# Conducting Online Research

Effective Online Research Strategies



### **Overview**

- For effective online research:
  - know available search tools
  - understand how tools work
  - know how to use tools
  - evaluate results found with tools

### **Online Research**

- Characteristics of the Internet:
  - large volumes of information
  - convenient
  - doesn't contain all information
  - potentially frustrating

### **Web versus Print: Web**

- Web
  - anyone with web access can publish
  - author/affiliations and qualifications may be unclear
  - may not clearly identify external information
  - may be biased/misleading
  - publication info may not be listed

### **Web versus Print: Print**

- Print
  - extensive publication process
  - clearly indicates author/affiliations
  - clearly marks outside sources/quotations
  - bias exists, but is reviewed
  - only qualified manuscripts accepted for publication
  - publication info clearly listed

#### Visible Web versus Invisible Web

 Visible Web: content can be found using freely accessible search engines such as Google

 Invisible Web: content not found by general search engines

# Invisible Web vs. Visible Web: Practice

- 1. Write a topic on a piece of paper
- 2. Exchange it with a partner
- Run one search in a general search engine such as Google
- 4. Run another search using a library research tool, such as JSTOR, EBSCOHOST, or Megasearch
- 5. Discuss the kinds of results each search turned up

### **Web Search Tools**

- Search Engines
  - list results based on entered keywords
- Web Directories
  - offer categories for users to choose from
- Metasearch Engines
  - combine results from multiple search engines

# **Search Engine Results**

- Based on:
  - site's amount of information
  - number of linking sites
  - number of people who choose a link
  - length of time in search engine database
  - code of the site

# **Search Engine Results**

- Different search engines might return different results in a different order
- Can include results from paying advertisers:



### **Search Engine Results: Practice**

- 1. Write a search topic on a piece of paper
- 2. Exchange the piece of paper with a partner
- 3. Enter the search term into three different search engines.
- 4. Discuss the difference in results with your partner

## **Conducting a Search**

- Consider:
  - keywords that apply
  - what kinds of information you need
  - multiple angles
  - keep notes

### **Using Search Terms**

- Do multiple searches
- Try keyword variations
  - e.g. try "dining hall," "cafeteria," and "campus food service"
- Be specific as you learn more
  - e.g. change "dining hall" to "Midwest university dining hall"
- Boolean Operators: words added to a search to make it more specific

# Defining a Search: Boolean Operators

#### AND

- finds pages with all of the search terms used
- e.g. "dining hall" AND "student workers"

#### · OR

- finds pages with at least one of the search terms
- e.g. "dining hall" OR "cafeteria" OR "campus food service"

#### NOT

excludes pages that include the second term
 e.g. Henry VII NOT Shakespeare

# Defining a Search: Quotation Marks

- Return pages with exact matches
  - enter dining hall
    - Get: "As I was dining, I heard a noise coming from the hall"
  - enter "dining hall"
    - Get: "Dining hall food quality is assessed in this paper."

### **Search Terms: Practice**

- Write a general search term on a piece of paper
- 2. Exchange it with a partner
- Using the same search engine for the whole activity, run searches using:
  - 1. the original term
  - 2. synonyms of the term
  - 3. Boolean operators
- 4. Discuss with your partner how the results of each search were different

- Some results won't be helpful
  - wrong topic
  - not enough information
  - incorrect or outdated information
  - shallow or untrustworthy source
  - wrong tone for your project (e.g. an opinionated article when you need a basic overview)

- Have a clear idea of type of content needed
  - general overview
  - different viewpoints in a debate
  - in-depth explorations of a topic with numbers and statistics

- No precise formula
- Find out:
  - purpose
  - who is responsible
  - when last updated
  - whether information is corroborated in other places

# Some Clues to Determine a Site's Purpose

- Tone and language used
- Assumptions/Generalizations
- Commercial/Non-commercial
- Advocating a particular opinion
- Copyright notice
- Links/Sources cited

- Domain name extensions
  - anyone can register .com, .net, .org domain names
  - not a great way to tell whether a source is "credible"
  - .edu and .gov can only be used by educational institutions and governmental institutions
    - still not necessarily reliable

# Evaluating Search Results: Visuals

- Good design NOT an indicator of reliable information
- Bad design not an indicator of unreliable information
  - might be more likely to indicate an outdated website or one run by an individual

### Wikipedia Articles

- Often one of the first results listed
- "Web versus Print" slides apply
- Check for instructors' policies
- Can be useful for:
  - getting an overview
  - generating new ideas
  - pointing to other sources

# Evaluating Sources: Using Wikipedia

 Example of sources and further reading in the Wikipedia Henry VIII article:

#### Sources

- The New World by Winston Churchill (1966).
- The Reformation Parliament, 1529-1536 by Stanford E. Lehmberg (1970).
- Henry VIII and his Court by Neville Williams (1971).
- The Life and Times of Henry VIII by Robert Lacey (1972).
- The Six Wives of Henry VIII by Alison Weir (1991) ISBN 0802136834.
- English Reformations by Christopher Haigh (1993).
- Europe: A history by Norman Davies (1998) ISBN 978-0060974688.
- Europe and England in the Sixteenth Century by T. A. Morris (1998).
- New Worlds, Lost Worlds by Susan Brigden (2000).
- Henry VIII: The King and His Court by Alison Weir (2001).
- British Kings & Queens by Mike Ashley (2002) ISBN 0-7867-1104-3.
- Henry VIII: The King and His Court by Alison Weir (2002) ISBN 034543708X.
- Six Wives: The Queens of Henry VIII by David Starkey (2003) ISBN 0060005505.
- The Kings and Queens of England by Ian Crofton (2006).

#### Further reading

- John Sherren Brewer; Robert Henry Brodie; James Gairdner. Letters and papers, foreign.
   Museum, and elsewhere. 1965 2d ed. (TannerRitchie Publishing 6)
- Childs, Jessie. Henry VIII's Last Victim: The Life and Times of Henry Howard, Earl of St
  - Reviewed 
     Ø by C.J. Sansom in The Guardian 
     Ø, 21 October 2006.

#### **Resources for Online Research**

- OWL Resource: Searching the World Wide Web
- OWL Resource: Evaluating Sources of Information
- OWL Resource: Copyright determine which content you are allowed to use
- http://www.vts.intute.ac.uk/detective/ (The Internet Detective—site with activities for developing critical online research and evaluation skills)

### For More Information

- Contact the Purdue Writing Lab:
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# The End



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