts (http://angelfire.com/ks/tonyaskinner/scavhunt.html).
- In Teaching/Learning Strategy 5c, students are exposed to the use of academic directories through a teacher-demonstration. The availability of information on the World Wide Web on a specific topic is explored through a comparison of commercial subject directories and academic directories. To ensure the relevance of this undertaking to students, teachers may wish to consult other subject teachers for topic suggestions. They may wish to prepare a list of previewed sites so that the difference between the two types of directories is clearly illustrated. Some prominent and useful academic directories are:
  Argus Clearinghouse: http://www.clearinghouse.net/
  Infomine: http://lib-www.ucr.edu/
  The WWW Virtual Library: http://www.vlib.org/
- In Teaching/Learning Strategy 6, students learn how to refine an Internet search.
  Appendix VIII - Refining Your Internet Search (For Teacher Use) is a step-by-step outline of the exercise students undertake in Appendix IX – Refining Your Internet Search (For Student Use). The examples shown in the Appendix for teachers relate to World War I. Teachers may wish to consult other subject teachers to determine a suitable theme or topic. Alternatively, teachers may wish to use generic examples—examples that are not necessarily related to one specific topic.
- Teachers may wish to use pre-selected sites in Teaching/Learning Strategies 7 in order to ensure that the points outlined in Appendix X - Evaluating Internet Resources are demonstrable.

Prior Knowledge Required

Students should be able to access the World Wide Web.

Teaching and Learning Strategies

1. **Reminder**
   Any new terms (e.g., Uniform Resource Locator [URL]) covered in this activity should be entered in students' glossaries and new procedures in using search engines should be noted in their technical journals.
2. **How to Find Information on the Internet**
   Teachers lead the class in a discussion of the ways to obtain information on the Internet. Five commonly-used methods are:
   a) Going directly to a site if the address is known
   Teachers refer students to one of the sites they accessed in Activity 1 of this unit (Teaching/Learning Strategy 3: Let's Go Somewhere!). The URL of one of these sites is used to:
   - explain the term URL;
   - outline the anatomy of a web address. (See Appendix XI - Anatomy of a Web Site Address.)

   b) Browsing
   - accessing home pages on the Web in a haphazard manner

c) Joining an e-mail discussion group or Usenet newsgroup

- Ongoing discussion with many participants about a multitude of topics

d) Exploring a subject directory

- similar to using a card catalogue in a library

e) Conducting a search using a Web search engine

- utility that finds resources by searching for keywords and phrases

3. Introduction to Search Engines

A search engine is a program that runs on the Internet and assists users in finding information. However, search engines operate in different ways. Before accessing search engine home pages, teachers may wish to illustrate this point by presenting an analogous scenario such as the one in Appendix VII - The Search for Chip Case.

Students are to access the home pages of at least three search engine sites. Have students bookmark these sites for access in subsequent activities. At each site that is visited, students note observations on a worksheet (see Appendix XII - Comparing Search Engine Sites). By completing this lab exercise, students understand that, although each search engine has distinctive attributes, collectively they share common features.

4. Exploration of Search Engines: Searching with Keywords

While on the Internet, students look up a topic of personal interest (e.g., name of rock star) on each of the web sites listed below. In each case, students are to take note of the number of 'hits' and the names of the first three sites listed.

http://altavista.com
http://MetaCrawler.com
http://yahoo.com

In the follow-up discussion, teachers explain that the results (e.g., the number of 'hits', order in which sites are listed) may vary because search engines employ different search strategies. For example,

- some search engines eliminate duplicate results;
- some search engines rank according to how often the keyword appears on a web site—the site with the highest key word frequency is listed first;
- some search engines (meta) combine results of several search engines (e.g., MetaCrawler).

At this point, teachers may wish to provide students with an opportunity to undertake a relatively complicated scavenger hunt in which they are given a variety of questions. (This exercise could be done individually or in groups.) Students seek the answers by using different types of search engines to investigate sites for answers. Students record both the answer and the site where the answer was found.

5. Exploration of Search Engines: Searching with Subject Directories

a) Introduction

Teachers begin with a teacher-led discussion of subject directories. *Students have been made aware of subject directories [categories] in their exploration of search engine home pages* (see Teaching/Learning Strategies 3). Teachers explain that a selected list of web sites has been organized into a database of subject categories (like a library card catalogue). However, the guidelines for selection may differ from one search engine to another. Due to this strategy, a specific web site (e.g., a personal fan club site for a movie star) might be in the subject directory of one search engine but not in the same (or similar) subject directory of another search engine. Teachers point out that there are two types of subject directories that can be used to search for information:

- Commercial subject directories;
- Academic subject directories.

b) Exploration of Search Engines: Searching with Commercial Subject Directories

Students access one of the commercial subject directories listed on a search engine site's home page (e.g., Sports). Teachers guide students through subdirectories until a list of web sites appears. Then, as the class visits different sites, teachers guide students through a critical analysis of web site addresses. (Refer to Appendix XI - Anatomy of a Web Site Address.) The purpose of this exercise is twofold:

- To expose students to the data available within commercial subject directories;
- To reinforce the material learned in Teaching/Learning Strategy 2 (web site addresses);

c) Exploration of Search Engines: Searching with Academic Directories

Through the use of a specific topic (e.g., Shakespeare), teachers demonstrate the use and nature of academic directories.

Teachers begin by accessing the home pages of a number of search engines. At each site, the class determines if there are any commercial subject directories that might contain information on the selected topic. (In some cases there may be no viable directory.) If 'suitable' directories do appear, teachers lead the class in exploring subdirectories and specific web sites. Students take note of the number of "hits" and the nature of the sites (e.g., movie advertisement, magazine article, university research paper).

Then, teachers access the home pages of academic directories (e.g. Argus Clearinghouse) and, using the same topic, search through subdirectories and web sites. Again, students take note of the number of "hits" and the nature of the sites.

As a result of this exercise students should conclude that an academic directory might offer more wide-ranging and credible information on a specific 'academic' topic than might be available in a commercial subject directory.

d) Conclusion

Once the demonstration of the two types of directories is completed, the teacher leads the class in drawing some conclusions. To facilitate students' understanding, teachers may wish to use an analogy with libraries and/or bookstores such as the one outlined below.

Commercial Subject Directory vs. Academic Directory
compares with
Public Library vs. Specialized Library (e.g. Law Library)
or
Bookstore (e.g., Indigo) vs. Specialized Bookstore (e.g. Travel)

To end this exercise, teachers may wish to present some scenarios and have students indicate which type of directory they would use to explore for information. For example, which type of directory would be used to:

- find a recipe for meatloaf;
- find information on Michelangelo and the Vatican;
- find a list of hotels for a travel destination;
- find a sport team's playing schedule;
- find the achievements of Wilfrid Laurier (a former Prime Minister).

6. Refining an Internet Search

The purpose of this exercise is to show students how to do a productive search using key words. To emphasize that a productive search begins *before* using the computer, teachers lead students through the completion of Appendix IX - Refining Your Internet Search. (Appendix VIII - Refining Your Internet Search (For Teacher Use) *is a step-by-step guide indicating examples that can be used*.)

The class is then divided into groups. Each group goes through a similar exercise, possibly on a single topic (see Planning Notes). Once the 'pen and paper' part is complete, students go to their computers, search key words, and share results (e.g., how many 'hits'). Through a comparison of the results, teachers point out the value of refining a search strategy—especially in academic research.

7. **Evaluating Internet Resources**
   At this point, students have been exposed to various strategies in searching for information on the World Wide Web. The purpose of the final exercise of this activity is to expose students to some methods used to evaluate Internet resources.
   Teachers begin with a class discussion about the need to evaluate sources (e.g., bias). This is followed by a guided discussion whereby the teacher selects a few sites and uses Appendix X - Evaluating Internet Resources, to highlight the elements that should be looked at to evaluate an Internet source.

Accommodations

- Specific sites could be book-marked ahead of time so those sites can be accessed quickly.
- Students could be referred to *Search Help* for more refinements of search strategies using key words.
- To reinforce the use of brackets, quotations and boolean operators in simple and advance search strategies, teachers may wish to use Appendices XIII and XIV – Simple and Advanced Search Strategies, Teacher and Student Copies. It is recommended that the teacher use a step-by-step approach to analyse the students' findings.
- For further strategies see Accommodations (General) on page 7, Phase 1.

Assessment/Evaluation

Formative

- teacher observation (IMV.01X, EE1.03X, EE1.04X, EE1.05X)
- students' glossaries (IM1.01X)
- lab exercises (EE1.03X)
- quiz (EE1.01X)

Summative

- test (EE1.01X, EE1.02X, EE1.05X, EE3.02X)

Resources

Internet

Search Engine Sites

http://www.altavista./digital.com/

http://www.elibrary.com/

http://www.excite.com/

http://www.hotbot.com/

http://www.infoseek.com/

http://www.looksmart.com/

http://www.lycos.com/

http://webcrawler.com/

http://www.yahoo.com/

http://www.yahooligans.com/

http://www.metacrawler.com

Academic Directories

ARGUS CLEARINGHOUSE – Site consists of rated collections of recommended sites organized into subject-specific guides. The guide's authors are often specialists in their fields.
http://www.clearinghouse.net/

INFOMINE – Large directory of Web sites of scholarly interest compiled at the University of California, Riverside. The directory may be browsed or searched by subject, keyword, or title. Each site listed is accompanied by a description.
http://lib-www.ucr.edu/

THE WWW VIRTUAL LIBRARY – This directory consists of individual subject collections, many of which are maintained at universities throughout the world.
http://www.vlib.org/

Other Internet Sites (providing useful information on principles of conducting effective searches)

TEACHING LIBRARY INTERNET WORKSHOPS, UNIVERSITY OF CALIFORNIA, BERKELEY
http://www.lib.berkeley.edu/TeachingLib/Guides/Internet

EXPLORING THE WORLD WIDE WEB SEARCH TOOLS, UNIVERSITY OF GEORGIA CENTER FOR CONTINUING ED.
http://www.gactr.uga.edu/exploring/searching.html

A GREAT PLACE TO START SEARCHING THE WEB
http://starthere.com

CONDUCTING RESEARCH ON THE INTERNET – A very informative site, providing useful details regarding the basic methods of accessing information on the Internet.
http://www.albary.edu/library/internet/research.html

GLOSSARY – A detailed glossary of Internet-related terms.
http://www.learnthenet.com/english/tutorial/

INTERACTIVE TUTORIAL ON SEARCH ENGINES – An excellent tutorial which takes the user, step-by-step, through the fundamentals of search engines. The tutorial begins with clear explanations of search engine features and then takes the user through simple and advanced search strategies.
http://www.learnthenet.com/english/tutorial/

INTERNET SEARCHING STRATEGIES – Provides useful information under the following topics: Formulating a Strategy; Maximizing Your Search Results; Evaluating Internet Resources; Citing Internet Resources
http://www.rice.edu/Fondren/Netguides/strategies.html

UNDERSTANDING WEB ADDRESSES – Outlines and explains the parts of a Web address.
http://www.learnthenet/.com/english/html/16addrss.htm

URL (UNIFORM RESOURCE LOCATOR) – Outlines and explains the parts of an Internet Address.
http://www.learnthenet.com/english/glosscom/glossary/url.htm

Scavenger Hunts

INTERNET SCAVENGER HUNTS
http://angelfire.com/ks/tonyaskinner/scavhunt.html

Print

Carroll, J., et al. *1998 Canadian Internet Handbook. Educational Edition*. Scarborough, ON: Prentice Hall Ginn, 1998.

Cordi, J. *Teachers' Internet Cookbook: A Recipe for Internet Implementation for the Absolute Beginner*. Toronto: Baxter Group Publishing Co., 1998.

Activity 4: Collaborating Using E-Mail and Other Electronic Tools

Time: 225 minutes

Description

There are two parts to this activity. Initially, students are exposed to some specific Internet collaboration tools (e.g., e-mail, mailing lists, FTP) and the appropriate netiquette for each of these means of electronic communication. The second part of this activity focuses specifically on e-mail. Following a teacher demonstration, students are assigned three lab exercises which involve the utilization of basic e-mail operations. Upon completion of these exercises, students have acquired the skills necessary for effective e-mail collaboration.

Strand(s) and Expectations

Ontario Catholic School Graduate Expectations:

Students will:

- read, understand and use written materials effectively;
- apply effective communication, decision-making, problem-solving, time and resource management skills;
- work effectively as an interdependent team member;
- respect the rights, responsibilities and contributions of self and others;
- accept accountability for one's own actions;
- contribute to the common good.

Strand(s): Electronic Research and Ethical Issues, Electronic Communication, Software Applications, Information Management

Overall Expectations:

- demonstrate an understanding of the information technology terms used in business; (IMV.01X)
- demonstrate the use of basic functions and features of common business software; (SAV.02X)
- use electronic tools to communicate effectively with others; (ECV.02X)❖

Specific Expectations:

- define key information technology terms (e.g., Internet, Intranet, Extranet, infrastructure, syntax, work environment); (IM1.01X)❖
- use current information technology terminology appropriately; (IM1.03X)❖
- demonstrate appropriate interpersonal skills when interacting with colleagues and peers in an information technology work environment (e.g., keeping passwords confidential, respecting privacy of information); (IM3.05X)
- create (e.g., design, edit, manage) an electronic address book; (IM4.03X) ❖
- use the common business software basic functions (e.g., create, save, update, print) and features (e.g., edit tools, fonts, justification, format tools, columns, menus, design and graphic tools, formulas, hyperlinks); (SA2.02X)
- follow written and oral instructions regarding the use of software applications (e.g., help menus, wizards, manuals); (SA2.03X)❖

- explain how e-mail is transmitted through the Internet and Intranet; (EC2.03X)
- demonstrate an ability to use electronic communication tools (e.g., e-mail, voice mail, the Internet, Intranet, voice recognition) effectively, using acceptable syntax and terminology; (EC2.04X)❖
- apply acceptable communication protocol in internal and external electronic communication; (EC3.03X)

Planning Notes

- Teachers may wish to consult the two recommended web sites listed below. These sites offer a wealth of information about the Internet and e-mail. (See Resources for more details.)
  http://everythingemail.net
  http://learnthenet.com
  Refer to Appendix XV - Netiquette Guidelines, for netiquette information.
- Determine the communication services that are available to your students in your network environment. This activity is designed to provide students with only an e-mail electronic communication experience. Other classroom activities may be designed as required when other services become available.
- If Board e-mail accounts are not available, students may register with a free e-mail service. (See Unit Resources in Unit 3 Overview for a list of free e-mail sites.) Examine your school's or school board's policy and inform parents that students have Internet e-mail accounts.
- For e-mail Lab 3, teachers should refer to an accepted style guide for referencing sources. Note: Many schools and school boards have developed their own style guides (consult with the school Teacher-Librarian(s)).
- Prepare a checklist of all e-mail tasks that students are to perform. Provide this to students before they begin the e-mail labs. (See Appendix XVI - E-Mail Checklist.)

Prior Knowledge Required

- desktop management skills

Teaching/Learning Strategies

1. Throughout this activity, teachers instruct students to note useful information about electronic communication procedures in their technical journals.
2. Teachers introduce the topic by developing, with the students, a definition for the term "collaborate". Teachers emphasize that collaboration may require that various types of information and ideas are communicated in many different ways and in many different directions (e.g., paper, voice, electronic text and images, one to one, one to many).
3. As students contribute to the class discussion initiated in Strategy 2, begin to focus on Internet collaboration tools such as:
   - e-mail;
   - mailing Lists (automated mailing lists or listserv);
   - FTP (file transfer protocol),
   - newsgroups;
   - internet relay chat (IRC or "chat");
   - conferencing.

   In chart form, students categorize these tools as "one to one" or "one to many" and develop definitions for them. (See Appendix XVII – Collaboration Tools on the Internet for sample definitions for these and related terms.)
   Use Appendix XVIII - E-Mail and Newsgroups, for an illustration of e-mail and newsgroups.

4. Where possible, teachers demonstrate each of the collaboration tools described in Appendix XVII - Collaboration Tools on the Internet, illustrating how they work using analogies and diagrams. (See Appendix XVIII – E-Mail and Newsgroups.)
5. Using Appendix XV - Netiquette Guidelines, outline appropriate netiquette guidelines for electronic communication.
6. E-mail Basics
   Demonstrate the features of the e-mail program that is available to students.
   a) *Screen Layout:* toolbars, message header (To, Subject, Cc.), message area.
   b) *Basic Commands:* Compose, Send, Reply to Author, Reply to All, Forward, Attachment.
   c) *E-mail Folders:* (e.g., Inbox, Outbox, Sent Items, Deleted Items).
   d) *Address Book:* adding, deleting entries.

   Highlight the unique features of the various screens for each of the following tasks: composing messages, sending mail, reading new mail, deleting mail, forwarding mail and adding attachments. Where possible, demonstrate the creation and use of signature lines and distribution lists. (Refer to the Help Index in the Menu Bar of the software.)
7. E-mail Addresses
   Where applicable, provide students with personal e-mail addresses. Describe the parts of the address, specifically identifying the username, the mail server and the domain (or domains) by which the computer is connected to the Internet. (See Appendix XVII – Collaboration Tools on the Internet.)
8. E-mail Lab 1: Creating and Using an E-mail Address Book
   - If possible, students are to create a signature line which should include the student's name, school, class code, grade.
   - Students then add three classmates to their address book.
   - Students prepare a message for those listed in the address book. The message will have three parts: a question (e.g., What is your favourite colour?); a request that the receiver respond to the question; a request that the receiver pose a question to the sender.
   - Where possible students add signature lines to their messages.
   - Upon receipt of the e-mail, students are to reply to the sender.
9. E-mail Lab 2: Forwarding and Deleting Messages
   - Students are to review the messages in their *Inboxes* and select ONE user name that appears in the Inbox.
   - Students compose a new message to the selected user requesting permission to forward his/her last message to the teacher.

     E.g., *Dear Mary:*
     May I have your permission to send your last message to the teacher? I look forward to your reply.
     Thanks.
     John
   - Once permission has been granted, the designated message is *forwarded* to the teacher.
   - Students are to *delete* all other messages from their Inboxes.
10. E-mail Lab 3: Using Attachments
    - Teachers demonstrate the use of attachment files (uploading, viewing and inserting into a word processing program)
    - The class is divided into groups of three students. Each group chooses a topic of interest (e.g., cars, fashion, music groups). Each student in the group has a distinct task to complete that is related to the topic (e.g., one student may key in/search for relevant text; another student may key in/search for a table; a third student may search for appropriate graphics.)

- Students complete their individual tasks.
- Upon completion of the individual tasks, students e-mail their work (as attachments) to the other members of the group.
- Students combine all the parts of the group assignment to form one document. (copy, cut, paste, insert file)
- Students should be reminded that all sources of information should be properly referenced
- Each group member e-mails the final document to the teacher as an attachment file. (Alternatively, one document per group may be submitted.)

Accommodations

- E-mail Lab 3 highlights the task of combining files. To simplify the exercise teachers may have pre-selected material ready for students.
- As an enrichment activity, have students include Internet links within the body of an e-mail message (Students may use the help menu to learn this and other advanced procedures.)
- For further strategies see Accommodations (General) on page 7, Phase 1.

Assessment/Evaluation

Formative:

- e-mail checklist (ECV.02X, IM4.03X, SA2.03X, EC2.04X, SA2.03X)
- teacher observation (SA2.02X, SA2.03X, EC2.04X, EC3.03X))

Summative

- quiz (IM1.01X, IM1.03X)

Resources

Internet

EVERYTHING E-MAIL – This web site offers just what it states…everything you would want to know about e-mail. It also offers an e-postcard service.
http://everythingemail.net

LEARN THE NET – This outstanding web site has some very user-friendly information about all aspects of the Internet.
http://learnthenet.com

BEGINNER'S E-MAIL – This is a course intended for new users of electronic mail. It assumes no prior knowledge of e-mail and covers very basic concepts.
http://www.lib.monash.au/training/begman.htm

WHAT IS NETIQUETTE - 15 MINUTE SERIES
http://www.sl-regional.k12.ma.us/lab323/15min/NETIQETE/sld01.html

NETIQUETTE: LIFE ON THE INTERNET
http://www.screen.com/start/guide/netiquette.html

NETIQUETTE - "Netiquette" is network etiquette, the do's and don'ts of online communication. Netiquette covers both common courtesy online and the informal "rules of the road" of cyberspace. This page provides links to both summary and detailed information about Netiquette.
http://www.albion.com/netiquette/index.html

Print

Cordi, Joseph. *Teacher's Internet Cookbook: A Recipe for Internet Implementation for the Absolute Beginner*. Toronto: The Baxter Group Publishing Company, 1998.

Grauer, Robert and Gretchen Marx. *Exploring the Internet* 2nd Ed. Scarborough, ON: Prentice Hall, 1997.

Internet Basics. PC Novice Learning Series,Vol. 5, Issue 3 (http://www.smartcomputing.com).

Robson, Kate, et al. *Introducing the Internet: How To Get the Most Out of Your Internet Connection in School and at Home*. Stentor and Medialinx Inc., 1996.

Activity 5: Applying Collaborative Research Skills to Create Knowledge

Time: 375 minutes

Description

This culminating exercise provides the opportunity for students to employ the research and collaborative skills that they have learned in Unit 3. The goal is for the students to e-mail students in a school with which they are partnered in order to obtain information about the other school's activities. The information that is compiled is organized in order to prepare a newsletter for the other school. (The production of the newsletter is completed in Unit 4, Activity 2.)

Strand(s) and Expectations

Ontario Catholic Graduate Expectations:

Students will:

- listen actively and critically to understand and learn in light of gospel values;
- present information and ideas clearly and honestly and with sensitivity to others;
- use and integrate the Catholic faith tradition, in the critical analysis of the arts, media, technology and information systems to enhance the quality of life;
- respect the rights, responsibilities, and contribution of self and others.

Strand(s): Electronic Communication, Electronic Research and Ethical Issues

Overall Expectations:

- use electronic tools to communicate effectively with others. (ECV.02X)❖

Specific Expectations:

- demonstrate an ability to use electronic communication tools (e.g., e-mail, voice mail, the Internet, Intranet, voice recognition) effectively by using acceptable syntax and terminology; (EC2.04X)❖
- apply acceptable communications protocol in internal and external electronic communication; (EC3.03X)❖
- communicate with people in other cultures, and demonstrate an understanding of their communication customs (e.g., social interactions, political sensitivities, jargon); (EC3.02X)❖
- use the common business software basic functions (e.g., create, save, update, print) and features (e.g., edit tools, fonts, justification, format tools, columns, menus, design and graphic tools, formulas, hyperlinks); (SA2.02X)❖
- use electronic references effectively (e.g., dictionaries, thesauri, grammar checks, spell checkers); (SA3.03X)❖

Planning Notes

- Teachers may make arrangements with a BTT class in another secondary school within or outside of the school board to create a partnership for an exchange of e-mail. Alternatively, teachers may use EPALS Global Classroom Exchange (http://www.epals.com) to partner with a class in the global community.
- Students are partnered with students from the other class in order to establish a flow of communication.
- Teachers and their colleagues at the partnered school develop a list of information that will be exchanged, keeping in mind that the end product will be a school newsletter.
- Sample information: school name, description, location, principal, vice-principal, sports teams, clubs, school events, and pictures and sounds (where possible).
- Due to the nature of this activity, time delays in e-mail communication will likely occur. Teachers may consider beginning Unit 4 before this activity ends and reserving some daily classroom time for students to work on this project.

Prior Learning Required

Students should be able to use the e-mail techniques that they learned in the previous activity.

Teaching/Learning Strategies

1. Students establish initial contact with their partners in order to begin the process of exchanging thoughts and information. They should be reminded to continue to use the appropriate e-mail netiquette strategies learned in Activity 4 and to log all communication in their e-mail journal. (See Appendix XIX - E-Mail Journal.)
   Where the exchange is cross-cultural, students should be sensitive to cultural differences. Teachers should closely monitor the exchanges.
2. Teachers give the students the list of the information to be collected from their partners. Students continue to exchange e-mail messages with their partners.
3. After several messages have been exchanged, teachers demonstrate to students how text from e-mail messages is copied to word processing files.
4. Students copy information from the incoming e-mail messages to a new word-processing file. Students should continue to update this file as new information is received. Teachers examine students' e-mail journals on a regular basis as the exercise continues.
5. When all necessary information is received and copied to a word processing file, students edit the file for: organization, grammar, and spelling. (no formatting at this time). Teachers inform the students that this file will be used in Unit 4, Activity 2.

Assessment/Evaluation

Formative

- teacher observation (EC2.04X, EC3.02X, EC3.03X, SA2.02X, SA3.03X)

Summative

- evaluation of e-mail journal (ECV.02X, EC2.04X, EC3.02X)

Accommodations

- Have students work in teams.
- Allow students more time to complete the assignment.
- Reduce the number of features of the assignment.

- Students may communicate in a preferred language (to both student and partner) and the final product may be interpreted.
- For further strategies see Accommodations (General) on page 7, Phase 1.

Resources

Print

Cram, Carol M. *World Wide Web*. Cambridge, MA: Course Technology, 1997.

Norton Peter. *Essential Concepts* 3rd ed. New York: Glencoe/McGraw-Hill, 1999.

OBEA Winter 1999 and Fall 1998 Resource Books. Vol. 19 and 20.

Pitter, Keiko, et al. *Every Student's Guide to Life on the Net.* Boston: Irwin McGraw-Hill, 1998.

Unit 4: Business Presentation: Presenting Ideas Using the New Media

Time: 18.75 hours

Note that the time allocation has been altered since Phase 1.

Unit Developer(s)

Toronto Catholic District School Board

Development Date: July 1999

Unit Description

Students examine the means by which business communicates, develop desktop and web publishing skills, and explore the power of electronic presentation tools. Students plan and produce both print and electronic communications that are suitable for a specific purpose and audience.

Strand(s) and Expectations

Ontario Catholic Graduate Expectations: 2c, 2d, 4b, 4c, 4f, 5a, 5f, 5g, 7b, 7i.

Strand(s): Information Management, Software Applications, Electronic Communication, Electronic Research and Ethical Issues

Overall Expectations: IMV.01X, .04X; SAV.01X, .02X, .03X; ECV.01X, .02X, .03X; C0V.03X.

Specific Expectations: SA2.01X, .02X, .03X; EC1.01X, .02X, .03X, .04X; EC2.01X, .02X, .03X, .04X; EC3.03X; EE3.03X, .04X; IM1.01X, .03X, .05X; SA1.03X; SA3.01X, .02X, .03X, C03.01X, .02X.

Activity Titles (Time + Sequence)

Activity 1	Communicating Information in Business	150 minutes
Activity 2	Publishing in Print	375 minutes
Activity 3	Web Publishing	375 minutes
Activity 4	Dynamic Office Presentation Tools	225 minutes

Unit Planning Notes

Teachers should ensure that the requisite software is accessible to students for the activities presented in this unit.

Prior Knowledge Required

The delivery of this unit is predicated upon the assumption that students have acquired competency in the application of productivity tools and Internet skills.

Teaching/Learning Strategies

- This unit provides students with opportunities to examine and/or apply a variety of communication tools. Activities in which students involved include the production of newsletters, brochures, web pages, and electronic presentations.
- Throughout the activities students should be reminded to update their glossaries and technical journals. Teachers check these for completeness at regular intervals.
- Where appropriate throughout this unit have students continue to develop their keying skills and monitor their own progress.

Assessment/Evaluation

Formative
- planning sheets
- teacher observation
- worksheets
- checklists
- quizzes
- portfolio checks

Summative
- test
- evaluation of final products

Resources

Internet
For a complete list of resources see Unit 3: Knowledge Management: Accessing the Global Network of People and Information, Internet Resources

Print
Kitto, Rick and Rob Scott. *Internet Web Pages*. London, Ontario: KS Publications, 1997.

Video
See Appendix XXVIII - Video Resources, for a detailed list of video resources.

Activity 1: Communicating Information in Business
Time: 150 Minutes

Description
This activity coalesces students' knowledge of the ways in which business communicates information. Students begin by discussing the need for business to communicate, by identifying those with whom business communicates, and by distinguishing between internal and external communication. Students examine the methods used by business to communicate. Discussion focusses on the diverse methods available, with particular emphasis on electronic communication and the need to evaluate various criteria to determine appropriate means of communication for particular circumstances.

Strand(s) and Expectations
Ontario Catholic School Graduate Expectations:
Students will:
- listen actively and critically to understand and learn in light of gospel values;
- read, understand, and use written materials effectively;
- present information and ideas clearly and honestly and with sensitivity to others;
- think reflectively and creatively to evaluate situations and solve problems;
- demonstrate flexibility and adaptability;

- work effectively as an interdependent team member;
- respect the rights, responsibilities, and contributions of self and others;
- respect the environment and use resources wisely.

Strand(s): Information Management, Electronic Communication.

Overall Expectations:

- demonstrate an understanding of the information technology terms used in business. (IMV.01X)❖

Specific Expectations:

- describe the tools used to communicate electronically in business (e.g., fax, e-mail, voice mail, bulletin board, discussion group, the Internet, Intranet, Extranet); (EC2.01X)❖
- compare a variety of electronic communication tools in terms of their uses and benefits to business. (EC2.02X)❖

Planning Notes

- Teachers may wish to refer to one or more business communication texts. (See Resources for this activity.)
- At the conclusion of this activity, teachers may wish to invite someone from the school office administrative staff to speak to the class describing how he/she uses electronic communication tools or alternatively may arrange for students to conduct interviews.

Prior Knowledge Required

No prior knowledge is required.

Teaching/Learning Strategies

1. **Need for Communication in Business**

   This activity begins with a class discussion on the need for business to communicate. General questions which will be explored are:

   - With whom does business communicate?
   - What type of information is communicated?
   - What is the difference between internal and external communication?

2. **Methods of Communication in Business**

   The class brainstorms the various ways in which business communicates. Each method should be written on the board or on an overhead transparency. (Examples would include: face-to-face dialogue, letters, memos, brochures, flyers, telephone, fax, e-mail, voice mail, the Internet, Intranet, Extranet, and the mass media such as newspapers, magazines, radio, and television.) This brainstorming session is followed up by a discussion of the factors that would be considered in determining the means of communication to be used (e.g., nature of message, receiver/audience, urgency of message, costs, confidentiality, need for interaction). To illustrate these factors a number of scenarios could be presented to students for which they must determine the 'best' method of communicating the information and the rationale for choosing this method. For example, what would be the most appropriate method to relay the following information?

   - inform employees of a meeting;
   - demonstrate how a product works to a customer;
   - let the public know of a national campaign to curb environmental pollution;
   - make the public aware of the date of a clearance sale;
   - advise an applicant to come in for a job interview;
   - dismiss an employee;
   - provide investment 'tips' to clients;

- make the public aware of product improvements;
- order inventory from a supplier;
- advise all personnel of the date of the company Christmas party;

3. Electronic Communication Tools

Students complete a worksheet (see Appendix XX - Electronic Communication Tools) outlining how and why the following electronic communication tools are used: fax, e-mail, voice mail, the Internet, Intranet and Extranet. An example of the details students might supply is given below.

Electronic Tool	Example of Information Requested or Communicated	Reason for Selecting Electronic Tool
Fax	copy of sales slip urgently requested by customer	Fast; allows for transmission of hard copy

As a follow up, teachers should help students to draw conclusions about matching appropriate electronic tools with communication needs.

Assessment/Evaluation

Formative

- completion of worksheet (IMV.01X, EC2.01X, EC2.02X)
- teacher observation (IMV.01X, EC2.01X, EC2.02X)

Accommodations

- As a supplemental project, students could research a business in the community to find out how a specific enterprise implements the use of electronic communication tools.
- Students could complete worksheet in groups.
- For further strategies see Accommodations (General), Page 7, Phase 1

Resources

Print

Bamford, et al. *Basic Business Communication* 2nd ed. Whitby, ON: McGraw-Hill Ryerson, 1997.

Clark, et al. *Business English and Communication* 5th ed. Whitby, ON: McGraw-Hill Ryerson, 1996.

Internet

INTERNET 101 BASIC TERMINOLOGY
http://www2.famvid.com/i101/terms.html

GLOSSARY; INTERNET TERMINOLOGY
http://www.library.nwu.edu/iesca/glossary/interms.html

For a complete list of Internet resources, see Unit 3: Knowledge Management: Accessing the Global Network of People and Information, Internet Resources.

Activity 2: Publishing in Print

Time: 375 minutes

Description

This activity involves a series of lessons in which the students are introduced to desktop publishing. They produce several documents using the features of desktop publishing software. Students learn to select the form of printed document that is most suitable for the intended audience.

Strand(s) and Expectations

Ontario Catholic School Graduate Expectations:

Students will:

- create, adapt, and evaluate new ideas in light of the common good;
- present information and ideas clearly and honestly with sensitivity to others;
- work effectively as interdependent team members;
- achieve excellence, originality, and integrity in their own work and support these qualities in the work of others.

Strand(s): Information Management, Software Applications, Career Opportunities

Overall Expectations:

- demonstrate an understanding of the Information Technology terms used in business; (IMV.01X)❖
- electronically manage personal data and computer files; (IMV.04X)
- demonstrate the skills required to enter data by using appropriate keyboarding techniques; (SAV.01X)❖
- demonstrate the use of basic functions and features of common business software; (SAV.02X)❖
- produce documents that meet basic business standards and formats; (SAV.03X)❖
- demonstrate an understanding of high school information technology programs designed for use in secondary schools. (COV.03X)❖

Specific Expectations:

- define key information technology terms; (IM1.01X)❖
- use current information technology terms appropriately; (IMI.03X)❖
- demonstrate appropriate interpersonal skills when interacting with colleagues and peers in an information technology work environment; (IM3.05X)
- use correct keyboarding techniques; (SA1.03X)❖
- explain the use of common business software; (SA2.01X)❖
- use the common business software basic functions (e.g. create, save, update, print) and features (e.g. edit tools, fonts, justification, format tools, columns, hyperlinks); (SA2.02X)❖
- follow written and oral instructions regarding the use of software applications (e.g. help menus, wizards, manuals); (SA2.03X)
- demonstrate an ability to select the most appropriate software applications for creating particular business documents; (SA3.01X)
- produce correctly formatted business documents; (SA3.02X)❖
- use electronic references effectively; (e.g. dictionaries, thesauri, grammar checks, spell checkers) (SA3.03X)❖
- identify the information technology programs available at their school; (CO3.01X)❖
- determine the prerequisites for specific information technology courses; (CO3.02X)❖
- demonstrate understanding of the importance of doing exemplary work and keeping examples of it for inclusion in resumes and portfolios that can be used in a future job search. (CO2.05X)❖

Planning Notes

- Teachers obtain a copy of the school's calendar or agenda book which lists scheduled events taking place at the school. Teachers may make arrangements with administration or student services to have the class produce documents that cater to their specific needs (e.g., invitations).
- Teachers provide the students with copies of the school's calendar of course selections.
- Ensure that the students have access to a desktop publishing program such as *Microsoft Publisher* or a word-processing program with desktop publishing capability.
- Establish criteria for the evaluation of the documents that the students will produce in this activity.
- Ensure that students have the newsletter file from Unit 3, Activity 5 for Teaching/Learning Strategy 4.
- Teachers are to have samples of the products that students will be developing in this Activity. See Teaching/Learning Strategy 1.
- Teachers may wish to prepare checklists of criteria for each product that is developed in this activity.

Prior Knowledge Required

Students should have developed a satisfactory level of competency in keyboarding skills and acquired a working familiarity with a word processing program.

Teaching/Learning Strategies

1. Teachers outline to the class the products that the students produce in this activity providing samples where possible.
   - a business card
   - a flyer
   - a three-column newsletter
   - a two-sided three-panel brochure
2. The Business Card
   Teachers demonstrate how to produce a personalized business card using either a template or wizard within a word processing or desktop publishing program.
3. Flyer
   Teachers demonstrate the organization of the desktop publishing program highlighting distinctive desktop publishing features (e.g., text boxes and graphic boxes). If available, teachers may choose to employ a projection panel for this demonstration. Teachers demonstrate how to:
   - create text boxes and insert text;
   - select appropriate font styles and font sizes;
   - create graphic boxes and insert appropriate graphics;
   - re-size and move text and graphic boxes.

   Teachers provide students with information about an upcoming school event (e.g., parent/teacher interview, open house) and instruct students to prepare an invitation to the school event in an attractive business-like format. Students are informed that a sampling of student work is to be presented to the "client" group for whom the invitation is to be produced (e.g., administration, student services). The "client" makes a selection from the students' submissions.
   Students then begin the exercise to produce the one-page invitation.
4. Newsletter – Planning and Development
   a) Students examine their newsletter files from Unit 3, Activity 4. Then, using pen and paper they draft a layout for their newsletters.
   b) Teachers demonstrate how to import files into a desktop publishing program and review layout and formatting features.

c) Students then work on the development of their newsletters. Students are encouraged to be creative and to seek personal solutions rather than uniform ones. Reinforce the use of proper keying techniques that were introduced in Unit 2.

5. Three-Panel Brochures
   a) This exercise involves the preparation of a three-panel brochure. Teachers may demonstrate the use of a wizard to assist in the development of the brochure and may introduce new features as is appropriate for the particular class.
   b) Students design and produce a three-panel brochure – *The School's IT Program.* This brochure describes the IT program that is offered within the secondary school, including course descriptions, pre-requisites, and teachers' names. Students refer to the school's course calendar.
6. A Celebration of Productivity
   Students post a selection of work on the bulletin board upon completion and place exemplary work in their portfolios. Encourage students to take their work home to show their families.

Assessment/Evaluation

Formative

- checklist (SA2.02X, SA3.01X, SA3.02X)
- quiz (IM1.01X, IM1.03X, SA2.01X)
- teacher observation (SAV.01X, SA1.03X)
- portfolio check (CO2.05X)

Summative

- evaluation of the final products based upon criteria established at the beginning of the activity (SAV.01X, COV.03X, SA3.03X, CO3.01X, CO3.02X)

Accommodations

- Assign gifted students specific editing roles in the production of the students' newsletters.
- ESL students could prepare a travel brochure based upon a popular tourist destination in their home countries. (See below for helpful Internet resources.)
- For further strategies see Accommodations (General) on page 7, Phase 1.

Resources

Internet

CIA WORLD FACTBOOK - provides statistical and descriptive data on virtually every country around the globe.
http://www.odci/gov/publications

TRAVEL WEEKLY
http://www.traveler.net/

WORLD FLAGS
http://www.adfa.oz.au/CS/flg/col/Index.html

GNN TRAVEL CENTRE
http://nearnet.gnn.com/gnn/meta/travel/index.html

IT'S A BEAUTIFUL DAY GRAPHICS
http://www.geocities.com/SiliconValley/Heights/1272/rainbow1.html

MICROSOFT CLIP GALLERY ALIVE
http://cgl.microsoft.com/clipgallerylive/default25.asp?ea=1

RELIGIOUS CLIP ART
http://www.silk.net/RelEd/clipart.htm

Print

Every E. and R. Driscoll. *Desktop Publishing: Practical Exercises*. 2 ed. Don Mills, ON, 1997.

Porozony, G.M. *Desktop Publishing: Design Basics & Applications*. Don Mills, ON: Addison-Wesley, 1993.

Video

See Appendix XXVIII - Video Resources, for a detailed list of video resource.

Activity 3: Web Publishing

Time: 375 minutes

Description

In this activity, students explore features of web pages to develop an understanding of good web page design. They practise using the basic commands of a web publishing program and develop a plan for a personal web page. Using available equipment and software and pre-determined criteria, students produce a multi-page web site with hyperlinks to other pages and Internet sites.

Strand(s) and Expectations

Ontario Catholic Graduate Expectations:

Students will:

- read, understand, and use written materials effectively;
- apply effective communication, decision-making, problem-solving, time and resource management skills;
- work effectively as interdependent team members;
- respect the rights, responsibilities, and contributions of self and others;
- accept accountability for their own actions;
- contribute to the common good.

Strand(s): Information Management, Software Applications, Electronic Communication

Overall Expectations:

- demonstrate an understanding of the information technology terms used in business; (IMV.01X)❖
- demonstrate the use of basic functions and features of common business software; (SAV.02X)❖
- produce documents that meet basic business standards and formats; (SAV.03X)❖
- use electronic tools to communicate effectively with others; (ECV.02X)❖
- demonstrate an understanding of the legal issues relating to electronic communication. (ECV.03X)

Specific Expectations:

- explain the use of common business software (e.g., word processing, database, spreadsheet, graphic, desktop publishing, web page software); (SA2.01X)❖
- use the common business software basic functions (e.g., create, save, update, print) and features (e.g., fonts, justification, format tools, columns, menus, design and graphic tools, formulas, hyperlinks); (SA2.02X)❖
- follow written and oral instructions regarding the use of software applications (e.g., help menus, wizards, manuals). (SA2.03X)❖

Planning Notes

- Determine the software that is available for web design and become familiar with its unique features and similarities with other software which is more familiar to students. Currently, the Ministry of Education has licensed *Claris Home Page* and *Web Workshop*.
- Determine resources available for digitizing pictures (e.g., scanner, digital camera) and downloading clipart (e.g., CD, Local Area Network shared folders, Internet)
- The web page assignment in this activity requires that students be given a list of criteria. Teachers may wish to use the information from Teaching/Learning Strategies 2 and 3 to assist them in preparing this list.
- For Teaching/Learning Strategy 2, the teacher may wish to consider a more structured activity that would require the use of a teacher-prepared rating sheet for web sites.
- Where the infrastructure and teacher experience exists, a teacher may wish to consider a class theme for the assignment in this activity and then have all of the students' web pages integrated into ONE site. This site could be copied to a shareable folder on a network and then become accessible to all students in the class or school.

Teaching/Learning Strategies

1. **What is a web page?**
   Teachers review terminology associated with the World Wide Web (e.g., URL, hyperlink) and during a class discussion, develop a description of a "web page". See sample description below.
   A web page is a digital document that contains graphics, text, and often other multimedia data, that is viewable by a browser such as Netscape or Explorer. Web sites are made up of one or more web pages which are "linked" together in a logical order. They contain related information that can be viewed in whatever order the user wishes.
2. **Exploring the features of Internet web pages**
   Have students launch a browser and visit the international school registry of web sites (Web 66 http://web66.coled.umn.edu/). Instruct students to explore school web sites and list features that make up a "good" web page and a "bad" web page.
   Students should consider the following:
   - speed of loading
   - size of pages (too much scrolling is required)
   - existence of author information
   - existence of date of last update
   - menu of options is consistent on every page
   - clear links
   - screen/font colours
   - home button

   When students begin to express added curiosity, teachers may demonstrate the *View, Source* command in the browser (click View, then Source). This command shows students the "coding behind ges, is known as HTML (Hypertext Markup Language).
   Refer back to Appendix XI - Anatomy of a Web Site Address. Although they are not to be given any instruction in HTML, students should be informed that they are using a program that converts documents into this form so that they can be read by browsers. Knowledge of HTML coding is useful when web designers wish to have more flexibility and control.

After approximately 40 minutes of exploring and listing information, have students contribute their findings during a class discussion. Summarize the information on the blackboard. Some of the findings should include:

- Pages with large graphics take too long to load.
- Pages with too much text can be difficult to read through.
- Good pages have information about who created them and when they were last updated.
- Good pages have clear headings in large fonts.
- It is helpful to have menus on every page.
- It is helpful to have a home button (link to first page) on every page.

3. Web Site Planning – Students submit a proposal for teacher assessment

Have students prepare and submit a proposal for personal web pages. Proposals may be based on a topic of personal interest (e.g., Fashion, Cars, My Family, Recipes, My Resumé) or a contemporary theme selected by the teacher (e.g., multic ultural school activity, social justice issue, Take Our Kids to Work Day™). The proposal should include a plan in written and flowchart form as in Appendix XXI - Guidelines for Student Web Site Plan.

Students should also be provided with a list of criteria to include in their plans. See below for an example.

All students web sites should include the following:

- a minimum of four pages
- three heading sizes
- two graphics per page
- one bulleted list
- one numbered list
- home buttons on every page
- footers on every page
- three Internet links

4. Demonstration 1: Features of web design software

Use the example from Appendix XXI or some other theme of interest to demonstrate the techniques or commands listed below. Teachers may wish to emphasize commands and features that are similar to the commands of previously learned software.

Teachers demonstrate:

a) creating a new folder in which to save web site documents;
b) starting a new page;
c) inserting headings;
d) inserting text;
e) formatting text (e.g., font colour, style, alignment);
f) inserting and positioning images (e.g., shapes, lines, clip art, scanned or digital camera images if available);

Use this opportunity to emphasize common Internet graphic types (i.e. .gif, .jpg).

g) creating bulleted and numbered lists;
h) use of different views available to edit and preview work (e.g., In *Claris Home Page, Preview in Browser, Edit Page, Preview Page, Edit HTML Source*).

5. Lab 1: Putting the plan into action

a) Teachers return student plans and instruct them to begin development of their web pages. Teachers may want to meet with individual students who require further assistance with their plans before they begin to develop their web pages at the computers.

b) When possible during this time teachers demonstrate the use of equipment such as scanners and digital cameras (where available) to small groups of students.

6. **Demonstration 2: How to pull the site together**
   Use the previously started demonstration files from Strategy 4 to illustrate the following:
   a) creating a hyperlink to another local page (in the student's folder) from text and from a graphic; (Demonstrate the use of a "home button" which is a link that can be either text or a graphic.)
   b) creating a hyperlink to an Internet web site from text and from a graphic.
7. **Lab 2: Pulling the site together**
   Provide students with time to complete their assignment by applying the link information from Strategy 6 above.
8. **Web Site Evaluation**
   Completed web assignments are evaluated. This could be structured as a combination of self-, peer- and/or teacher-evaluation.

Assessment/Evaluation

Formative

- web site plan (SAV.03X)
- teacher observation (ECV.03X, SA2.03X)

Summative

- checklist (SAV.03X, ECV.02X)
- quiz (IMV.01X, SAV.02X, SA2.01X, SA2.02X)

Accommodations

- Invite peer tutors or gifted students to act as lab assistants during this activity.
- Simplify terminology or use everyday analogies to explain terminology.
- Reduce the complexity of the assignment to the learning capabilities of the students.
- Have gifted students explore existing web pages for more complex features to include in their web pages. Provide them with a leadership role where they integrate several students' web sites to form a site which meets a school need (e.g., student council information, Chaplaincy Services)
- Provide gifted students access to an on-line tutorial on HTML.
- For further strategies see Accommodations (General) on page 7, Phase 1.

Resources

Internet

IT'S A BEAUTIFUL DAY GRAPHICS
http://www.geocities.com/SiliconValley/Heights/1272/rainbow1.html

MICROSOFT CLIP GALLERY LIVE
http://cgl.microsoft.com/clipgallerylive/default25.asp?ea=1

For a complete list of resources see Unit 3: Knowledge Management: Accessing the Global Network of People and Information, Internet Resources

Software

Claris Home Page – Help Menu

Video

See Appendix XXVIII – Video Resource, for a detailed list of video resources

Activity 4: Dynamic Office Presentation Tools

Time: 225 minutes

Description

In this culminating activity for Unit 4, students explore features of multimedia presentation software. They integrate these features and previously learned skills to plan and develop a multimedia presentation.

Strand(s) and Expectations:

Ontario Catholic School Graduate Expectations:

Students will:

- read, understand, and use written materials effectively;
- create, adapt, and evaluate new ideas in light of the common good;
- think reflectively and creatively to evaluate situations and solve problems;
- examine, evaluate, and apply knowledge of interdependent systems (physical, political, ethical, socio-economic, and ecological) for the development of a just and compassionate society;
- apply effective communication, decision-making, problem-solving, time and resource management skills
- respect the rights, responsibilities, and contributions of self and others.

Strand(s): Software Applications, Electronic Communication

Overall Expectations:

- demonstrate the use of basic functions and features of common business software; (SAV.02X)
- demonstrate an ability to use electronic software to create presentations; (ECV.01X)
- use electronic tools to communicate effectively with others. (ECV.02X)

Specific Expectations:

- describe the basic functions of presentation software commonly used in business (e.g., text objects, quick art, chart/graphic tools, slide editor/sorter/lists); (EC1.01X)
- explain the purposes of presentation tools; (EC1.02X)
- select the presentation tools that are most appropriate for an assigned purpose and target audience (e.g. slides, animation, music); (EC1.03X)
- create an electronic presentation (e.g., kiosk display, assembly presentation, class project). (EC1.04X)

Planning Notes

- Teachers determine what presentation software is available for this exercise. Currently the Ministry of Education has licensed *HyperStudio* and *MP Express* for use in Ontario schools. (This activity uses *HyperStudio*.) Teachers then prepare an example of a multimedia presentation to demonstrate to students. As the theme of the presentation consider a "Product Launching" for the presentation program you have available.
- Teachers prepare to demonstrate the integration of other productivity tools (word processing, graphics, spreadsheet and database) with the selected presentation software. Where clip art libraries (CD, network folders, Internet sites) are accessible demonstrate how they can be used with the presentation program.
- Teachers prepare a "tips" sheet to assist the students during this assignment. (Appendix XXIII- Tips to Help You With *HyperStudio*)
- Teachers prepare a list of criteria for the presentation assignment.
- If computer projection equipment or "broadcasting" software is available, teachers may wish to use it during this activity.

Prior Knowledge Required

Students know how to use word processing, spreadsheet, graphics and data base programs.

Teaching /Learning Strategies

1. Teachers use the "Product Launching" demonstration to introduce students to the presentation program available in the school. Include:
   a) the purpose of the software;
   b) some sample presentations;
   c) unique features.

   Teachers emphasize the similarities to previously learned programs (e.g., word processing, graphics, web publishing).

   Note: The *HyperStudio* CD contains an excellent introduction that can be used for this purpose. See Resources below.
2. Teachers repeat the above demonstration (or a much simpler version), but this time focus on the terminology of the program and how the presentation was created (e.g., buttons, sound, animation). The *HyperStudio* CD contains an excellent introductory tutorial for your reference.
3. As an introduction , students produce a short presentation on a theme of personal interest. Teachers encourage students to explore unfamiliar features during this time. The following are some basic instructions to help students get started with HyperStudio:
   a) Launch *HyperStudio* and select *New Stack* from the Home screen or *File, New Stack* from a blank screen. This will open the first card in your presentation.
   b) Select *Tools* and drag the tool box to the side of the screen to facilitate its use.
   c) Select *Objects* and choose *Add a Text Object.* Adjust the size of the object as necessary.
   d) Double click the text box to open the *Text Appearance* dialog box. Select the font colour, size and style and background colour. Click *OK*.
   e) Enter instructions into the text box on the first card.
   f) Select *Objects, Add a Button*. From the *Button Appearance* dialog box, select the type of button, colours and text for the button (e.g., Go to next page). Click OK.
   g) Position the button and then double click to assign an "action" to the button.
   h) From the *Action* dialog box you may select from "Places to go" (e.g., next card) or "Things to a sound). Explore the choices and select appropriately.
   i) From the *Transitions* dialog box, explore some of the transitions (e.g., Fade to Black) and select a transition. Click *Done* when finished.
   j) Select *Edit, New Card* to create the next card.

   Teachers observe students as they are developing their presentations and provide assistance where necessary.
4. Teachers then provide students with an outline of the final product for this activity complete with evaluation form and rubric. The presentation theme is "A Guide for Grade 9 Students". Appendix XXII outlines the suggested topics. Teachers may wish to assign specific topics to groups of students (e.g., School Rules and Policies, Special Events). See the following appendices:
   - Appendix XXII – Multimedia Presentation Project
   - Appendix XXIV – Multimedia Project Evaluation
   - Appendix XXV- HyperStudio Presentation Project Rubric
5. The students complete this activity by presenting their projects to the class. (Use projection equipment or broadcast software where available.)

Assessment/Evaluation

Formative

- checklist of skills inventory (EC1.01X, 02X, 03X, 04X)
- terminology quiz (EC1.01X, 02X, 03X, 04X)
- teacher observation (EC1.01X, 02X, 03X, 04X)

Summative

- multimedia presentation project (EC1.01X, 02X, 03X, 04X)

Accommodations

- Pair up a stronger student with a weaker student.
- Students who complete the project quickly may act as peer tutors.
- Adjust the major project to make it less complex (e.g., fewer pages, graphics, and buttons)
- For further strategies see Accommodations (General) on page 7, Phase 1.

Resources

CD

HyperStudio Reference Manual and Tutorial Book (pdf format)
Tutorial Program (*HyperStudio* format)
on Windows Program Resource CD *HyperStudio*
Distributed by Ontario Ministry of Education
(contact your Board representative)

Internet

HYPERSTUDIO PROJECT RUBRIC
http://memorial.sdcs.k12.ca.us/LESSONS/WWII/WWIIunit/HyperStudiorubric.html

CLASSROOM PROJECTS - Projects for *ClarisWorks*, *Hyperstudio*, and Web Page Design
http://www.sv400.k12.ks.us/tips/projects.html

Print

Cram, Carol M. *World Wide Web*. Cambridge, MA: Course Technology, 1997.

Kitto, Rick and Rob Scott. *HyperStudio*. London, Ontario: KS Publications, 1998.

Norton, Peter. *Essential Concepts*, 3rd ed. New York: Glencoe/McGraw-Hill, 1999.

OBEA Winter 1999, Fall 1998 Resource Books Vol. 19 & 20.

Pitter, Keiko, et al. *Every Student's Guide to Life on the Net.* Boston: Irwin McGraw-Hill, 1998.

Video

HYPERSTUDIO TRAINING VIDEOS - OSAPAC has purchased a license for training videos for *HyperStudio*; duplicating masters have been shipped to school boards (announced on site listed below).
http://www.haltonbe.on.ca/OSAPAC/osapacE.html

See Appendix XXVIII - Video Resources, for a detailed list of video resources.

Unit 5: Career Dynamics: Positioning Oneself for Success

Time: Activities 1 to 3: concurrent delivery with other units
Activity 4: 150 minutes

Unit Developer(s)
Toronto Catholic District School Board

Development Date: July 1999

Unit Description

Students learn how to plan for and participate in the working world of e-business that is increasingly characterized by invention, project-based teamwork, entrepreneurship, change, and the challenge of life-long learning. Students learn techniques to discern the purpose of their working lives and manage their potential with dignity, respect, and success.

Strand(s) and Expectations

Ontario Catholic Graduate Expectations: 1D, 1G, 3C, 3D, 3E, 4A, 4B, 4D, 4E, 4G, 5B, 5C, 5D, 5H, 7B.

Strand(s): Career Opportunities

Overall Expectations: COV.01X, .02X, .03X.

Specific Expectations: CO1.01X, .02X, .03X, .04X; CO2.01X, .02X, .03X, .04X, .05X; CO3.01X, .02X, .03X.

Activity Titles (Time + Sequence)

Activity 1	The IT Secondary School Program	Delivered concurrently
Activity 2	Career Exploration: Gathering IT Career Data	Delivered concurrently
Activity 3	Comparative IT Career Analysis	Delivered concurrently
Activity 4	Personal Inventory: Assessing Personal and IT Skills	150 minutes

Unit Planning Notes

The careers unit can be most effectively delivered by the integration of topics throughout the course. Classroom teachers work closely with the student services department to co-ordinate the planning of the unit. Students have the opportunity to explore a variety of career options in the IT field that are appropriate for the range of ability levels within the classroom.

Prior Knowledge Required

Students possess a sound understanding of the IT terminology that was introduced in Unit 1. Students are also familiar with the school's course calendar and have begun to prepare a planning chart for their high school program.

Teaching/Learning Strategies

Current newspapers are available to the students. Teachers obtain a directory of local businesses through the Chamber of Commerce or the Board of Trade. Career exploration software such as "Choice be accessible on the network. Teachers gather course calendars of community colleges, universities and private institutions for student research. Teachers employ interest inventory software and have students explore job advertisements in the IT field. Comparisons of IT careers should remain a focus of the unit.

Assessment/Evaluation

Formative

- Completion of interest inventories and self-assessment exercises.

Summative

- Oral presentations on IT careers that employ a variety of communication methods.

Resources

CD

CAREER CRUISING
Licensed by the Ministry of Education from Anaca Technologies

CHOICES
Licensed by the Ministry of Education

Internet

HRDC TORONTO'S LABOUR MARKET INFORMATION SITE - This site has work trends and career information for the Toronto Region.
http://www.toronto-hrdc.sto.org/lmi/lmi-x.html

HRDC JOB SEARCH
http://jobs-gta.sto.org/cgi-bin/English/SearchForJobs/obtainNOCCodes.cgi?214559

HRDC JOB FUTURES - A two part-publication, which provides Canadians with information about the current world of work and projections for the future. Part I contains Occupational Outlooks and Part II contains Career Outlooks for Graduates.
http://www.hrdc-drhc.gc.ca/JobFutures/english/index.htm

HUMAN RESOURCES DEVELOPMENT CANADA ONTARIO REGION - This site has work trends and career information for the Toronto Region.
http://www.on.hrdc-drhc.gc.ca/english

DeVry, Success Fundamentals, DeVry Institute of Technology, Mississauga, ON,
Human Resources Development Canada, Towards 2001 Occupational Trends in the Greater Toronto Area.

Junior Achievement's *Strut Fest'99 Guide to the Future*, Toronto and York Region, 1999.
www.jatoronto.org

Metro Toronto/York Labour Market Analysis Group, HRDC.
http://www.the-wire.com/hrdc/hrdc.html

North York Career Centre, Toronto District School Board, Summer's Coming, Toronto, 1999
Tel. (905) 898-4680,
http://www.devry.edu

CAREER GATEWAY - Enrichment and Summer Opportunities
http://www.edu.gov.on.ca/eng/career/enrich.html

SUMMER JOBS - JOB DETAILS
http://www.summerjobs.com

YOUNG CANADA WORKS
http://www.pch.gc.ca

JOB FIND 2000
http://JobFind2000.com

YOUTH RESOURCE NETWORK OF CANADA
http://www.youth.gc.ca/jobopps/summer_e.shtml

FEDERAL GOVERNMENT SITE ON YOUTH EMPLOYMENT
http://youth.hrdc-drhc.gc.ca

CANADA WORK INFONET
http://worinfonet.ca/cwn/english/main.html

MAZEMASTER
http://www.mazemaster.on.ca

NATIONAL GRADUATE REGISTER
http://ngr.schoolnet.ca

WORKSEARCH
http://www.ipunet.com/cgi-bin/start.pl

HRDC Metro Toronto and York Region
http://www.jobs-gta.sto.org

MONSTERBOARD
http://www.monster.com

Activity 1: The IT Secondary School Program

Time: This activity is delivered concurrently with Unit 4, Activity 2: "Publishing in Print".

Description

In this activity students prepare a three-panel brochure in which they prepare an outline of the IT program which their secondary school offers. The brochure provides course descriptions, prerequisites, names of teachers, and other relevant information about IT at the school.

Strand(s) and Expectations

(See Unit 4, Activity 2: "Publishi

Ontario Catholic School Graduate Expectations:
Students will:

- read, understand and use written materials effectively;
- accept responsibility for their own actions.

Strand(s): Career Opportunities

Overall Expectations:

- demonstrate an understanding of high school information technology programs designed for use in secondary schools. (COV.03X)❖

Specific Expectations:

- demonstrate understanding of the importance of doing exemplary work and keeping samples of it for inclusion in resumes and portfolios that can be used in a future job search; (C02.05X)❖
- identify the information technology programs available at their school; (C03.01X)❖
- determine the prerequisites for specific information technology courses. CO3.02X)❖

See Unit 4, Activity 2: "Publishing in Print" for:

- Planning Notes
- Prior Knowledge Required
- Teaching/Learning Strategies
- Assessment/Evaluation
- Accommodations
- Resources

Activity 2: Career Exploration: Gathering IT Career Data

Time: This activity is delivered concurrently with:

- Unit 1, Activity 3: Accessing the World Wide Web
- Unit 2, Activity 2: Word Processing

Description

In Unit 1, Activity 3, students undertake a guided exploration of IT careers using the World Wide Web. Through this exercise, students come to appreciate the scope of career opportunities in the field of Information Technology. Then, in Unit 2 Activity 2, students are provided with an opportunity to do in-depth research on a specific IT career. The end product is a multi-page report providing details of their findings.

Strand(s) and Expectations

(See Unit 1, Activity 3: Accessing the World Wide Web and Unit 2, Activity 2: Word Processing)

Ontario Catholic School Graduate Expectations:

Students will:

- read, understand, and use written materials effectively;
- accept responsibility for their own actions.

Strand(s): Career Opportunities

Overall Expectations:

- describe career opportunities related to Information Technology. (COV.01X)❖

Specific Expectations:

- identify occupations that require an understanding of information technology; (CO1.01X)❖
- explain the skills and competencies needed to work in an information technology environment; (CO1.02X)❖
- identify local employers that require employees who have a knowledge of information technology; (CO1.03X)❖
- summarize current job advertisements that require information technology skills and education; (CO1.04X);❖
- demonstrate understanding of the importance of doing exemplary work and keeping samples of it for inclusion in resumes and portfolios that can be used in a future job search.. (C02.05X)❖

See Unit 1, Activity 3: Accessing the World Wide Web and Unit 2, Activity 2: Word Processing for:

- Planning Notes
- Prior Knowledge Required
- Teaching/Learning Strategies
- Assessment/Evaluation
- Accommodations
- Resources

Activity 3: Comparative IT Career Analysis

Time: This activity is delivered concurrently with: Unit 2, Activity 2: "Word Processing".

Description

In this activity, students compare various IT careers. First, each student researches a specific IT career and then the students' collective findings are presented to the class. In this way, students have a wide exposure to the nature and variety of career opportunities in the field of Information Technology.

Strand(s) and Expectations

Ontario Catholic School Graduate Expectations:

Students will:

- read, understand, and use written materials effectively;
- accept responsibility for their own actions.

Strand(s): Career Opportunities

Overall Expectations:

- describe career opportunities related to Information Technology. (COV.01X)❖

Specific Expectations:

- identify occupations that require an understanding of information technology; (CO1.10X)❖
- explain the skills and competencies needed to work in an information technology environment; (CO1.02X)❖
- demonstrate understanding of the importance of doing exemplary work and keeping samples of it for inclusion in resumes and portfolios that can be used in a future job search; (C02.05X)❖

See Unit 2, Activity 2: "Word Processing" for:

- Planning Notes
- Prior Knowledge Required
- Teaching/Learning Strategies **
- Assessment/Evaluation
- Accommodations
- Resources

** Additional Teaching/Learning Strategies

The culminating activity in Unit 2, Activity 2 is the preparation of a multi-page report dealing with an IT career. Completion of this report presents an opportune time to do a comparative IT career analysis, which could be performed in a variety of ways:

- Possibly invite guest speakers involved in IT careers to address the class.
- Students who have researched the same or similar careers can work in groups to synthesize their findings. Then, each group can prepare an IT career bulletin board presentation which would be changed at regular intervals to highlight another career. Alternatively, on a designated 'career day' each group could deliver a five-minute presentation enhanced by a summary on an overhead transparency or a word-processed handout that is distributed to the class.
- Highly motivated students may wish to make individual presentations of their reports.
- A jigsaw method could be employed whereby students who have reported on different careers are grouped together to prepare a summary of the differences and similarities in IT careers.

Activity 4: Personal Inventory: Assessing Personal and IT Skills

Time: 150 minutes

Description

This activity is the culminating activity for the BTT program. Through various exercises, students take inventory of their general interests and personal and IT skills. This facilitates students' understanding of themselves and assist them in developing their Individual Education Plans. The second part of this activity is the compilation of a personal portfolio that may be useful in furthering future educational and career plans.

Strand(s) and Expectations

Ontario Catholic School Graduate Expectations:

Students will:

- understand that one's purpose or call in life comes from God and strive to discern and live out this call throughout life's journey;
- think reflectively and creatively to evaluate situations and solve problems;
- demonstrate a confident and positive sense of self and respect for the dignity and welfare of others.
- set appropriate goals and priorities in school, work, and personal life;
- examine and reflect on one's personal values, abilities and aspirations influencing life's choices and opportunities;
- think critically about the meaning and purpose of work;
- find meaning, dignity, fulfillment, and vocation in work that contributes to the common good;
- exercise Christian leadership in the achievement of individual and group goals;
- accept accountability for their own actions.

Strand(s): Career Opportunities

Overall Expectations:

- assess their information technology skills and competencies. (COV.03X)❖

Specific Expectations:

- determine their information technology skills; (CO2.01X)❖
- analyse their information technology strengths and weaknesses; (CO2.02X)❖
- summarize, electronically their information skills and competencies; (CO2.03X)❖
- demonstrate their information technology skills in samples of their work; (CO2.04X)❖

- demonstrate understanding of the importance of doing exemplary work and keeping samples of it for inclusion in resumes and portfolios that can used in a future job search; (CO2.05X)❖
- design a personal plan to help them achieve information technology skills and competencies. (CO3.03X)❖

Planning Notes

- In order to complete the various personal inventories involved in this activity, teachers may use Appendices XXVI and XXVII or develop their own worksheets that are specifically tailored to the students in the class.
- In order to prepare the portfolio, students use exemplars of some of the work. Teachers may wish to prepare a checklist well before the portfolio is submitted to ensure that students have all the documentation that is required.

Prior Knowledge Required

No prior knowledge is required.

Teaching/Learning Strategies

1. Teachers begin this activity by discussing the need for students to plan their future academic and career endeavours. In this discussion, it should be pointed out that there are tools which can help them in planning, such as:
   - Individual Education Plans;
   - documentation of their personal assessments regarding interests and skills;
   - a portfolio of their work which can be used to demonstrate particular skills.
2. Teachers distribute the personal inventory sheets (see Appendices XXVI and XXVII) which students complete. These inventories are an inquiry to see what are the students' interests and skills. These forms are assessed for completion only. (Teachers may wish to comment on each student's forms and have a follow-up discussion on the skills they have and the skills they need to develop and how they will develop them.)
3. Upon completion of the inventories, students use an appropriate software application to produce a chart of IT skills and competencies.
4. Students prepare a portfolio of exemplars that have been completed from previous activities. Examples would include: the multi-page report, a spreadsheet, graphic 'maze', a database, a flyer, a newsletter, a brochure, and a web page design. These exemplars must be organized in an attractive format (e.g., binder) and submitted for evaluation.

Accommodations

- Portfolios should be individualized to reflect accommodations made in previous activities.
- Extensive conferencing with students regarding further development of IT skills.
- Students work with a 'buddy' to complete the forms.
- Allow more time for students to fill out their forms and organize their portfolios.
- Encourage students to include any exemplars of IT skills that may have been prepared outside of the course.
- For further strategies see Accommodations (General) on page 7, Phase 1.

Assessment/Evaluation

Formative

- completion of personal interests and skills inventories (COV.03X, CO2.01X, C02.02X, C03.03X)

Summative

- chart summarizing IT skills and competencies (CO2.03X)
- student portfolios (CO2.04X, C02.05X)

Resources

No resources required.

Appendix I: Internet-Related Terms

Sources for Definitions:

1 http://www.library.nwu.edu/iesca/glossary/interms.html *Glossary: Internet Terminology*
2 http://www.cyberorg.com/oscpa_pres/tsld005.htm *What is an Extranet?*
3 http://www2.famvid.com/i101/terms.html *Internet 101: Basic Terminology*
4 http://www.backroomstudio.com/web/extranet/what_is.html *What is an Extranet?*
5 http://www.backe.com/fnic/.terms.html *Basic Web Terms*
6 http://www.netvoyage.com/netcafe/extranet./htm *NetEnvelope vs. Extranet*
7 *The Ontario Curriculum: Grades 9 and 10, Business Studies*
8 Heide, Ann and Linda Stilborn. *The Teacher's Complete & Easy Guide to the Internet.*
9 Cordi, Joseph. *Teachers' Internet Cookbook: A Recipe for Internet Implementation for the Absolute Beginner*. Toronto, Canada: Baxter Group Publishing Company, 1998.

In the definitions below, the superscript number indicates the source.

Browser [3]
An application that displays a Web page. Also known as a Web browser.

Browser [1]
A program which allows a person to read hypertext. The browser gives some means of viewing the contents of nodes, and of navigating from one node to another.

Extranet [4]
Extranets are external Intranets. By setting up an Extranet, companies can allow trusted customers or partners to connect via the Web to view certain private Intranet information stored behind the firewall while at the same time restricting access to sensitive information.

Extranet [2]
An extranet is a network application that lets your company use the Internet for secure business relationships with partners, suppliers, and customers. It's like an Intranet that you share with your partner organizations, anywhere in the world.

Extranet [6]
An Extranet is a collaborative network that uses Internet technology to link businesses with their suppliers, customers, or other businesses that share common goals. The term was used … to describe software that facilitates inter-company relationships. An Extranet can be viewed either as part of a company's intranet that is made accessible to other companies or as a collaborative Internet connection with other companies….It can also be viewed as an intersection set of a number of different company intranets.

Firewalls [7]
A system used to prevent access to or from a private network. Firewalls are often used by companies to prevent individuals outside the company from accessing private networks that are connected to the Internet.

HTML [3]
Hypertext Markup Language. The standard for adding tags to a text file, so that the file is able to be interpreted by a Web browser.

Appendix I: Internet-Related Terms (Continued)

HTTP [3]
Hypertext Transfer Protocol. The Internet protocol that the Web uses to send information to the client, so the client browser can view Web pages.

Hyperlink [3]
An icon, graphic, or word in a file that, when clicked with the mouse, automatically opens another file for viewing.

Hyperlink [5]
(AKA; Hot Area/Links) Connection from one page to another on the World Wide Web. Links are usually indicated by underlined text or highlighted graphics.

IP Address [3]
The number that identifies your machine as unique on the Internet. Without it, you cannot use any Internet protocols.

ISP [5]
Internet Service Provider. An organization that provides access to the Internet and/or additional services.

Internet [1]
The largest worldwide system of interconnected computer networks, capable of the exchange of messages and of offering seamless connectivity for service, such as, remote login and file transfer. Today, the Internet is mainly composed of local and wide-area networks that use the TCP/IP suite of protocols for computer-to-computer communications; its technical standards are defined by an international cooperative committee known as the Internet Activities Board and the IAB's Internet Engineering Task Force. Other computer networks, which can exchange messages with computers on the Internet, but which cannot connect for services, such as, file transfer and remote login, can be considered part of an even larger network, sometimes referred to as the Matrix.

Internet [8]
An interconnection of thousands of separate networks worldwide, originally developed by the U.S. federal government to link government agencies with colleges and universities. The Internet's real expansion started recently with the addition of thousands of companies and millions of individuals who use graphical browsers to access information and exchange messages.

Intranet [7]
A network that is similar in design to the Internet but that is only accessible to individuals within an organization or with authorization. For security purposes, Intranets are usually behind firewalls.

Intranet [5]
An Intranet is just like an Internet, except that it is a private network that is limited to a certain group of people. For example, companies set up Intranets for employees to access while they are at work. Intranets reside inside a "firewall" which blocks access from anyone outside the company.

Search Engine [3]
A utility that locates resources via searches by keywords and phrases.

Appendix I: Internet-Related Terms (Continued)

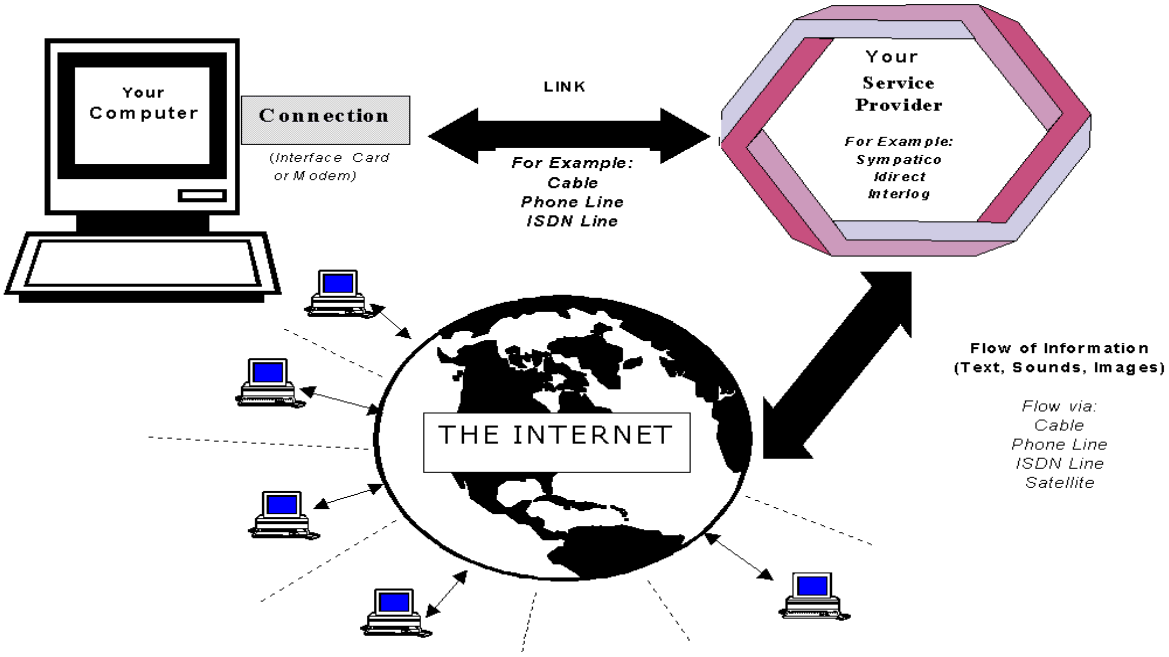
Search Engine [9]
A Web site with a huge database. A search engine Web site will have search tools running on it to help a user find materials on the Internet.

World Wide Web [1]
WWW is a system of hypertext-based documents that are linked across the Internet, unlike the hierarchical directory of documents, or a gopher menu, where the connections from one directory or file to another are linear. WWW connections are unrestricted, nonlinear, and seemingly endless. As the third part of its name implies, it is a web of connections, linking information from one resource to another, possibly providing the best opportunity for serendipitous discoveries on the Internet.

World Wide Web [3]
A collection of electronic documents loosely knit by a concept called "hyperte
each other by clickable "hyperlinks." You need to run a browser program to access the Web.

World Wide Web [5]
WWW – World Wide Web – subset of the Internet. Graphical representation of Internet using HTML language and hyperlinks to connect you to sites (data) around the world.

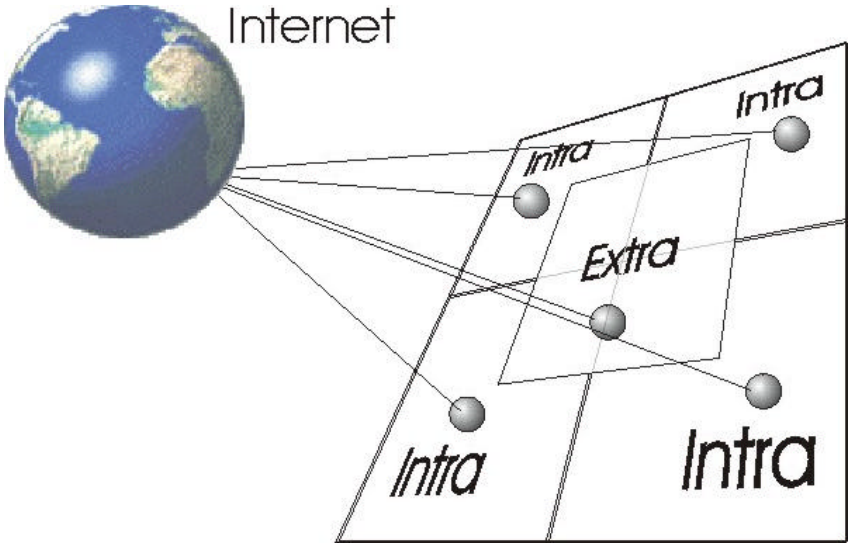
Appendix II: How Is a Computer Connected to the Internet?



Appendix III: Comparison of Internet Service Providers

Service Provider	Type of Ownership	Cost per month	Speed of Transmission	# of E-Mail Addresses	Space for Web pages? How much?
Sympatico	Home				
	Business				
Rogers	Home				
	Business				
Other…	Home				
	Business				
Other (local)…	Home				
	Business				

Appendix IV: The Internet, Intranet and Extranet



Medium	Description	Accessibility
Internet	Interconnection of thousands of separate networks	Anyone with an Internet connection
Intranet	Similar in design to the Internet but positioned inside a firewall. *(A firewall is a system which is designed to prevent access to a private network by outside users - in the diagram above, solid lines indicate firewalls.)*	Users within the organization (with passwords)
Extranet	Selected portions of one or more Intranets to form an "extra" Intranet(In diagram above, middle square forms an Extranet)	Authorized users inside *and outside* of the organization (with passwords)

Appendix V: The Ten Commandments for Computer Ethics

I	Thou shall not use a computer to harm other people.	VI	Thou shall not use or copy any software for which you have not paid.
II	Thou shall not interfere with other people's computer work.	VII	Thou shall not use other people's computer resources without authorization.
III	Thou shall not snoop around in other people's files.	VIII	Thou shall not appropriate other people's intellectual output.
IV	Thou shall not use a computer to steal.	IX	Thou shall think about the social consequences of the program you write.
V	Thou shall not use a computer to bear false witness.	X	Thou shall use a computer in ways that show consideration and respect.

(Rinaldi, Arlene. *The Net: User Guidelines and Netiquette*. Florida, Atlantic University. Graphics included by writing

Appendix VI: Computers and The Criminal Code of Canada

Section 430 (1) MISCHIEF IN RELATION TO DATA

OFFENCE	EXAMPLES OF SITUATIONS
(A) DESTROYS OR ALTERS DATA	
(B) RENDERS DATA MEANINGLESS, USELESS OR INEFFECTIVE	
(C) OBSTRUCTS, INTERRUPTS OR INTERFERES WITH THE LAWFUL USE OF DATA	
(D) OBSTRUCTS, INTERRUPTS OR INTERFERES WITH ANY PERSON IN THE LAWFUL USE OF DATA OR DENIES ACCESS TO DATA TO ANY PERSON WHO IS ENTITLED TO ACCESS THERETO	

SECTION 430 (5)

EVERYONE WHO COMMITS MISCHIEF IN RELATION TO DATA

A) IS GUILTY OF AN INDICTABLE OFFENCE AND IS LIABLE TO IMPRISONMENT FOR A TERM NOT EXCEEDING 10 YEARS
B) IS GUILTY OF AN OFFENCE PUNISHABLE ON SUMMARY CONVICTION

QUESTIONS:

1. Distinguish between an "indictable offence" and a "summary offence". (Use a law textbook or law dictionary.)
2. Under what circumstances might a person convicted of an offence under Section 430 receive a penalty of 9 years? of 1 year?
3. Under what circumstances within a school setting might a person be charged with the offence of "Mischief in Relation to Data"?
4. What are the maximum penalties that could be imposed on a young offender? (See law textbook - e.g., Talos et. al.)

Appendix VII: The Search for Chip Case

It is imperative that a business manager speak immediately to a recently-hired employee, Chip Case. However, a construction crew has accidentally cut the power lines to the business. Thus, the only way to communicate with Chip Case is to speak to him face-to-face.

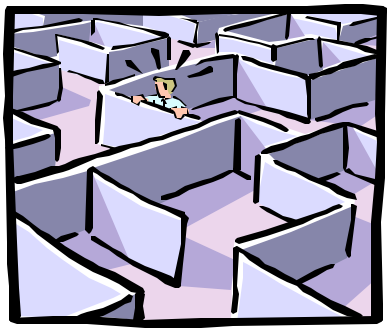
The manager asks three security guards to find Chip Case, who is known to be on the premises. The first security guard checks an employee list to see where Chip Case should be at that moment. The second guard checks every room and hallway in the building. The third guard, not aware that Chip Case is a person, looks for and returns with anything that is a chip or a case.

What are the benefits and drawbacks of each guard's search strategy to find Chip Case?

Points which might be raised in discussing this scenario are outlined in the table below.

Search Strategy	Benefits	Drawbacks
Checking Employee Records	Fast	Records may not be updated and Chip's name may not appear
Checking Every Room	Chip Case will eventually be found	Time-Consuming
Returning with every 'chip' and 'case'	Chip Case will eventually be found	Time-Consuming Office will be cluttered with unwanted items such as potato chips, computer chips, bookcases, briefcases.

(Teachers should use the above scenario, or one like it, to highlight the fact that search strategies will vary among search engines.)



Appendix VIII: Refining Your Internet Search

(For Teacher Use)

A productive search, using key words, begins before using the computer. To illustrate how this may be done, teachers lead the students through the accompanying worksheet (Refining Your Internet Search). In this worksheet, the class will supply the examples.

The following is an analysis of the ways in which an Internet search may be refined. The examples shown all relate to World War I. However, teachers may wish to use a current topic of interest to students, or use a topic suggested by another subject teacher. Alternatively, teachers may wish to use generic examples--examples that are not necessarily related to one specific topic.

1. **What is it that you really want to know?**
   - A description of the battles of World War I in the Ypres Salient
2. **What are the key words?**
   - Battles
   - World War I
   - Ypres Salient
3. **What are some synonyms, or closely-related terms, for the key words?**
   - Battles: conflicts
   - Ypres Salient: Western Front, Passchendaele
4. **Identify words that should stay together to accurately reflect search topic.**
   - "Ypres Salient"
5. **Identify words that must appear within the same document (use AND)**
   - World War I AND Ypres Salient

   Result of Search would be: Documents containing both these terms
6. **Identify words that are suitable if either word appears in the document (use OR)**
   - Ypres Salient OR Passchendaele

   Result of Search would be: Documents containing at least one of these terms.
7. **Identify words that should not appear in the same document (use NOT)**
   - Western Front NOT World War II

   Result of Search would be: Documents containing the term Western Front but not the term World War II.
8. **Try "Natural Language" which involves composing a question.**
   - Where can I find information about the battles of World War I?

If teachers wish, the above concepts can be further developed using other, and multiple, boolean operators.

Appendix IX: Refining Your Internet Search

Before you get to the computer	Examples
1. What is it that you really want to know? • State the information wanted. • Brainstorm to arrive at a list of key words • List synonyms for these key words.	
2. Identify words that should stay together to accurately reflect your search topic.	
3. Identify the logical relationships among your key words Examples of what this can mean: • Words that must appear together (use "____") • Words that must appear within the same document (use AND) • Either word appears in the document (use OR) • Words that should not appear in the same document (use NOT)	
4. Try "Natural Language" • Compose a question such as "Where can I find information about _____?"	

Appendix X: Evaluating Internet Resources

"The Internet is a self-publishing medium. This means that anyone with a small amount of technical skill and access to a host computer can publish on the Internet. It is important to remember this when you locate sites in the course of your research. Internet sites change over time according to the commitment and inclination of the creator. Some sites demonstrate an expert's knowledge, while others are amateur efforts. Some may be updated daily, while others may be outdated. As with any information resources, it is important to evaluate what you find on the Internet."

Cohen, L., "Conducting Research on the Internet", http://www.albany.edu/library/internet/research.html

When evaluating Internet resources, consider the following:

1. **Purpose**
   Who is the intended *audience* of the site you are viewing? Consider its content, tone, and style. Is this appropriate for your purposes?

2. **Source**
   - Is the author/developer identified on the page?
   - Does this person have expertise in this area? Are credentials provided?
   - Is the sponsor or "host" of the site appropriate for the material presented? Examine the URL.

   Examples

If domain name ends with:	This site represents a(n):	Example of appropriate information:
.edu	educational institution	research material
.gov	government organization	government resources
.com	commercial site	products and prices

   - Does the URL contain *"~name" (tilde – name)* where the name can be any username or expression? This represents a personal home page with no official sanction.
   - Is there an e-mail address offered for submission of questions or comments?

Appendix X: Evaluating Internet Resources (Continued)

3. Content

a) Accuracy of Information

- Don't automatically take information at face value, since web sites are seldom reviewed in the same way as published material
- Look closely for any evidence of bias? (political, religious, profit motive or some hidden agenda). Is the point of view one-sided? Does the author focus only on the negative? the positive?
- Is the source of the information clearly stated? Is it original or borrowed?

b) Comprehensiveness

- Does the content presented cover a specific time period or aspect of the topic? Is this what you want?
- Always refer to additional print and electronic resources to complement this information.

c) Currency

- Check that "date of last update" on the page or site that you are viewing. Is the material current enough?

d) Links

- Are the links provided to you relevant and appropriate for this topic? Don't assume that they will be the best available.

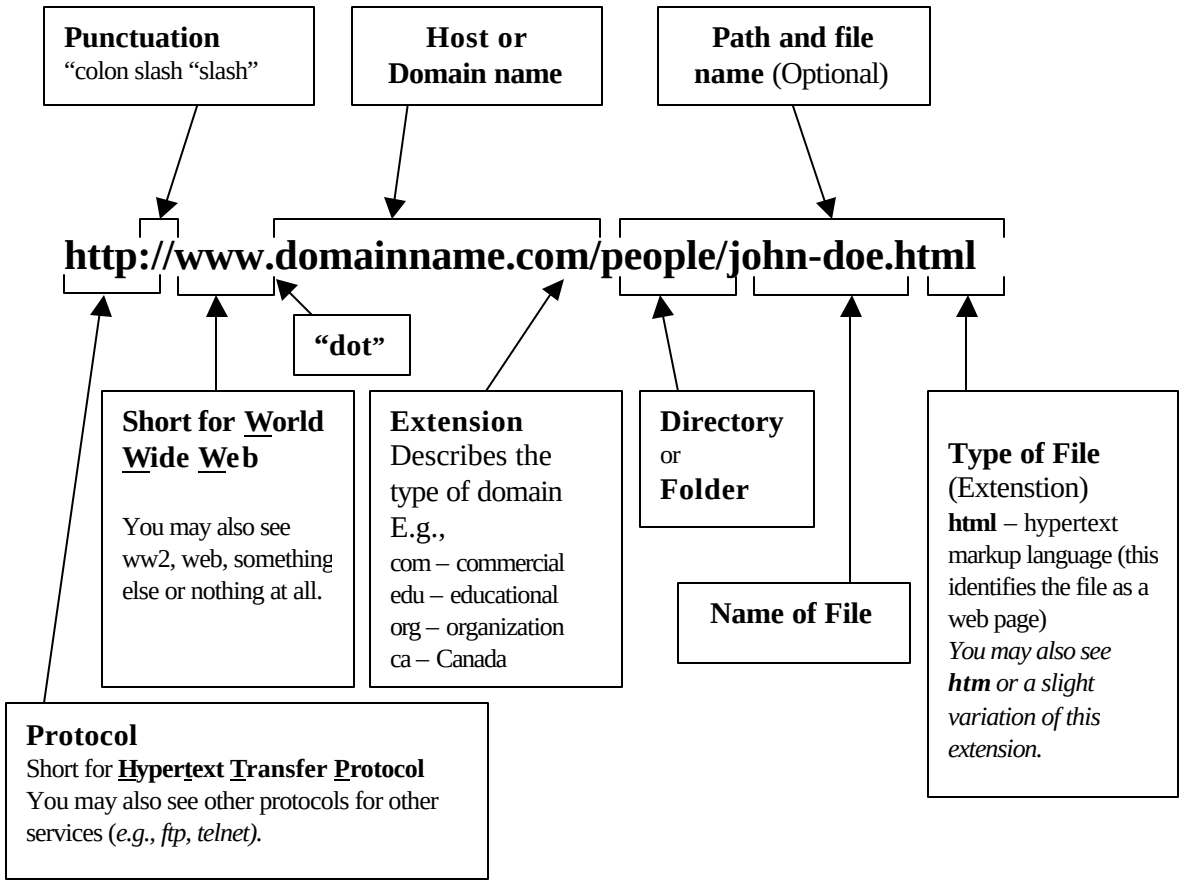
4. Style and Functionality

- Is the site organized in a clear and logical manner?
- Is the style of writing appropriate for the intended audience?
- Does the site contain clear navigation buttons (e.g., Home, Back, Go to Top)
- Do all the Internet links work?
- Is there a search feature for a large site?

Adapted from Jacobson, T. and L. Cohen. "Evaluation Internet Resources". http://www.albany.edu/library/internet/evaluate.html

Appendix XI: Anatomy of a Web Site Address

A web site address is also referred to as Uniform Resource Locator or URL for short (pronounced "earl").



Appendix XII: Comparing Search Engine Sites

Instructions: Complete the chart below by answering the questions for each search engine site you visit. Look ONLY at the home page of the site.

QUESTION	Site:		Site:		Site:	
Do you have to scroll to see the entire page?	Yes	No	Yes	No	Yes	No
Is there an advance searching feature?	Yes	No	Yes	No	Yes	No
Is there an e-mail service?	Yes	No	Yes	No	Yes	No
Is there a help feature?	Yes	No	Yes	No	Yes	No
Are there 'search for' options (e.g., web page, images, video, audio)?	Yes	No	Yes	No	Yes	No
Is there a copyright line? (Hint: Look at bottom of page)	Yes	No	Yes	No	Yes	No
Does the home page have stock market information?	Yes	No	Yes	No	Yes	No
Does the company have a site in other countries?	Yes	No	Yes	No	Yes	No
What are the first three subject categories shown on the home page?	1-		1-		1-	
	2-		2-		2-	
	3-		3-		3-	
How many advertisements do you see?						

Appendix XIII: Simple and Advanced Search Strategies – Teacher Copy

Assume : You can evaluate (read) an entire site in one second.

NUMBER OF HITS	TIME TO READ (minutes)	TIME TO READ (hours)
60	1	
600	10	
6000	100	1.7
60000	1000	16.7
600000	10000	166.7 = 6.9 DAYS
1000000	16666.66	277.7 = 11.5 DAYS

Using Simple and Advanced Search methods can minimize the amount of time spent looking at inappropriate or unnecessary web sites. The following strategies were applied in looking for the song "I want to hold your hand" by the Beatles. The Search Engine used is http://Altavista.com

SIMPLE SEARCH STRATEGY	ALTA VISTA FOUND (# OF HITS)
The beatles	135,032
"the beatles"	136,059
"The Beatles"	84,839
("The Beatles" and lyrics)	862,025 *
("The Beatles") and (lyrics or music)	1,686,780 *
("The Beatles") and (lyrics and "want to hold your hand")	392,728
("The Beatles" or Beatles) and (lyrics and "I want to	339,265
Lyrics near "The Beatles"	1,868,818
"I want to hold your hand" The Beatles	87,311 **

* Note that as a search becomes more detailed, it is expected that the number of hits will decrease. As the exercise shows, it is not always be the case. There are no absolutes in researching on the web and students should be made aware of that.

** Note the difference in selecting the same keywords in a simple search strategy as opposed to an advanced search strategy. (87,311 vs. 173)

ADVANCED SEARCH STRATEGY	# OF HITS
ENTER RANKING KEYWORDS (IN ANY LANGUAGE)	
ENTER BOOLEAN EXPRESSION	
"I want to hold your hand" The Beatles **	173
"I want to hold your hand" "The Beatles"	173
"I want to hold your hand" "The Beatles" lyrics	3
"I want to hold your hand" "The Beatles" lyrics and download	1

Appendix XIV: Simple and Advanced Search Strategies – Student Copy

Assume : You can evaluate (read) an entire site in one second.

NUMBER OF HITS	TIME TO READ (minutes)	TIME TO READ (hours)
60	1	
600	10	
6000	100	1.7
60000	1000	16.7
600000	10000	166.7 = 6.9 DAYS
1000000	16666.66	277.7 = 11.5 DAYS

Using Simple and Advanced Search methods can minimize the amount of time spent looking at inappropriate or unnecessary web sites. The following strategies were applied in looking for the song "I want to hold your hand" by The Beatles. The Search Engine used is http://Altavista.com

SIMPLE SEARCH STRATEGY	ALTA VISTA FOUND (# OF HITS)
the beatles	
"the beatles"	
"The Beatles"	
("The Beatles" and lyrics)	
("The Beatles") and (lyrics or music)	
("The Beatles") and (lyrics and "want to hold	
("The Beatles" or Beatles) and (lyrics and "I want to hold your hand")	
Lyrics near "The Beatles"	
"I want to hold your hand" The Beatles	

Choose the Advanced Search feature found in Alta Vista and key in the following. Note the first line of the advanced search is identical to the last line of the simple search.

ADVANCED SEARCH STRATEGY	# OF HITS
ENTER RANKING KEYWORDS (IN ANY LANGUAGE)	
ENTER BOOLEAN EXPRESSION	
"I want to hold your hand" The Beatles	
"I want to hold your hand" "The Beatles"	
"I want to hold your hand" "The Beatles" lyrics	
"I want to hold your hand" "The Beatles" lyrics and download	

Appendix XV: Netiquette Guidelines

The Core Rules of Netiquette

The Core Rules of Netiquette are excerpted from the book *Netiquette* by Virginia Shea.

Introduction

Rule 1: Remember the Human

Rule 2: Adhere to the same standards of behavior online that you follow in real life

Rule 3: Know where you are in cyberspace

Rule 4: Respect other people's time and bandwidth

Rule 5: Make yourself look good online

Rule 6: Share expert knowledge

Rule 7: Help keep flame wars under control

Rule 8: Respect other people's privacy

Rule 9: Don't abuse your power

Rule 10: Be forgiving of other people's mistakes

To view this table of contents and obtain more information, visit the web site:
http://www.albion.com/netiquette/corerules.html

Some Practical Netiquette Tips for E-mail and Newsgroups

1. Avoid using all caps. IT LOOKS LIKE YOU'RE SHOUTING!

2. To personalize your messages, you can use *smileys*, also known as *emoticons*, expressions you create from the characters on your keyboard. A few popular ones include:

:-)	Happy	:-e	Disappointed
:-(	Sad	:-<	Mad
:-o	Surprised	:-D	Laughing
:-@	Screaming	;-)	Winking
:-I	Indifferent		

3. Keep your communications to the point. Some people pay for Internet access by the hour.

Appendix XV: Netiquette Guidelines (Continued)

4. Keep in mind that anything you post to a newsgroup or type into a chat session is a public comment. You never know who's reading it, or who may copy it and spread it around.

5. If you're posting a message to a public bulletin board, forum, or newsgroup, stick to the topic. Don't make the mistake of posting advertisements or announcements to every newsgroup you can think of. This practice, referred to as *spamming*, will quickly lead to another unpleasant Internet practice known as *flaming*.

6. What is *flaming*? Sometimes you might offend someone unintentionally. Be prepared to receive some angry e-mail or be treated rudely in a public discussion. This is called being *flamed*. If you attack back, you will spark what is known as a *flame war*. The best response usually is no response at all.

7. If you post an ad to a newsgroup, or send it in an e-mail, clearly identify it in the subject line. That way people who aren't interested can delete it.

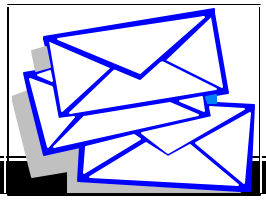
8. To keep messages short, there are some abbreviations you can use:
   - <BTW> means "by the way."
   - A <G> enclosed in brackets indicates grinning.
   - A good one to keep handy in case you're worried about offending someone is <IMHO> -- In My Humble Opinion.

9. Some additional resources you can consult include the following:
   - For a short and friendly summary, try the *UK Beginners' Guide to Good Manners.*
   - For the definitive guide, read Arlene Rinaldi's *The Net: User Guidelines and Netiquette*.

10. Keep in mind that *FAQs* (Frequently Asked Questions) are very handy documents to read before asking questions. You should always consult them whenever they are available.

Adapted from The Net: User Guidelines and Netiquette - Index
By Arlene H. Rinaldi
http://www.fau.edu/netiquette/net/

Appendix XVI: E-Mail Checklist



STUDENT'S NAME:

When using E-Mail, I am able to:	Circle Response	
Create a signature line....	Yes	No
Add names to my electronic address book....	Yes	No
Compose an E-mail message correctly....	Yes	No
Send an E-mail message....	Yes	No
Read and Reply to an E-mail message....	Yes	No
Forward an E-mail message...	Yes	No
Delete messages from the Inbox...	Yes	No
Send attachments....	Yes	No
Combine attachments to form one document....	Yes	No
Use appropriate netiquette....	Yes	No
Correctly reference sources....	Yes	No

I need more practice in:

E-MAIL LAB 3: FOR TEACHER USE ONLY

- Message received with appropriate netiquettte? Yes No
- Attachment received? Yes No
- Attachment correct? Yes No
- Attachment properly referenced? Yes No

Appendix XVII: Collaboration Tools on the Internet

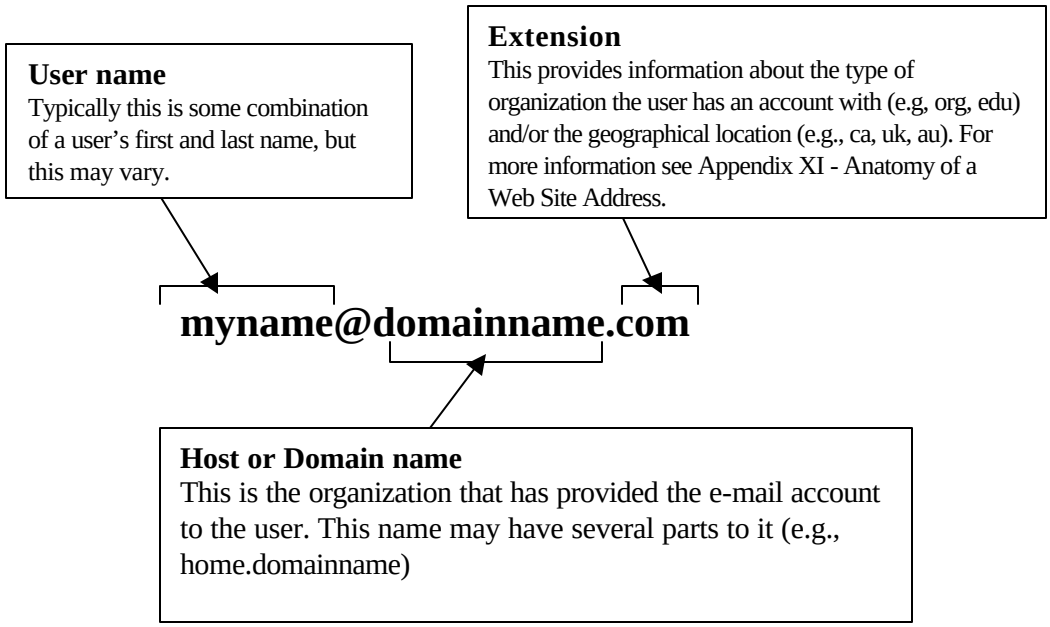
1. E-Mail (one-to-one, one-to-many)

We use Internet E-mail (electronic mail) to send electronic letters to people or organizations. E-mail messages may contain text and multimedia data and can be delivered within seconds to almost any E-mail address in the world. To send and receive messages, a user must have an E-mail account and an E-mail program. Accounts are available through commercial Internet Service Providers (ISP) or a school's or organization's network manager. Some non-commercial E-mail accounts are designed to function only within the school or organization in which they were created or inside the *firewall* (the electronic "wall" that separates your internal network or Intranet from the rest of the world). E-mail programs are built into most Web browsers and are also available as separate products.

The path of an e-mail message

When someone types and SENDS a message *to you* this message travels to the POST OFFICE (disk space on a computer) on the Internet MAIL SERVER at your school, organization or ISP. Here it is stored in your private MAILBOX. Instead of a box number and key, you have a USERNAME and PASSWORD for this mailbox. You can prevent other users from viewing your mail by keeping your username and password secure just as you would your house keys or locker combination

The anatomy of an e-mail address



There are two protocols (or sets of "rules") for the sending and receiving of e-mail messages via a MAIL SERVER. They are SMTP (Simple Mail Transfer Protocol) and POP (Post Office Protocol).

Appendix XVII: Collaboration Tools on the Internet (Continued)

2. Mailing Lists (one-to-many)

An Internet Mailing List operates much like a magazine subscription – after you find a topic that interests you, you subscribe. All users on the list may post messages which will be sent to all members on the list. All replies will ALSO be sent to every member of the list. Some popular WEB resources for locating mailing lists are: http://www.liszt.com, http://www.tile.net/listserv, and http://www.listtool.com.

3. File Transfer Protocol (FTP) (one*-to-one)

*(In this case "one" refers to a file)

This is one of the oldest Internet services which enables you to download (copy) a file from a remote (distant) computer. This service may expose your computer to unwanted viruses

File Compression

Files available by FTP are typically compressed to reduce the amount of storage space required and the amount of time required for downloading. These files typically have extensions such as .tar, .zip, .z, .zr, .gz.

4. Newsgroup (one-to-many)

A newsgroup is an electronic forum where users participate in ongoing discussions among an unlimited number of people about a multitude of topics. A system called *Usenet* is a widely used example which is much like a huge bulletin board where people post new messages and/or replies to existing ones. An ongoing discussion about a particular topic is typically referred to as a *newsgroup*. In order to participate you need a *news reader* (also known as a newsgroup client). This is a program that allows you to compose and read messages. The collection of messages about one topic is called a *thread*. Netscape Navigator and Microsoft Explorer have built-in news readers just as they have an E-mail program.

There are six major domains in the Usenet structure as follows: comp (computer-related), sci (science), soc (social issues and politics), news (topics related to Usenet), rec (recreational activities), misc (miscellaneous), alt (alternative)

Many newsgroups are targeted to users who are members of a particular network or institution such as a university or large organization as opposed to the general public.

Appendix XVII: Collaboration Tools on the Internet (Continued)

5. Chat (one-to-one, one-to-many)

This is a popular way for Internet users to communicate in real-time. Real time communication means that communication is "right now". Unlike e-mail, there is no waiting period between the time you send the message and the other person or group of people receives the message. Most chat rooms have a dedicated topic and may be monitored by a moderator. A web browser is all that is needed to participate in most chat rooms. It is possible to combine both keyboard and voice chat with such programs as *Cool Talk* which comes with *Netscape Navigator 3*. Another popular chat program is called *Microsoft Chat.*

6. Conferencing (one-to-one, one-to-many)

Internet conferencing enables a group of users to communicate in real-time using a combination of keyboards, microphones, speakers, and video (where available). Internet conferencing makes it possible for people in distant locations to communicate and share files and applications so that they may work collaboratively in a group. Some popular software include *Microsoft NetMeeting* and *Powwow*. "Buddy lists" are programs that let you create specific lists of people with whom you want to chat in real time – much like conferencing. A program that provides this feature is available from http://www.icq.com.

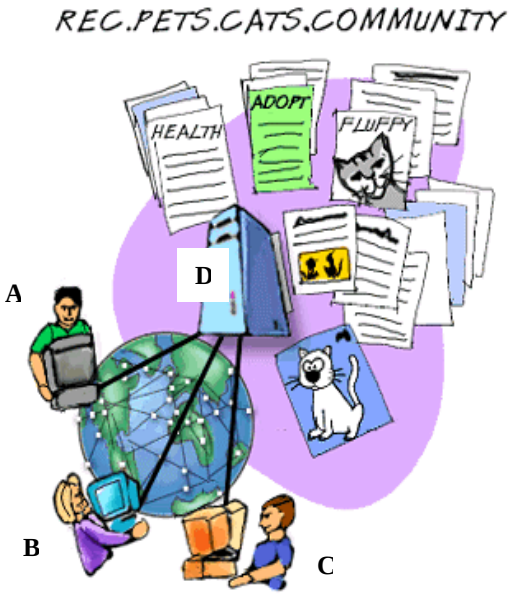
Appendix XVIII: E-Mail and Newsgroups

How E-Mail Works

- Sender (A) **composes** and **sends** a message to one or more receivers (B, C, D).
- The message is stored on a **mail server** (E).
- When receivers B, C, and/or D log on, they will receive the message from server E, via the Internet and can **reply** where necessary.

How Newsgroups Work

- A **newsgroup administrator** sets up an ongoing discussion or **newsgroup** called rec.pets.cats.community on server D.
- Users A, B, and C **subscribe** to the newsgroup and contribute comments and questions using **news reader** program.
- Users A, B, and C place their contributions into topic categories called **threads** (e.g.,



Graphics from http://www.learnthenet.com – included with permission, July, 1999.

Appendix XIX: E-Mail Journal

Task	Done (✓)	Date	Comments	
Introductory e-mail sent				
Reply e-mail received				
Editing of word processing document				
Final Draft completed				
Categories			**Date Information Requested**	**Date Information Received**
events				
stories				
clubs				
school, location				
other…				

REFLECTION

Answer in space below.

What have you learned about your partner?

What have you learned about the cultural background of your partner's school?

How is it different from your school? Name some differences and similarities.

How would you change this activity if you were to do it again?

Appendix XX: Electronic Communication Tools

Instructions: Complete the chart below by indicating, for each electronic communication tool identified:

- An example of the information a business might wish to communicate using the tool;
- The reason(s) why the electronic tool might be used by a business.

ELECTRONIC COMMUNICATION TOOL	EXAMPLE OF INFORMATION REQUESTED/ COMMUNICATED	REASON(S) FOR SELECTING ELECTRONIC TOOL
Fax		
E-Mail		
Voice Mail		
Internet		
Intranet		
Extranet		

Appendix XXI: Guidelines for a Student Web Site Plan

Title of Web Site:

Audience:

Purpose (e.g., Entertainment, Promotion, Information)

General Description (in sentences)

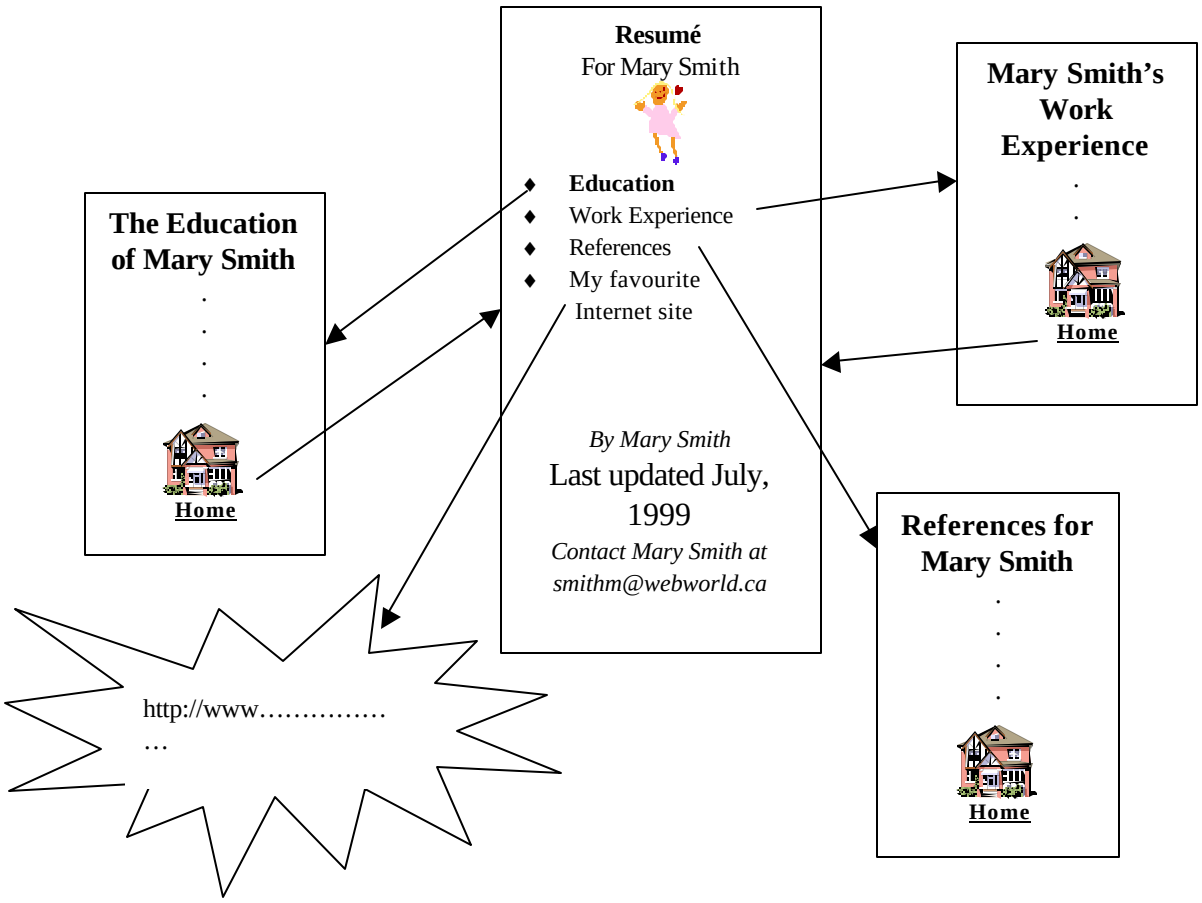
Summary of Content (e.g., pictures, song lyrics, recipes)

Link Objects or Text (e.g., Education will link to another page which lists my education Picture of a magnifying glass will link to my favourite search engine)

Attach a flowchart plan for your web site.
Teacher comments and authorization to continue:

Appendix XXI: Guidelines for a Student Web Site Plan (Continued)

Sample Flowchart



Appendix XXII: Multimedia Presentation Project

A Guide For New Grade Nine Students

Suggested Areas to Include in Guide

Layout of the School

The Role of the Library Resource Centre

The Role of Chaplaincy Services
Liturgies, counselling
community services

The Role of Student Services

The Role of Student Council

School Rules and Policies
Student Behaviour
Uniform, Attendance
Evaluation

Extra-Curricular Activities
Sports, Clubs

Special Events
Dances, Fund Raisers
Career Days
Take Your Child to Work

Miscellaneous
Dress Down Days (or Jeans Days)
What to do at Lunch Time

Personal Observation
(Any experience or advice which you wish to share with an incoming Grade 9 student)

Appendix XXIII: Tips to Help You With *HyperStudio*

The "pieces" of *HyperStudio*

- A **card** is what you see on one computer screen
- A card may contain text and or graphic objects or buttons
- Several cards make up a **stack** (e.g., you may have 10 cards in one stack).
- Buttons are objects which will perform an action when "clicked" with the mouse (e.g., move to the next page, play an animation).

Getting Started

- Launch *HyperStudio*, look at the **File** menu and notice that the file name is referred to as a stack
- Examine the **Edit**, the **Move**, and the **Tool** menus. Look for commands that are familiar and explore those that are not.
- The **Objects** menu allows you to add a button, a graphic or a text object to a card.
- Select **File, New Stack** - this will give you your first **card** to work on.
- Select **File, Import Background** and select a background from **Disk file**.
- Select **Tools** and drag the toolbox to any spot on the screen. You may move it as required and close it when it is not needed.

Working with *HyperStudio*

- To add text, select **Objects** and choose **Add a Text Object** - a dialog box will appear to help you position your box.
- In the **Text Appearance** dialog box, select the **Style** menu, select a font, size, colour, and background.
- To add a button select **Objects** and choose **Add a Button**.
- In the **Button Appearance** dialog box, you can name your button, select a shape, choose text colour and a background colour.
- When you click outside the button the **Action** menu will appear.
- Choose a suitable action from the **Places to Go** (e.g., **Next card**) and/or **Things to Do** (e.g**., Play Frame animation**) lists.
- Select **Play Animation**, select an image from the disk and experiment with the settings.
- If you selected **Places to Go** a **Transitions** dialog box will appear. Experiment with several effects until you find one that you like.
- Add additional cards and buttons to move between cards as necessary.

Adapted from Kitto, Rick and Scott Rob. *HyperStudio*. London, Ontario: KS Publications, 1998.

Appendix XXIV: Multimedia Project Evaluation

This project has a value of 50 marks. Half of the marks will be awarded for content (e.g., research, spelling, and grammar) and half for technical design (e.g. use of buttons, animation).

Categories	Needs Improvement	Good	Excellent	Mark
Content				
Content – Thoroughness of Research				/5
Content - Accuracy of Information				/5
Content - Spelling				/5
Content - Grammar				/5
Content - Writing Style				/5
				/25
Technical Design				
Technical Design - Buttons				/5
Technical Design - Graphics				/5
Technical Design - Animation				/5
Technical Design - Order of cards				/5
Technical Design - Creativity				/5
				/25

Total Marks = /50

SUGGESTIONS FOR IMPROVEMENT:

Appendix XXV: *HyperStudio* Presentation Project Rubric

Categories	Level 1	Level 2	Level 3	Level 4
Content *Knowledge and Understanding of HyperStudio functions*	- demonstrates limited knowledge and understanding of *HyperStudio* functions	- demonstrates some knowledge and understanding of *HyperStudio* functions	- demonstrates considerable knowledge and understanding of *HyperStudio* functions	- demonstrates extensive knowledge and understanding of *HyperStudio* functions
Thinking and Inquiry *Evidence of Planning and Problem-Solving in Development of HyperStudio Presentation*	- provides limited evidence of planning and use of problem-solving strategies	- provides some evidence of planning and use of problem- solving strategies	- provides considerable evidence of planning and use of problem-solving strategies	- provides extensive evidence of planning and use of problem-solving strategies
Communication - Oral Presentation *Communication of information and ideas*	- communicates relevant information and ideas with limited clarity and sense of audience and purpose	- communicates relevant information and ideas with some degree of clarity and sense of audience and purpose	- communicates relevant information and ideas with considerable clarity and sense of audience and purpose	- communicates relevant information and ideas with exceptional clarity, insight and sense of audience and purpose
Application of Technology *Application of HyperStudio Software*	- is able to employ *HyperStudio* to a limited degree with teacher direction	- is able to employ *HyperStudio* to a limited degree without teacher direction	- is able to employ *HyperStudio* to a significant degree without teacher direction	- is able to confidently employ *HyperStudio* in a creative manner without teacher supervision providing evidence of insight

Adapted from Llinda Taggart-Fregoso - http://memorial.sdcs.k12.ca.us/LESSON/WWII/WWIIunit//HyperStudiorubric.html

Appendix XXVI: Personal Inventory

PERSONAL TRAITS	Often	Sometimes	Never
I enjoy making decisions…			
I work at something until it is finished before taking on a new task…			
I prefer to organize things myself…			
I feel comfortable giving instructions to others…			
I prefer to work as part of a group…			
I become nervous when talking in front of a group…			
I develop an action plan before starting any new task…			
It is difficult for me to tell someone that certain habits annoy me…			
I become tongue-tied when speaking on the telephone…			
I prefer to have established procedures to work by…			
I like to try to help people deal with their problems…			
I enjoy new challenges…			
I speak more than one language…			

PERSONAL INTERESTS	
My Personal Interests Include:	**If Applicable, Identify Sport, etc. and Include Positions/Awards**
Sports	
Clubs	
Community Groups	
Other Activities (e.g., Hobbies)	

By looking at the completed personal inventory above, describe the type of work (employment) in which you would be most successful.

Appendix XXVII: My Information Technology Skills

My Skill Level in Each of the Following Areas Is….	Excellent	Good	Fair
Desktop Management			
Word Processing			
Spreadsheets			
Graphic Tools			
Databases			
Use of the Internet			
Desktop Publishing			
E-Mail			
Presentation Tools			
Computer Literacy (Terms: e.g., Browser, etc.)			

The IT skills in which I require improvement are:

- _____
- _____
- _____
- _____
- _____
- _____

What I will do to improve my IT skills:

- _____
- _____
- _____
- _____

Appendix XXVIII: Video Resources

Inside the Internet
Mississauga, Ont: International Tele-Film, 1996. 1 videocassette (28 min.)
Focuses on how to use the Internet as a learning tool. This program shows how to use the World Wide Web in the classroom and discusses the different types of Internet connections.
Recommended for: Professional Development, Educational Technology

Caught in the Net
Montreal: National Film Board of Canada, 1997. 1 videocassette (14 min.)
Provokes young people to explore the risks of getting too personal on the Internet. Adam reluctantly faces the possibility that a girlfriend he met on the Internet may not be everything she appears to be. Viewers are urged to think critically and carefully about the many people and sources of information on the Internet.
Recommended for: Intermediate, Senior, Internet (Computer network)

Cybernation--programs 1-4 (4 programs on 1 videocassette - 30 min. each)
Cybernation--programs 5-8 (4 programs on 1 videocassette - 30 min. each)
Cybernation--programs 9, 10 (2 programs on 1 videocassette - 30 min. each)
Mississauga, Ont.: International Tele-Film, [199-],
This series is designed to introduce students to emerging technologies, help them understand how they work, what they've replaced (or what motivated their development), and how they've changed the world technologically and socially.
Recommended for: Intermediate, Senior, Technological innovations

Infologic Series
Toronto: International Tele-Film [distributor], 1995.
4 programs per videocassette (ca. 30 min. each)
Episode 1. Microsoft Windows 95
Episode 2. Microsoft Word 6.0
Episode 3. Lotus Smartsuite 3.0
Episode 4. Microsoft Word 6.0.
Episode 5. Lotus Smartsuite 3.0
Episode 6. Lotus Smartsuite/1-2-3
Episode 7. Microsoft Excel 5.0
Episode 8. Microsoft Word 6.
Episode 9. Microsoft Access 2.0
Episode 10. Lotus Notes
Episode 11. Microsoft Publisher
Episode 12. Microsoft Publisher.
Episode 13: Delrina Winfax: Erin Hintz, from Delrina, shows Beverly how easy it is to send and receive faxes using the computer and faxmodem.
Recommended for: Intermediate, Senior

Appendix XXVIII: Video Resources (Continued)

WebHead
Toronto: CBC Enterprises, 1996, 1 videocassette (47 min.)
Roughcuts Host Don McKellor takes us on a visit through a new and quickly changing neighborhood, the Internet. Using a wide range of experts and clear analogies, McKellor and company explain the history of the net and how it is expected to develop.
Recommended for: Senior, Professional Development

Digital design—programs 1-4
Digital design—programs 5-8
Mississauga, Ont., International Tele-Film, [199-], 2 videocassettes (120 min. each)
This series makes the essentials of page design, illustration, and typography accessible to everyone. Programs offer an overview of the tools, software, and concepts required to produce professional-looking documents. Also featured are the insights and wisdom of accomplished and professional designers and authors who share their favourite tips and techniques.
Recommended for: Intermediate, Senior, Electronic publishing.

Internet for Educators: A step-by-step guide to help educators understand and use the Internet
Speakeasy Cafâe/White Rain Films, 1996, 1 videocassette (66 min.)
A step-by-step guide demonstrating effective techniques for using the World Wide Web, E-mail, FTP, and others. The video also examines the Internet phenomenon from the educator's point of view. Examples are given of how to put the Internet to work in the classroom or to interact with fellow educators.
Recommended for: Professional Development, Senior

Venture: Technology and change
Toronto: CBC Enterprises, 1992, 1 videocassette (26 min.)
Technology is creating new realities and methods of getting things done in our homes, our workplaces and just about everything in between. We're in the midst of a world-wide technological revolution that is radically altering the speed and manner in which information is stored, accessed and communicated
Recommended for: Professional Development, Senior

Computer Applications
Scarborough, Ont.: Nelson Canada, 1996, 1 videocassette (29 min.)
This program gives a brief history of computers, explains white collar crime and the role of a forensic accountant, and looks at the Internet and the World Wide Web.
Recommended for: Senior, Teacher reference

Information Processing – 20 part Series
Ontario, TV Ontario, 1993
These series covers a variety of Information Technology topics. The videos were designed to accompany the Independent Learning Centre courses.
Titles include: Business Organization, The changing workworld, Data Bases, Telecommunications, Preparing for an Information Processing Career, Business documents.

Internet Searching Skills: Navigating the Web with Ease
Schlessinger Media, 1998, 1 videocassette (23 minutes)
Available from: The Magic Lantern Group, 10 Meteor Drive, Toronto, ON
http://www.magiclantern.ca
Recommended for: Grade 5 and up