Incorporating Information Literacy into First-Year Programs

Faculty Guide

Crystal Gale

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Mission & Vision Statement

The mission of the Duane G. Meyer Library instruction program is to encourage the development of information literacy skills for all Missouri State University students, staff, and faculty. We define information literacy as the "ability to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information" (American Library Association, 1989).[1] These essential information-seeking skills and behaviors contribute to an individual's ability to think critically and advance his or her success as a life-long learner.

Information literacy can be defined as a process by which students come to

- Recognize when they have a need for information
- Identify the kinds of information needed to address a given problem or issue
- Develop a search strategy and find and evaluate the needed information
- Organize the information and use it effectively to address the problem at hand
- Use the information legally and ethically

The Information Literacy Task Force has identified information literacy proficiencies that we believe to be crucial for Missouri State University students to master in their first year. These proficiencies come under the "Goal I: Objectives for GEP 101.

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[1] American Library Association. Presidential Committee on Information Literacy. Final Report.(Chicago: American Library Association, 1989.) http://www.ala.org/ala/acrl/acrlpubs/whitepapers/presidential.htm

Information Literacy Proficiencies and Strategies for Addressing Them

Goal 1

Define the Information Need
"The information literate student defines and articulates the need for information." (ACRL Information Literacy Standard One)

Competencies
- Identify key area of research interest
- Refine topic

Outcomes
- Ask a focused question
- Narrow a broad topic to focus on one particular aspect
- Expand a topic which is too narrow
- Use reference works to get an overview of a topic

Instruction Strategy
Help students understand research is usually not a linear process. They will occasionally hit dead ends, and they will need to extrapolate disparate parts into a whole.

Potential discussion topics
- Walk through the process of topic formulation, from a general interest to forming a research question.
- Share experiences where research was stymied or blossomed, based on what was found while researching; dispel the myth that the perfect answer exists for every question. The one perfect article that sums it up rarely exists.

Potential exercises
- *Searchpath* Modules 1 and 2
- Have students state the question/research problem and then consider what kinds of information sources will be needed to answer the question (*i.e.,* books, articles, videos, reference works, etc.)
- Have students keep research logs on the way their topics changes as they encounter more information

Goal 2

Locate Information

"The information literate student selects the most appropriate investigative methods or information retrieval systems for accessing the needed information." (ACRL Information Literacy Standard Two)

Competencies	Outcomes
• Become familiar with the libraries' organization	• Understand that library staff is available to help and provide research and reference assistance • Be able to use call numbers (LC, SuDocs) to locate materials • Know how to find periodicals
• Navigate the libraries' websites effectively	• Know how to use course-specific research guides (subject guides) • Know how and when to use MOBIUS • Know how to access due dates and renew materials • Be able to locate periodicals at Meyer Library (TD-Net)
• Determine range of possible resources	• Be able to distinguish between a variety of print and electronic resources (e.g., reference works, library stacks, government documents, databases) • Know how SWAN differs from an online subscription index/database • Know the pros and cons of a subscription database versus a free website • Know that different databases serve different research purposes
• Develop a search strategy	• Predict which resources will be most useful • Compose search statement with key words and Boolean connectors

• Use print and electronic information access tools/resources	• Find books, etc. in the catalog using:
	   o Author/title searching
	   o Keyword searching
	   o Subject searching
	   o Limiting
	   o Information in bibliographic records
	   o Locations
	• Be able to conduct a basic search in a database like Academic Search Complete
	   o Be able to distinguish between citations, abstracts, and full-text in results list
	• Be able to distinguish between different formats of full-text (e.g., print, online from a database—HTML or PDF, e-journal)
	• Tag and export resources

Instruction Strategy
Help students understand that they can't enter their thesis statement into a search engine and get a coherent result. Make students aware of appropriate reference sources, databases, indexes, etc.

Potential discussion topics
- Discuss the flow of information.
- Distinguish between the Web as a source vs. the Web as a platform.
- Roles/uses of different types of sources throughout the research process [reference sources, SWAN, journal indexes, Web, etc.].
- Match a research question to the methods of scholarly communication in this field. Who would be interested in this question? Where and how would they communicate/publish? And which tools would you use to locate those publications/communications?

Potential exercises
- *Searchpath* modules 3 and 4.
- Have students diagram their research statement; pick out keywords and brainstorm synonyms.
- Have students conduct a search in two different databases and compare the results.
- Have students state which resources they will use to find the kinds of information they said they needed; e.g.   I will use SWAN to find books and videos; I will use X and Y databases to find articles in scholarly journals.
- Have students consult two reference sources to answer a particular question, and compare treatment of the topic in the two sources; have them note what else the tool could be used for.

Goal 3

Select and Evaluate the Information
"The information literate student evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system." (ACRL Information Literacy Standard Three)

Competencies
- Select appropriate information
- Evaluate the relevance and usefulness of the information
- Organize relevant information

Outcomes
- Apply criteria including availability, currency, and primary/secondary source, popular/scholarly.
- Be able to evaluate credibility of sources for point of view/bias, reliability/accuracy, scope or depth, author's credentials.
- Prepare a working bibliography.

Instruction Strategy
Consider the source and the audience. Work with students to help them understand why being able to distinguish between and evaluate types of materials is important.

Potential discussion topics
- How can you tell if a source is scholarly? What visual cues distinguish a scholarly article from a popular article?
- Ask students to consider a particular source and think about whether it might be considered a primary source?
- Have students consider various kinds of writing and discuss whether these materials would be considered primary or secondary sources.

Potential exercises
- *Searchpath* Module 4 and 5
- Have students compare a scholarly article and a popular article on the same topic.
- Give students several research questions and have them make a list of the kinds of primary sources scholars might seek.
- Have students evaluate a primary source.
- Apply the *CRAAP** test to two web sites on the same topic (see page 10)

Goal 4

Use the Information Ethically

"The information literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally."(ACRL Information Literacy Standard Five)

Competencies
- Use information ethically
- Cite all sources used

Outcomes
- Be able to understand plagiarism and copyright issues
- Be able to cite sources
- Be able to locate and use style manuals

Instruction Strategy

Through discussion at various levels and at various points, help students understand the nature of intellectual property and related issues, such as plagiarism. Outline the basic format of book and periodical citations and discuss the differences.

Potential discussion topics
- The notion of common knowledge--how do you determine if an idea is common knowledge in the field (and therefore doesn't require attribution) or unique to an author?
- How does research in an electronic environment, where so much "content" is available full-text online, impact issues of intellectual property?

Potential exercises
- *Searchpath* Module 6
- Give students excerpts from books/articles, etc. and have them practice paraphrasing and quoting, and properly citing the material.

(Portions adapted from faculty guide compiled by Oberlin College Library's Reference Work Group, Oberlin College Library, 2002.)

Information Literacy Assignments

The following suggested research projects for GEP 101 students demonstrate all four information literacy proveniences.

Assignment 1: *Keeping a research journal*

Task

Keep an ongoing record of the library research you do for an assigned project -- use journal format (see guidelines below). Include the sources or databases consulted, and keywords or subject headings searched in your entries. In the journal, list the sources you find that will be most useful for your research paper or project.

Purpose

- Provides students an opportunity to practice writing.
- Provides an introduction to how information is organized, and orients students to Meyer Library.
- Encourages students to think critically about evaluating quality of resources.
- Provides practice using a bibliographic citation style.

Research Journal Guidelines

Basically, the journal is just a place to write down how you did the research for your topic. The research journal guidelines provide a structure for recording information. These guidelines only address the basics; however, you may include any other resources or strategies that you used.

A) List your topic and keywords or concepts that describe the topic.

B) Browse through reference books on the topic.

- Search the Library Catalog to find reference works. Reference books might include handbooks and specialized subject encyclopedias or dictionaries, such as the *Encyclopedia of Psychology*, *Dictionary of the History of Ideas*, and *McGraw Hill Encyclopedia of Science and Technology*.
- Is there one source that provides a helpful overview and background on your topic? If so, list it in your journal and explain why it will be useful for your research.

C) Find books in the general collection.

- Search SWAN the Library Catalog to find books. List all terms, keywords or subject headings that you used in your searching. Be sure to note the terms or searches that yielded the most results.
- Find the books on the shelves and select any that you think will be most useful. List the title(s) and call number(s) in your journal.
- If necessary, request books from MOBIUS.

D) Find journal articles
- From the library home page click on "Articles and Databases." Begin your search by selecting *Academic Search Complete* listed under "General Article Databases." and
- In your journal list all the terms searched, and your search strategy. For example, "I used the combined search **women AND entrepreneur** to find information about business women in entrepreneurial roles." Which terms or search strategies yielded the best results?
- List bibliographic information for several articles that you might want to use for your research. Be sure to list the titles of any other databases you used in searching.

E) Find web resources
- Search the web for useful sites. Which search tool(s) did you use (Google, Yahoo, etc.)?
- List your search terms and phrases. Cite the best web sites in the journal and tell why they will be useful for your topic.

Assignment 2: *Evaluative Annotated Bibliography*

Prepare an annotated bibliography that includes the best, most useful resources on your topic—include books, periodical articles, websites, or other relevant sources as specified in type and number by your instructor. In the annotations you'll evaluate the usefulness of the resource for your particular topic. Entries should be properly cited.

Purpose
- Helps students develop skills in searching, reading and reviewing the literature on their topic.
- Allows students to identify a source's thesis and key ideas.
- Allows students to clarify a source's argumentative structure.
- Affords students an opportunity to imagine how a secondary source might fit into their own argument.
- Encourages students to think critically about selecting quality resources, and also provides practice in using a bibliographic citation style.

Prepare an annotated bibliography that includes the best, most useful resources on your topic—include books, periodical articles, websites, or other relevant sources as specified in type and number by your instructor. In the annotations you'll evaluate the usefulness of the resource for your particular topic.

Components of an annotation

- Bibliographic citation entry
- Summary of approach
- Paraphrase of thesis
- Statement or paraphrase of key idea or issue
- Statement of how you intend to use it and why you chose it
- An annotation is generally three or more sentences.

Sample annotation

Doe, Jane. "Technology, Culture, and Dread: An Analysis of the Terminator Films."
    Technology and Culture: A Reader. Ed. Moe Greene. New York: Columbia UP,
    2001. 44-62.

This article uses *Terminator 1* and *Terminator 2* to examine our cultural anxiety about technology and its affect on our daily lives. Greene makes several connections between the films and other areas of human activity, in which technology has seemed to take on a power of its own, or even become more powerful that its creators. The author argues that we have created a "narrative of dread" about our relations to all technology, but especially to computers and electronic media. I chose this article because it is well written and supports its thesis with lots of cited research, and plan to use this idea of the narrative of dread to examine the imagery in William Gibson's novel *Neuromancer.*

Evaluating Information
Applying the CRAAP Test

When you search for information you're going to find lots of it . . . but is it accurate and reliable? You will have to determine that for yourself, and the *CRAAP Test* can help. The *CRAAP Test* is a list of questions you can ask in order to determine if the information you have is reliable. Please keep in mind that the following list of questions is not static or complete. Different criteria will be more or less important depending on your situation or need. So, what are you waiting for? Is your web site credible and useful, or is it a bunch of . . . ?! Key: indicates criteria is for Web only.

Evaluation Criteria

Currency: *The timeliness of the information.*
- When was the information published or posted?
- Has the information been revised or updated?
- Is the information current or out-of-date for your topic?
- Are the links functional?

Relevance: *The importance of the information for your needs.*
- Does the information relate to your topic or answer your question?
- Who is the intended audience?
- Is the information at an appropriate level (i.e. not too elementary or advanced for your needs)?
- Have you looked at a variety of sources before determining this is one you will use?
- Would you be comfortable using this source for a research paper?

Authority: *The source of the information.*
- Who is the author/publisher/source/sponsor?
- Are the author's credentials or organizational affliations given?
- What are the author's qualifications to write on the topic?
- Is there contact information, such as a publisher or email address?
- Does the URL reveal anything about the author or source? examples: **.com .edu .gov .org .net**

Accuracy: *The reliability, truthfulness, and correctness of the informational content.*
- Where does the information come from?
- Is the information supported by evidence?
- Has the information been reviewed or refereed?
- Can you verify any of the information in another source or from personal knowledge?
- Does the language or tone seem biased and free of emotion?
- Are there spelling, grammar, or other typographical errors?

Purpose: *The reason the information exists.*
- What is the purpose of the information? to inform? teach? sell? entertain? persuade?
- Do the authors/sponsors make their intentions or purpose clear?
- Is the information fact? opinion? propaganda?
- Does the point of view appear objective and impartial?
- Are there political, ideological, cultural, religious, institutional, or personal biases?

(Developed by Meriam Library, California State University, Chico 8/24/04)

Appendix
Resources for Information Literacy
And First Year Programs
Information Literacy Standards

Association of College and Research Libraries: Information Literacy Competency Standards for Higher Education. 2000.
Outlines five standards, twenty-two performance indicators, and a range of outcomes for assessing student progress toward information literacy. The standards focus on the needs of students in higher education at all levels and serve as guidelines for faculty, librarians, and others in developing methods for measuring student learning.

Association of College and Research Libraries: Objectives for Information Literacy Instruction: A Model Statement for Academic Librarians. 2001.
Lists discrete and measurable goals for student learning; provides suggestions for generating ideas about teaching information literacy concepts and skills.

Middle States Commission on Higher Education: Developing Research & Communication Skills: Guidelines for Information Literacy in the Curriculum.

Information Literacy Tutorials
Searchpath is a new resource for Missouri State University students, a self-instructional tutorial to teach them basic library and research skills. It covers the research process from initial topic selection to citation styles and the issue of plagiarism. There is a link to Searchpath on the Libraries' home page or it can be accessed directly from http://library.missouristate.edu/tutorial/index.html

Understanding the Cycle of Information
- Information Cycle by Penn State Libraries
  http://www.libraries.psu.edu/content/dam/psul/up/lls/audiovideo/infocycle_2008.swf

Plagiarism
- You Quote it You Note It. http://library.acadiau.ca/tutorials/plagiarism/

- You be the judge. http://www.fairfield.edu/library/lib_plagiarismcourt.html

Intellectual Property
- UCLA Carlos and Eddie cartoons.

  http://unitproj.library.ucla.edu/col/bruinsuccess/01/01.cfm

Popular vs. Scholarly
- University of Arizona, one page, picture examples, quiz at bottom.

  http://www.library.arizona.edu/help/tutorials/scholarly/

Searching the Web
- Searching with Success. Acadia-Vaughan Memorial (interactive & cartoony).

  http://library.acadiau.ca/tutorials/websearching/

Evaluating Sources

- Credible Sources Count. Acadia- Vaughan Memorial Library.

    http://library.acadiau.ca/tutorials/webevaluation/

Boolean

- Boolean tutorial. CSU Libraries.

    http://lib.colostate.edu/tutorials/boolean_info.html

(Adapted from tutorial bibliography by Tracy Stout, Reference Librarian 2008.)

Suggested Readings

Barefoot, Betsy. "Bridging the Chasm: First-Year Students and the Library," *Chronicle of Higher Education* 52 (January 20, 2006): B16.
> Discusses the perception of first year college students that campus libraries are largely irrelevant to their lives. Suggests ways to make library instruction an integral part of courses.

Brodsky, Karen. "Information Competence in the Freshman Seminar," *Academic Exchange* (Winter 2002): 46-51.
> Describes a model designed to facilitate integration of information competence into the curriculum of a freshman seminar. The model focuses on collaboration among librarians, faculty, peer mentors and students.

Fitzgerald, Mary Ann. "Making the Leap from High School to College," *Knowledge Quest* 32 (March/April 2004): 19-24.
> Summarizes three studies about information literacy skills of first-year college students.

Flynn, Mari. "Integrating Brain-Based Strategies into Library Research Assignments," *Academic Exchange Quarterly* 6 (Winter 2002): 66-70.
> Describes the use of a controversial real-world example as a mock research event.

Mittermayer, Diane. "Incoming First Year Undergraduate Students: How Information Literate Are They?" *Education for Information* 23 (2005): 203-232.
> A questionnaire given to first year students measured knowledge of five areas: concept identification, search strategy, document types, search tools, and use of results.

Williams, Janet L. "Creativity in Assessment of Library Instruction," *Reference Services Review* 28, no. 4 (2000): 323-334.
> Outlines the steps in designing an assessment, and has examples of various assessment methods such as constructed response, Know-Wonder-Learn-Wonder, self-reflection, and performance tasks.

Young, Niki. "From Small Step to Giant Leap in Research Ability," *Academic Exchange* (Summer 2005): 104-108.
> Discusses ways to transform a complex process into a series of small achievable steps and deliver instruction at the student's point of need.

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Instruction Guidelines

- The Reference Department tries to be as flexible as possible when scheduling a library visit for classes. However, we ask that faculty and instructors respect the following policies:

- We design each session to suit the unique needs of your course so please schedule as early as possible to reserve the time slot that best fits your students' needs, even if the class won't be coming to the library until later in the semester.

- Research has shown the most effective information literacy instruction happens at the point-of-need. Therefore, we prefer all librarian led instruction sessions be tied to a specific research assignment. If you need general instruction that is not tied to a specific research assignment, please use the *Searchpath* tutorial.

- We strongly recommend that you plan the session for when students are beginning to work on their research project. Note that the first three weeks of the semester might be too early, depending on your course schedule. We will also help to design course assignments that effectively integrate information literacy and library research.

- Plan to attend the entire session with your students. Interaction between faculty members, librarians, and students enriches the learning process and emphasizes the importance of the library and information literacy to the students. In addition, students are often more attentive and engaged when the faculty member is present.

For instructional assistance and assignment design contact:
Crystal Gale, Information Literacy Coordinator
417-836-4345 crystalgale@missouristate.edu

Tracy Stout, Reference & Information Literacy Librarian
417-836-8938 Tracystout@missouristate.edu

Ngaire Smith, Reference & Information Literacy Librarian
417-836-4539 Ngairesmith@missouristate.edu