Technology as a Doorway to Information

Grades 4-12

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Student Research Habits
“Information Literacy is defined as the ability to acquire, critically evaluate, select, use, create and communicate information in ways which lead to knowledge and wisdom”

(Information Studies K-12, OLA)
Information Literacy Skills Continuum

- [http://techtalk.ddsbschools.ca/doorway-to-information/skills-continuum.html](http://techtalk.ddsbschools.ca/doorway-to-information/skills-continuum.html)
Sample
Designing Research Assignments

- Take a Position
- Compare and Contrast
- Re-Create Model

OSLA Inquiry Process
Phase 1: Exploring

- Initiating Inquiry
- Choosing a Topic
- Developing Questions
You are researching MARC records. Develop 5 questions.
Online Encyclopedias

- Grolier Encyclopedia – provided by OSAPAC
  - http://go-kids.grolier.com/

- Canadian Encyclopedia - free
  - http://www.thecanadianencyclopedia.com
Video Streaming

- Viewing a video gives an overview of topic and a common experience for all students to use a ‘jumping-off point’ for their research

- Learn360 – more than 8,000 educational videos

- National Film Board – English and French
  - [http://media.durham.edu.on.ca](http://media.durham.edu.on.ca)
Wikipedia


- **Wikipedia explained:**
Generate Keywords and Ideas

- Smart Ideas
- Bubbl.us
Developing Questions

- http://techtalk.ddsbschools.ca/doorway-to-information/skills-continuum.html
Phase 2: Investigating

- Designing the Plan
- Selecting Information
- Formulating the Focus
Research Tips for Junior Grades

- Emphasize books
  - Instruction on Table of Contents, Index

- Safe, Age-Appropriate Searching
  - www.kidsclick.org

- Teacher pre-selects websites in folder and provides them to students
Adding a Folder of Web Links to Class Group

- Instructions are in Teachers Community/Software Documentation/SchoolConnect/

- Preselected sites guarantee that students are using appropriate information (especially for Gr. 4-5)

- For older students, saves random surfing time
Online Databases

- Knowledge Ontario
  - Portal for dozens of online databases available to students in Ontario
  - No login or password needed.
  - Authoritative
  - No advertising

- [http://eresources.knowledgeontario.ca/](http://eresources.knowledgeontario.ca/)
Knowledge Ontario: Gr. 4-6

http://eresources.knowledgeontario.ca/?cat=19
Knowledge Ontario: Gr. 7-12

http://eresources.knowledgeontario.ca/?cat=21
How Does a Search Engine Work?

- **Web spider**: Scans the web to index pages.
- **Builds index based on its own system of weighting**: Creates an index of pages.
- **Encodes the data to save space**: Compresses the index for storage.
- **Builds list of words and notes where they were found**: Creates keywords and locations.
- **Stores data for users to access**: Stores the indexed data for user retrieval.
Google

- Poster can be found in Skills Continuum
- No human review!
- Results based on:
  - Keywords
  - Popularity (as determined by how often other sites link to the page)

Anatomy of a Search.

How does Google help you find what you're looking for? To give you the best search results, Google maintains an index of the billions of pages of content on the web. Here's what happens in that fraction of a second after you type a few words into the Google search box.

1. Search the index: When you click the Google Search button, Google goes through the billions of web pages in the index to find every page that contains the word or phrase or group of words you've used.

2. Analyze the web pages for relevance: Google screen's web pages in the index to see which ones are most likely to have what you're looking for. Based on such factors as the number of times the words you searched for appear in a particular page, whether they are in the title and - if you entered multiple words - how close together they appear.

3. Evaluate the site's reputation: Google looks at how often other websites link to these pages to determine how popular or useful each one is.

4. Rank the web pages: Having scrutinized the web pages in terms of their relevance to your search words, Google presents your results, with what we believe are the most useful pages at the top.
Understanding a Search Results Page

Paid Results

Computer Generated Results
Google Search Tips

- Advanced Search
- Ctrl F
Phase 3: Processing

- Analyzing Information
- Evaluating Ideas
- Organizing and Synthesizing Findings
Evaluating Websites

- Criteria
  - Authority
  - Objectivity/Bias
  - Content and Accuracy
  - Currency
Authority

- Who created this site?
- What is the authority or expertise of the person or organization?
Objectivity/Bias

- Check site for any indication of bias
- What is the purpose of the site?
  - Does the author have a political or business agenda?
- Is there an organization sponsoring the site?
- Who is the intended audience?
- Is it free from advertising?
Check site for any indication of bias

Domains:
- .edu
- .gov
- .ca
- .org – www.martinlutherking.org or www.gatt.org
- .com

Find domain owner at:
- www.easywhois.com
Content and Accuracy

- Can the information be verified by going to another source?
- Is there documentation stating the original source of the material?
- Are there links to other credible sites with additional information?
- Can you contact the author or webmaster?
- Did you reach this site through a reputable link?
Content and Accuracy

- Research on Famous Explorers
  - www.allaboutexplorers.com

- Lessons and lists of fake websites can be found in the Information Literacy Skills Continuum

- What sites link to this site? Use Yahoo.
Currency

- Does the site show a date of when it was created or last updated?
- Has the site been updated recently?
- Does the site cover recent changes or advancements in the topic being researched?
Notes/summarizing are two of the most powerful skills students can master. They provide students with tools for identifying and understanding the most important aspect of why they are learning.

The Information Literacy Skills Continuum has several examples of jot note templates.

Tools:
- Smart Ideas (or Bubbl.us)
- Graphic Organizers
- Talking Word Processor
- OneNote
Phase 4: Creating

- Making and Presenting Products
- Assessing Product and Process
- Extending and Transferring Learning
Where to Get Images, Video and Music

- M: drive
- Creative Commons
  - [www.creativecommons.org](http://www.creativecommons.org)
Citing Sources

- **Information Literacy Continuum** contains helpful tips

- **Citation Guidelines**
  - [http://www.easybib.com/ebook](http://www.easybib.com/ebook)

- **Citation Creator**
  - [http://www.easybib.com](http://www.easybib.com)
Technology Tools

Comic Strips/Animation: Bitstrips, Comic Life, Frames

Movies: Photostory, Moviemaker

Presentations: Powerpoint, Corel

Posters: Photoshop, Publisher, Notebook

Podcasting: Audacity
DDSB Learning Commons

- Found on all school websites
- Student Splash Page (elementary)
  - [http://schoolresources.prog/student/](http://schoolresources.prog/student/)