On Beyond Google

Web Literacy for Teachers and Students

Gaby Richard-Harrington

Internet Basics

- Origins
- Benefits
- Today

Internet Basics
Origins of the Internet

- Advanced Research Projects Agency (ARPA) of the U.S. government created the Internet in 1969
  - Un-interruptible communications network
- Government
- Military
- Research

Internet Basics
Benefits of the Internet

- It was a worldwide system of computer networks - a network of networks
- It allowed research scientists to "talk to" each other at distant universities, military installations, etc.
- All text-based information
  - HTLML

Internet Basics
The Key Benefit

- Messages could be routed or rerouted
- In more than one direction
- Network could/would continue to function even if parts of it were destroyed* in the event of a military attack or other disaster.
  - *It worked on September 11th when cell phones couldn't...

Internet Basics
What is the Internet today?

- a worldwide network of networks open to the public that is used for:
  - Communication
  - Research
  - Education
  - Commerce
  - Military/government business
  - Entertainment and socializing
  - everything...

Internet Basics

What changed?

- Creation of the WWW
  - Tim Berners-Lee 1989
- Development of a Graphic User Interface (GUI) A "Browser"
  - MIT Mosaic 1993
- WWW part of the Internet became accessible to the public (Web 1.0)
- Read/write web = Web 2.0

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Internet Basics

What Is A Browser

- A translator of programming language
- A graphical interface for the code
  - A window to the Internet
- A way to access search tools
- A tool for bookmarking favorite sites
- A tool for collecting images for later use

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Internet Basics

The Internet & Education

- Research
- WebQuests
- Virtual field trips
- Communication
- Publishing
- Contact experts
- Global Projects

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Internet Basics

Where do we begin?

- Understand the search tools
- Pick a topic
- Formulate a search question
- Give it a few tries
- Refine your methods
- Create a strategy
- Modify your strategy

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Internet Basics

Understand the Search Tools

- Search Engine and Meta Search Engine
- Directory (also called subject directories)
- Portal (also called vortal - vertical portal)
- Database
- User/Discussion Groups
- Blogs
- Wikis
- Podcasts

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Internet Basics

Search Engine

- Search Engine
  - Spiders and robots "bots"
  - new findings logged automatically
  - Some sites are submitted by "owner"
  - unique mathematical equation "algorithm" used in searches
    - Google-most used
    - AltaVista-most comprehensive
    - Dogpile-a favorite for education

Google

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Internet Basics

Meta Search Engine

- Engines that search other engines
- Dogpile example
- one search returns results from many other search engines

Internet Basics

Directory
(also called subject directories)

Internet Basics

Directory
(also called subject directories)

- Good starting point if you don't have a very specific topic or question
- Good for general questions
- very selective
- index reviewed by human being
- smaller database coverage
- paid inclusion

Internet Basics

Meta Site
(also called specialized directories or portals)

- Good starting point if you need info on a specific topic or question
- specialized
- very selective
- immediate "expertise"
- index reviewed by human being
- smaller database coverage
- paid inclusion

Internet Basics

Pick a topic and a tool

- Choose between
  - Directory
  - Meta site or specialized directory
  - Search Engine
  - Meta search engine
  - Specialialty search engine

Internet Basics
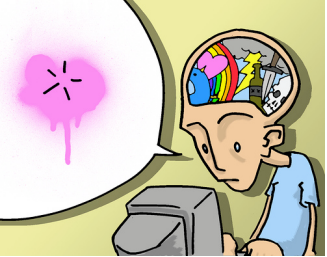
Formulate a search question

- This may be given by the teacher
  - Make it a good question!
  - Research rather than report
  - open ended
- This may be chosen by the students
  - Help them ask a good question
  - Research rather than report
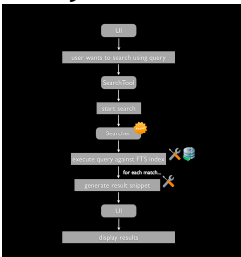 - Workable

Internet Basics
Give it a few tries

http://www.cbc.ca/searchengine/blog/natural%20language%20search_nated
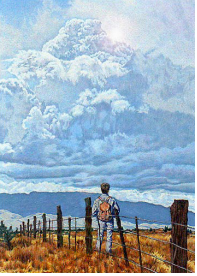rawssomestuff.jpg

Internet Basics
Refine your methods

http://gears-pubtools.googlecode.com/svn/trunk/docs/ps_searching_flow.png
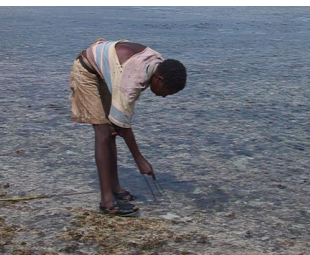
Internet Basics
Create a strategy

http://picture-
book.com/files/userimages/
824u/searching5.jpg

Internet Basics
Modify your strategy

http://filmingwild.wildlifedirect.org/files/2008/06/6searching-for-the-last-ba.png

The Grammar of the Internet
How to read the URL

- (http://) is a protocol name
- (www.) is the location of the site
- (gpsk12) This is the name of the organization that maintains the site
- (.com, .org, .gov, .net, .mil, .edu or state.us) domain or suffix that identifies the category of the organization
- http://www.gpsk12.org

The Grammar of the Internet
Look at these URLs

http://ccbit.cs.umass.edu/SchoolofEducation/Preservice/vrroom

http://memorialhall.mass.edu/home.html

http://www.strategy2design.com/keyboarding_links.html

http:broccoli.cs.umass.edu/pvma/pvma_staging/

http://www.gazettenet.com/12032001/sports/sports.htm

http://massachusetts.ihigh.com/0,1713,5___216,00.html

http://www.umass.edu/~smith-----------

The Grammar of the Internet

What happens when a page is not found?

- deconstruct the URL to see if you can find the missing web page...
- go to the home page and see if there is a search feature

http://davidalees.com/wp-content/uploads/2009/07/amazing_surprising_child_looking_searching_binoculars.jpg

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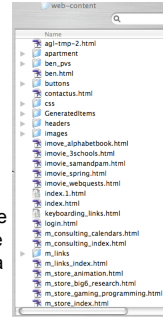
The Grammar of the Internet

Structure of the Website

http://www.strategy2design.com

http://www.strategy2design.com/index.html

http://www.strategy2design.com/

folder structure can change and the page has a new URL. Websites change all the time. Now you can use the URL to find a page.

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Keyword Searching

Define Keywords

- talk about what to enter into the search box
- talk about how kids/students search now
- ask about the types of things that they look up when they go online
- talk about entering full questions

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Keyword Searching

How do you teach keyword searching?

- think out loud
- brainstorm a list of keywords
- take keywords out of questions
- formulate research questions
- practice
- use games and make it fun!

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Games and Mini Lessons

Microsoft Word Should look like this...

- keywords for this search
- URL (web address www.......)
- the answer to the question

http://www.goodschoolsguide.co.uk/images/stories/searching%20large.jpg

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Games and Mini Lessons

Who wrote the book *The Wind in the Willows*?

Kenneth Grahame

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Games and Mini Lessons

What are the short pleated skirts associated with Scotland called?

kilts

Games and Mini Lessons

What is the name of the largest castle in the capital of Scotland?

1. Scotland capital
2. _____ "largest castle"

Edinburgh Castle

Games and Mini Lessons

What kind of animal is Brian in *The Magic Roundabout?*

"The Magic Roundabout" characters

snail

Games and Mini Lessons

What part of the body is treated by an optician*?*

optician

eyes

Games and Mini Lessons

If someone is descending are they going up or down*?*

descending definition

down

Games and Mini Lessons

On which temperature scale is 212 degrees the boiling point of water*?*

"boiling point of water"

Fahrenheit

Games and Mini Lessons

Part 2 - At high altitude, does water boil at a higher or lower temperature and why?

Games and Mini Lessons

What sea creature possesses three hearts and eight tentacles?

"eight tentacles" "three hearts"
or
8 tentacles and 3 hearts

Octopus

Games and Mini Lessons

Trivial Pursuit

- Work alone or in partners to find the answers to the questions on the next slide.
- In Microsoft Word: You need to copy and paste or drag and drop the URL of each site on which you found an answer. This is your proof. Type in a word processor the keywords that you used.

Games and Mini Lessons

Trivial Pursuit

PP	Dragon-boats
GT	Alfred Hitchcock
ST	Venus
AC	He smells his blood
NW	The tortoise
GH	Drop Zone

Young Players

399

Games and Mini Lessons

Trivial Pursuit

Trivial Pursuit Master Game - Genus Edition
Trivial Pursuit Master Game - Genus II Edition
Pursuit for Juniors - First Edition (1987)
The 1980s (1989) (also sold as card set)
Vintage Years (20's/50's) (1989) *Anniversary Millennium* (1998) ·
Biographies (2000)
Genus V (2000)
Book Lover's Edition (2004)
Pop Culture 2 to go (2006)

Games and Mini Lessons

Which country is in South America Ghana, Guinea or Guyana?

Guyana

Games and Mini Lessons

- What is the full name of the coyote of the *Roadrunner* cartoon fame?

  Wile E. Coyote

Games and Mini Lessons

- Which country is in South America - Ghana, Guinea or Guyana?

  Guyana

Games and Mini Lessons

- Which of Brobdingnag, Lilliput and Slobbbovia does Gulliver not visit?

  Slobbbovia

Games and Mini Lessons

- What do badgers live in - flets, nets or setts?

  Setts

Games and Mini Lessons

- Which animal has a longer life expectancy - the elephant or the tortoise?

  The tortoise

Games and Mini Lessons

Learn how to use an online dictionary or thesaurus...

Kangaroo

Pouch
Hop
Animal
Australia
Captain

Watch

Look
Time
Wrist
Clock
Wears

Watch

Look
Time
Wrist
Clock
Wears

Games and Mini Lessons

- Find enough information to see what the three things have in common...

Games and Mini Lessons

World Teasers

Answer: (c) Canada

World Region: North America

Country: Canada

Capital: Ottawa, Ontario

Population: 33,390,141

Land Area: 3,511,003 sq. mi. (about the size of the United States)

Life Expectancy: 80.3 years

Literacy Rate: 99%

World Teasers™

Games and Mini Lessons

Other ideas?

Family Quiz Book
Questions for specific grade levels
Use textbook questions at the end of chapters. Let the students answer the questions as teams. Combine' the work into a study sheet.
Watch "Who Wants to be a Millionaire" and see if you can find the answer faster than the person says it.

Evaluating Sites

http://www.searchlores.org/images/images_searching_09.jpg

Evaluating Sites
Good sites for all ages

- California Velcro Crop Under Challenge
  http://home.inreach.com/kumbach/velcro.html
- Dihydrogen Monoxide
- http://www.dhmo.org
- The Pacific Northwest Tree Octopus
- http://zapatopi.net/treeoctopus/

Evaluating Sites
Questions to ask...

- R = read the URL
- E = examine the content
- A = ask about the author or owner
- L = look at the links

This is from Alan November's book *Web Literacy for Educators*.

Evaluating Sites
Pick a system

- Kathy Schrock
- NETS for Searching
  http://webquest.sdsu.edu/searching/fournets.htm
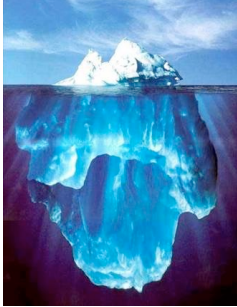
Evaluating Sites
Wikipedia

- Collective Intelligence
- Great place to begin
- Transparent
- One of many sources

http://swcenter.fortlewis.edu/images_web/photos/searching-man.jpg

Deeper Searching

http://idke.ruc.edu.cn/projects/Post/web/deepweblogo.jpg

Deeper Searching

http://www.internettutorials.net/images/google-deep-web.gif

Deeper Searching
Create a virtual index

host:nationalgeographic.com

Deeper Searching
Create a virtual index

- host:nationalgeographic.

Slide 1
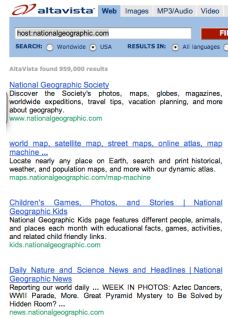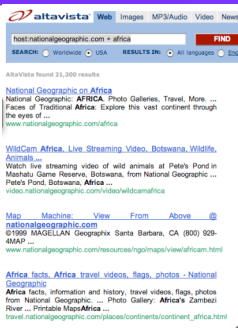
Deeper Searching

Create a virtual index

host:nationalgeographic.com + africa

Slide 2

Deeper Searching

subtitle

Slide 3

Deeper Searching

links

- links out
- links in
- link command
- link:

Slide 4

Deeper Searching

find sites in a specific country

- host:s

Slide 5

Deeper Searching

The Deep Web Librarians' Internet Index search.lii.org/index.jsp?
Google Scholarscholar.google.com/ **Google U.S. Government Search**www.google.com/ig/usgov **Find Articles - News, Magazine back issues & Reference on all topics**findarticles.com/ **Welcome to INFOMINE: Scholarly Internet Resource Collections**infomine.ucr.edu/ Infomine for deep searching of scholarly titles.**CrossEngine**www.crossengine.com/ Deep web searcher**CompletePlanet - Discover over 70,000+ databases and specially search engines**aip.completeplanet.com/aip-engines/browse?thisPage... deep web searcher**Internet Public Library:**www.ipl.org/ Unbelievable resource lists**Grokker - Enterprise Search Management and Content Integration**www.grokker.com/ **Sputtr. Custom Search**www.sputtr.com/ Gathers all major search engines into one place for easy access.**Clusty**www.clusty.com

Slide 6

What's Next?

http://img2.allposters.com/images/MCG/FPFD1318.jpg

What's Next?

- Social Bookmarking
- Annotating the web
- Sharing resources

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Links

Thanks for listening!

- www.strategy2design.com
- www.novemberlearning.com
- www.extremesearcher.com

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Links

Tutorials

- Internet Stategies for Kids
  http://www.searchengineyearbook.com/internet-searching.shtml
- Search Engines and Search Strategies
  http://www.blindteachers.net/Search.htm
l

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Thanks for listening.

all of these links and resources can be found (by Friday) at:

www.strategy2design.com

http://www.prlog.org/10229634-deeperwebcom-the-essential-addon-for-searching.jpg

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