"What makes instructional design for online information literacy courses robust?"
SESSION LAYOUT

1st Half: Key research
   Ideas
   Beliefs

2nd Half: Design Process
   Tools
   Lessons
OBJECTIVES

By the end of this session, you will gain insights into solving instructional problems in the online course design process by virtue of:

• Seeing how current research about student information-seeking and -use behaviors is integrated into course design

• Understanding how the importance of teaching philosophies and how they might impact instructional decisions

• Learning the basics of instructional design and how to overcome some obstacles
Online and asynchronous

Faculty Committee on Student Computer Competencies

1. use a Web browser to search for information efficiently,
2. learn to use the libraries' print and online information, sources
3. choose appropriate research tools,
4. evaluate and choose the best information sources, and
5. use key information sources for your major field.

Centered around net.TUTOR (http://liblearn.osu.edu)
SETTING THE STAGE: RESEARCH & VALUES
Students typically start with Google but aren't effective users & give up easily.

Students don't differentiate between sources easily.

Students use a variety of strategies, but lack depth in their tactics, preferring to "satisfice".

Students overuse research methods developed implicitly over time.

Students have a difficult time getting started with research.
% of Citations in 174 Papers

- Paraphrasing: 32%
- Patchwriting: 16%
- Direct Copy: 42%
- Direct Copy w/o Attribution: 4%
- Summarizing: 6%

Photo Credit: YuMaNuMa 2011 "Emptiness" CC-BY-2.0
In 3 points, direct to Academic Search Complete.

Use the Advanced Search option under the search box.

Enter your search terms into the search box(es), using any features available to you for expanding, limiting or focusing the search results most useful.

Your search to full text

It changes what database is being searched. Search only Academic Search Complete.)

Try different searches to see what works best before reporting an answer here.

CTLY how you entered your search into the search box(es), including:

You put in each box (box 1, 2, etc)

des that are being searched

Hiters, etc.
PERRY'S SCHEMA

Dualism
there's a right or wrong answer to everything

Multiplicity
there's uncertainty everywhere, so there's no true right answer to anything

Relativism
there are ways of interpreting the world that are valid; learning to work within a discipline

Committed Relativism
I have committed taking an informed but dynamic opinion to the world

SO WHAT?
1. STUDENT-FOCUSED (NOT CENTERED)

2. MOTIVATION

3. REINFORCEMENT ("DRILL & KILL")

4. FORMATIVE ASSESSMENT (DEVELOPING LIFELONG LEARNERS)
Brief Questions
&
Possibly Answers
1. Establishing desired goals
2. Determining acceptable evidence
3. Planning learning experiences and instruction
<table>
<thead>
<tr>
<th>Standard One</th>
<th>Standard Two</th>
<th>Standard Three</th>
<th>Standard Four</th>
<th>Standard Five</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Recognizes that existing information can be combined with original thought, experimentation, and/or analysis to produce new information.</td>
<td>2. The information literate student identifies a variety of types and formats of potential sources for information.</td>
<td>3. The information literate student constructs and implements effectively-designed search strategies.</td>
<td>4. The information literate student articulates and applies initial criteria for evaluating both the information and its sources.</td>
<td>5. The information literate student revises the development process for the product or performance.</td>
</tr>
<tr>
<td>Outcomes Include:</td>
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</tr>
<tr>
<td>a. Knows how information is formally and informally produced, organized, and disseminated.</td>
<td>a. Develops a research plan appropriate to the investigative method.</td>
<td>a. Examines and compares information from various sources in order to evaluate reliability, validity, accuracy, authority, timeliness, and point of view or bias.</td>
<td>a. Maintains a journal or log of activities related to the information seeking, evaluating, and communicating process.</td>
<td>a. Participates in electronic discussions following accepted practices (e.g., “Netiquette”).</td>
</tr>
<tr>
<td>b. Recognizes that knowledge can be organized into disciplines that influence the way information is accessed.</td>
<td>b. Identifies keywords, synonyms and related terms for the information needed.</td>
<td>b. Analyzes the structure and logic of supporting arguments or methods.</td>
<td>b. Reflects on past successes, failures, and alternative strategies.</td>
<td>b. Uses approved passwords and other forms of personal identification (ID) for access to information resources.</td>
</tr>
<tr>
<td>c. Identifies the value and differences of potential resources in a variety of formats (e.g., multimedia, database, website, data set, audio/visual, book)</td>
<td>c. Selects controlled vocabulary specific to the discipline or information retrieval source.</td>
<td>c. Recognizes prejudice, deception, or manipulation.</td>
<td>c. Recognizes the cultural, physical, or other context within which the information was created and understands the impact of context on interpreting the information.</td>
<td>c. Complies with institutional policies on access to information resources.</td>
</tr>
<tr>
<td>d. Identifies the purpose and audience of potential resources (e.g., popular vs. scholarly, current vs. historical)</td>
<td>d. Constructs a search strategy using appropriate commands for the information retrieval system selected (e.g., Boolean operators, truncation, and proximity for search engines, internal organizations such as indexes for books)</td>
<td>d. Recognizes the cultural, physical, or other context within which the information was created and understands the impact of context on interpreting the information.</td>
<td></td>
<td>c. Preserves the integrity of information resources, equipment, systems and facilities.</td>
</tr>
<tr>
<td>e. Differentiates between primary and secondary sources, recognizing how their use and importance vary with each discipline</td>
<td>e. Implements the search strategy in various information retrieval systems using different user interfaces and search engines, with different command languages, protocols, and search parameters</td>
<td></td>
<td></td>
<td>c. Legally obtains, stores, and disseminates text, data, images, or sounds.</td>
</tr>
<tr>
<td>f. Realizes that information may need to be constructed with raw data from primary sources</td>
<td>f. Implements the search using investigative protocols appropriate to the discipline</td>
<td></td>
<td></td>
<td>f. Demonstrates an understanding of what constitutes plagiarism and does not represent work attributable to others as his/her own.</td>
</tr>
<tr>
<td>g. Demonstrates an understanding of institutional policies related to human subjects research</td>
<td></td>
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OVERALL COURSE GOALS

1. Students will understand the basic cycle and organization of information

2. Students will differentiate between information types

3. Students will gain a framework for critically evaluating information sources

4. Students will strategically formulate research questions

5. Students will iterate through multiple search strategies

6. Students will effectively use and manage information
BACKWARD DESIGN

1. Establishing desired goals
2. Determining acceptable evidence
3. Planning learning experiences and instruction
<table>
<thead>
<tr>
<th>Appyling</th>
<th>Carrying out Executing Implementing Using</th>
<th>Demonstration Diary Illustration Interview Journal Performance Presentation Quiz/Test Sculpture Simulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Clear a browser cache.</td>
<td>-Navigate a website</td>
<td><strong>Search, evaluate, and share information sources given a topic</strong> <em>(journal/forum)</em></td>
</tr>
<tr>
<td>Analyzing</td>
<td>Attributing Comparing Deconstructing Integrating Organizing Outlining Structuring</td>
<td>Abstract Chart Checklist Database Graph Mobile Outline Quiz/Test Report Spreadsheet Survey</td>
</tr>
<tr>
<td>-Compare content of multiple information sources for similarities</td>
<td>-Deconstruct ineffectual searches</td>
<td><strong>Deconstruct and correct complex searches</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Create and critique effectiveness of complex searches given topics</strong> <em>(journal/forum)</em></td>
</tr>
<tr>
<td>Evaluating</td>
<td>Checking Critiquing Detecting Experimenting Hypothesizing Judging Monitoring Testing</td>
<td>Conclusion Debate Evaluation Investigation Panel Persuasive speech Quiz/Test Report Portfolio Verdict</td>
</tr>
<tr>
<td>-Judge the legitimacy of information sources</td>
<td>-Detect bias in written content</td>
<td><strong>Compare similar information sources using criteria</strong> <em>(written assignment)</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Given an information source, find and analyze information sources of comparable legitimacy.</strong> <em>(journal/forum)</em></td>
</tr>
<tr>
<td>Creating</td>
<td>Constructing Designing Devising Inventing Making Planning Producing</td>
<td>Advertisement Film Media product New game Painting Plan Portfolio Project</td>
</tr>
<tr>
<td>-Construct a search on a specified topic.</td>
<td>-Revise the search iteratively.</td>
<td><strong>Select a topic and search for information sources. Evaluate information sources in terms of content and how they</strong></td>
</tr>
<tr>
<td></td>
<td>-Produce a citation for a given source.</td>
<td><strong>at those sources. Cite sources. Describe any tools used to help with research.</strong> <em>(capstone project)</em></td>
</tr>
</tbody>
</table>
1. Establishing desired goals
2. Determining acceptable evidence
3. Planning learning experiences and instruction
<table>
<thead>
<tr>
<th>W</th>
<th>Content</th>
<th>Instruction</th>
<th>Activity</th>
<th>Objective(s)</th>
</tr>
</thead>
</table>
| 1 | Course Overview & Self-Efficacy; Information Cycle and Organization | **HOW TO CONSUME INFORMATION**
  
  Preliminary
Using Carmen
Course Responsibilities (email)

  **Introduction**
  *Did you know? Information Cycle*(PSU)
  *Information Cycle*(UIUC)
  *What Students Don’t Know* (Inside Higher Ed)
  *Primary, Secondary, and Tertiary Sources* (net.TUTOR)

  | Multiple Choice Quiz (MCQ) on weekly readings
  | Pre-Test/Reflection on personal information behavior
  | Discussion Board Task #1 |
| 2 | Information Types and Critical Evaluation (2+3) | **Online Information Basics**
  *Thing 15: URLs* (20 Things I Learned About the Web)
  *How Web Pages Work – Setting the Stage* (howstuffworks.com)
  *Electronic Sources* (Web Publications)
  (Purdue OWL)

  **Meta Aspects**
  Authority: *Identifying reliable sources* (Wikipedia)
  Reliability: *Verifiability: Sec. 2 & 3* (Wikipedia)
  Currency: *Evaluating Websites: 3C* (net.TUTOR)

  | MCQ on weekly readings
  | Worksheet on Information Types
  | Worksheet on Meta Topics
  | Discussion Board Task #2 |
| 3 | Critical Evaluation (2+3) / Research Questions (strategies part 1) | **Content Aspects**
  *Bias: How to Detect Bias in the News* (Media Awareness Network)
  *POV: Neutral Point of View* (Wikipedia)
  *Validity: Fallacies* (The Writing Center at UNC-Chapel Hill)

  **Data Sources**

  | MCQ on weekly readings
  | Worksheets on logical fallacies
  | Discussion Board Task #3
  | Data Sources, Part 1 Worksheet | 1a, 2a, 2b, 2c, 3a

  | Familiarity
  | Self-efficacy
  | Self-assessment 2c |

  | 3a, 3b, 5c, 5d, 6b, 6c |
GUIDING LIGHTS

1. BIG PICTURE

2. TEACHING IS LEARNING

3. LIMITATIONS ARE SELF-IMPOSED

4. BE A NODE (OR, DON'T REINVENT THE WHEEL)
"What makes instructional design for online information literacy courses robust (aside from embracing complexity)?"
SELECTED BIBLIOGRAPHY


The Citation Project. http://site.citationproject.net/


