# INFORMATION LITERACY

# **ADMINISTRATIVE GUIDELINES**

# **Benefits of Information Literacy**

Neumann College Neumann College Library Aston, Pennsylvania

Why Is It Important?

Students have always needed to know how to find and use information, and instructors have always taught these skills. Now, however, because of the Internet, students have access to more information than ever before. For instance, the Neumann College Library subscribes to about 400 print periodicals, but provides access to almost 10,000 online periodicals via databases. Google indexes over 4 billion Web pages!

Formal instruction in information literacy helps students deal with the deluge of information, and according to the Association of College and Research Libraries, "Information literacy forms the basis for lifelong learning." Because of its importance, accrediting bodies now expect colleges and universities to establish and assess information literacy standards.

University of Iowa University of Iowa Libraries Iowa City, Iowa

Why Is Information Literacy Important?

It has become increasingly clear that students are in need of skills to filter through the vast amount of information in their lives. Information literacy equips students with the skills they need to be thoughtful and efficient users of information. Information literacy skills also help students become independent, lifelong learners by enabling them to analyze and evaluate the information they find.

Integrating Information Literacy into the Classroom

The best way for students to become truly information literate is for information skills and concepts to be integrated into course goals as well as into the University's curriculum. We invite all faculty and teaching staff to consider implementing an information literacy component in their course to improve student learning.

Librarians are available to meet with faculty and TAs to discuss course goals and information literacy skills that can be emphasized in the course. They then collaboratively design the approach that best suits the course goals. For more information on integrating information literacy into the classroom, see Course-Related Instruction. The examples presented below are not "either-or." Many times a librarian and instructor work together on an assignment, and a librarian will provide an in-class presentation as well as a resources page for the course Web site.

# **ACRL Standards**

Illinois State University Milner Library Normal, Illinois

Information Literacy Competencies/Standards

Know

• decide what is required to answer this question/what is required to do the assignment/what the question, assignment, etc. means to you

#### Access

- select appropriate search tool(s) and information source(s)
- design search strategy(-ies)
- implement search strategy(-ies) to find information
- assess and select search results/found information
- manage and record relevant search results/found information
- refine search strategy(-ies), if necessary, by repeating "know" and/or "access" process(es)

#### Evaluate

- recognize and summarize main ideas from search results/found information
- identify/create evaluation criteria
- assess search results/found information with evaluation criteria
- judge in comparison to existing knowledge
- refine search strategy(-ies) and/or evaluation criteria, if necessary, by repeating "know," "access," and "evaluate/incorporate" process(es)

Use/Incorporate Ethically/Legally

- apply new information ethically and legally
- integrate and synthesize new and existing information ethically and legally into paper, project, performance, etc.
- acknowledge new information used in paper, project, performance, etc. without plagiarizing and by appropriately attributing and citing sources
- share paper, project, performance, etc. with others using appropriate communication medium, format, technology, etc.

Neumann College Neumann College Library Aston, Pennsylvania

#### What Are the Standards?

Each institution can devise its own standards. The Association of College and Research Libraries recommends five basic standards, which can be broken down into various performance indicators and outcomes.

The information literate student determines the nature and extent of the information needed.

The information literate student accesses needed information effectively and efficiently.

The information literate student evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system.

The information literate student, individually or as a member of a group, uses information effectively to accomplish a specific purpose.

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.

#### **Mission Statement**

Tallahassee Community College Tallahassee, Community College Library Tallahassee, Florida

Our mission is to provide an information literacy program that fosters the development of lifelong learning skills. Information literate individuals have 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). These skills contribute to the ability to think critically and use information ethically and legally. Our information literacy program supports the Library's mission of providing resources and services necessary to support the excellence in teaching and learning objectives of the College.

We support this mission by:

- Collaborating with the College community to integrate information literacy across the curriculum in all academic programs
- Promoting the use of library resources in all formats
- Providing instruction formally or informally, in person or via technology
- Continually evaluating programs and methods and updating our skills to reflect best practices

Stetson University duPont-Ball Library DeLand, Florida

Library Instructional Services Mission Statement

The instructional mission of the Library is to initiate and support opportunities for faculty and students to develop technological, evaluative, and critical thinking skills in pursuit of lifelong information literacy.

Using a variety of methodologies, we will provide these initiatives in support of and in conjunction with the curricular and research needs of the University. We do this in the context of the Information Literacy Competency Standards of the Association of College and Research Libraries and the University's mission which embraces the value of "the centrality of knowledge, examined ideas, and independent judgment in the life of an educated person."

Florida International University Florida International University Libraries Miami, Florida

Information Literacy Mission Statement

The pursuit of knowledge is the foundation of the University. Providing access to the world of knowledge, imparting knowledge through excellent teaching, fostering creative expression and encouraging the creation of new knowledge through research are at the core of the University's mission.

Information literacy enhances the pursuit of knowledge at the University by preparing students to think critically and use information for their academic, professional and personal lives. The information literate individual can recognize the need for information, can locate it using a variety of media and technologies and can evaluate information in order to use it effectively. Information literate students have the flexibility to take these skills from their formal education and use them throughout life as citizens and professionals and as a means toward continued learning.

Colleges, schools, programs and the libraries share the responsibility for helping students develop information literacy skills. Successful implementation of information literacy goals is achieved by integration across the curriculum and depends on active participation of all parties.

The Libraries seek to promote information literacy by educating students to understand the organization of knowledge, to gather data of all kinds using both print and information technology resources and to

evaluate the relevance and authority of information in all its forms. The Libraries provide resources and services in an environment that fosters free and open inquiry and serve as a catalyst for the interpretation, integration, and application of knowledge in all fields of learning.

### **Goals and Objectives**

California State University, Los Angeles John F. Kennedy Memorial Library Los Angeles, California

(Policy copyrighted by California State University Los Angeles 2006. Used with permission.)

The goals of the John F. Kennedy Memorial Library Information Literacy Program are:

Goal One

Transform the current, traditional, teach-on-demand bibliographic instruction model to an information literacy program model.

Create a systematic Library Liaison program that supports the development of information literacy pedagogy for classroom faculty.

Further develop a tiered instructional program that develops information literacy skills incrementally from general education courses to graduation, with special emphasis on unique department- or discipline-based needs.

Expand the librarian liaison program by identifying and contacting special groups on campus.

Enhance off-campus outreach by extending information literacy and orientation efforts to local high schools and community colleges.

Create a web-based information literacy tutorial capable of general and specific use, accessible from the Library Web and classroom management software.

Develop an assessment process for both programmatic and class level review.

Encourage the professional development of librarians and staff through training in information literacy concepts, standards and teaching methods.

Goal Two

Create instructional programs for identified general education courses.

Ensure that every section of the college-based Introduction to Higher Education courses, and English 102 courses, attend an information literacy session with a librarian.

Create content, materials and instructional methods.

Ensure even distribution of teaching responsibilities for these classes among User Services librarians.

Goal Three

Participate in and support the accreditation and program review process.

Ensure that the Program Review Subcommittee annually notifies the Library of programs under review.

Assist in program reviews by providing appropriate statistics and other documentation.

Meet with external reviewers/evaluators.

Goal Four

Oversee the LIBR 150, Information Literacy and Research Skills course.

Create content, materials and instructional methods.

Incorporate use of the new information literacy tutorial.

Establish uniform learning objectives.

Develop learning outcome assessment tools.

Develop a depository for class materials.

University of Alaska Anchorage Alaska Pacific University Consortium Library Anchorage, Alaska

Information Literacy Goals and Outcomes

I. Recognizes and articulates the need for information. Competencies/Learning Outcomes:

- a. Formulates questions based on the information need.
- b. Identifies key concepts and terms that describe the information need.
- c. Uses background information sources effectively to gain an initial understanding of the topic.
- d. Recognizes that assistance is available from librarians.

2. Understands how information is organized. Competencies/Learning Outcomes:

- a. Describes differences between and demonstrates appropriate use of general and subject-specific information sources.
- b. Identifies research sources, regardless of format, that are appropriate to a particular discipline or research need.
- c. Recognizes the format (e.g., book, book chapter, periodical article, website) of a reference from its citation.
- d. Identifies characteristics of information that make an item a primary or secondary source in a given field.
- e. Identifies the purpose and audience of potential sources (e.g., current vs. historical, popular vs. scholarly,).
- f. Understands the differences between freely available Internet search tools and websites and subscription- or fee-based databases.
- g. Describes when different types of information (e.g., primary/secondary, background/specific) may be suitable for different purposes.
- 3. Develops and implements an effective process or search strategy to meet the information need. Competencies/Learning Outcomes:
  - a. Selects appropriate resources (e.g., indexes, online databases, books, primary sources) to research a topic.
  - b. Understands the content and period of time covered by the resources selected.
  - c. Chooses relevant keywords, synonyms, and related terms for the information needed, recognizing that different resources may use different terminology for similar concepts.
  - d. Formulates and uses search strategies appropriate to the resources, whether they be print or electronic.
  - e. Constructs a search strategy using appropriate commands (e.g., Boolean operators, truncation, proximity, limiting, field searching) when an electronic information retrieval system is used.
  - f. Limits or expands searches by modifying search terminology or logic.
  - g. Identifies when and where controlled vocabulary (e.g., descriptors, subject headings, assigned terms) is used in a bibliographic record, and successfully searches for information using that vocabulary.
- 4. Locates, retrieves, and selects appropriate information. Competencies/Learning Outcomes:
  - a. Uses appropriate print and electronic resources (e.g., bibliographies, databases, indexes, search engines) to retrieve information in a variety of formats.
  - b. Uses various classification schemes and other search strategies to retrieve appropriate information.
  - c. Identifies the basic elements of different kinds of citations

- d. Examines footnotes and bibliographies from retrieved items to find additional sources.
- e. Understands methods for obtaining information not available in the library (e.g., interlibrary loan, community resources, document delivery).
- f. Selects information that provides evidence for or relates to the topic.
- 5. Evaluates the information and the effectiveness of the search. Competencies/Learning Outcomes:
  - a. Reviews the initial information need and clarifies, revises, or refines the question as necessary.
  - b. Gathers and evaluates information and appropriately modifies the research plan as new insights are gained.
  - c. Assesses the quantity, quality, and relevance of the search results and identifies gaps in the information retrieved.
  - d. Narrows or broadens questions and search terms in response to results to retrieve an appropriate quantity and quality of information.
  - e. Describes the differences in results when searching with a library-provided tool (e.g., webbased library catalog, full-text electronic journal, web-based article index) and a general web search engine (e.g., Alta Vista, Google).
  - f. Examines and compares information from various sources to evaluate reliability, validity, accuracy, authority, timeliness, cultural context, and bias.

6. Organizes and synthesizes the information and uses it appropriately. Competencies/Learning Outcomes:

- a. Understands the basic ethical, legal, and socio-economic issues (e.g., fair use, copyright, digital divide) involved in information and information technology.
- b. Demonstrates an understanding of what constitutes plagiarism.
- c. Understands that different disciplines may use different documentation styles (e.g., APA, MLA, CBE).
- d. Selects an appropriate documentation style and uses it correctly and consistently.

# **EVALUATION AND TESTING**

## Surveys

University of Maryland Baltimore County Albin O. Kuhn Library Baltimore, Maryland

The UMBC Information Literacy Survey contains 51 items and takes approximately 34 minutes to complete. The survey is automated and will be deployed via the UMBC portal, my.UMBC.edu. Survey participants will use a Web browser to access my.UMBC.edu. Once logged in they will select the AOK Information Literacy Survey link and follow the instructions to complete the survey. The survey will only be available during the month of September, 2003.

The majority of the questions on the survey have no right or wrong answers. These questions are designed to solicit student perceptions about information and the use of information.

Participating faculty will receive a list of the unique usernames of the students who have completed the survey as of Sunday, September 14th on Monday, September 15th. A final roster of those who have completed the survey will be distributed to participating faculty by Friday, October 3rd.

In addition to the assessment the Task Force will be developing and promoting the Faculty Awareness Project, to promote information literacy awareness, assist faculty, and provide support for integrating information literacy standards, objectives, and competencies into the classroom and across the curriculum at UMBC.

The Information Literacy Task Force believes that focusing Information Literacy Awareness efforts on Faculty will greatly benefit students. To that end, additional material has been developed for faculty to use in campus initiatives including the First Year Success Course. This material is also recommended for use in the First Year Seminar courses as well.

University of Maryland Baltimore County Albin O. Kuhn Library Baltimore, Maryland

The results of the Information Literacy Survey include no personal identifying information. However, results may be reported based on other demographic elements such as academic department.

The complete survey results (raw data) are available.

An executive summary has been prepared for the entire population, organized by the five ACRL Standards and other major areas of data collection. The summary includes key principles of the Standards which will then be mapped to indicators/results.

Reports of the results (based on data from participating students enrolled in departmental courses) were made for the following academic departments:

- English
- Biology

Participating teaching faculty will be able to request additional data about their individual classes upon request at the end of the semester.

The sections written by the Task Force are:

Standard I—The information literate student determines the nature and extent of the information needed.

The survey includes questions about the types of sources that exist for doing research and asks students to select those sources with which they are familiar. For example, one question has a list of sources that include some commonly used materials, such as magazine and journal articles, and some less commonly used, such as conference proceedings, dissertations, and manuscripts.

Standard II—The information literate student accesses needed information effectively and efficiently.

Included in the survey are questions that investigate students' abilities to select appropriate resource tools, develop successful search strategies, and extract needed information from their results. For example, one survey question asks students to specify how frequently they use search strategies such as Boolean operators, truncation, and proximity operators.

Standard III—The information literate student evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system.

The survey includes questions about students' capabilities in evaluating materials and selecting those most appropriate for a specific purpose. For example, one question asks students to specify how they select the best articles from a list of results in an article database.

Standard IV—The information literate student uses information effectively to accomplish a specific purpose.

Included in the survey are questions that will gather data regarding students' abilities to synthesize gathered information to produce a final product, such as a research paper. For example, a series of questions in the survey asks students to specify whether or not they've had the opportunity to present their research using various methods such as PowerPoint, visual projects, personal Web pages, etc.

Standard V—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.

Questions in the survey regarding this Standard examine students' views and understanding of issues of copyright, plagiarism, and fair use. For example, one question offers specific writing scenarios (such as rewording someone else's information and using it without giving credit to the author) and asks students to indicate whether or not they consider it plagiarism.

Relationship with Faculty—A very important element of information literacy involves students' relationships with their instructors. The survey contains a number of questions that investigate student/faculty relationships—whether or not a student is comfortable asking his or her instructor for assistance, whether or not a student has participated in directed research with a faculty member, among others.

Attitudinal Responses—A number of questions on the survey gather information regarding students' attitudes about doing research. Students are asked to indicate their comfort levels with working with various types of resources, and seeking information from a variety of sources, such as the Library homepage.

Demographics—The survey gathered a great deal of demographic data regarding the participants. Participants are asked to specify: gender, age, race, academic status, ethnic heritage, country of citizenship, native language, and academic history.

The Task Force will host two Brown Bag(s) during the month of November. They will take place Tuesday, November 18th from 12–1, and Monday, November 24th from 1–2, in the Albin O. Kuhn Library & Gallery, 3rd floor, Administration Suite, conference room. The focus of these sessions will be:

- Creating solutions to provide students with information literacy skills instruction;
- The role of the faculty in participating and supporting this effort;
- Obtaining meaningful feedback from students on information literacy efforts.

### Assessment

University of California Davis University Library Davis, California

Resources For Instructors Library Instruction Assessment:

Minute Paper:

What was the most important thing you learned during the class today?

What important questions remain unanswered?

What would you change about this class?

Pre- & Post-Class Quiz:

Create a quiz that addresses the areas you will cover during the session.

Copy it on both sides of a sheet of paper.

At the beginning of the session, have students take the quiz. When they are done, tell them to set it aside.

At the end of the session, ask students to turn the sheets over and take the same quiz again. [They will immediately be able to see what they learned, and so will you when they pass it in.]

Save time to go over the correct answers during class. If you do not have time, make sure that students are given a handout or a follow-up email with the correct answers.

University of Maryland Baltimore County Albin O. Kuhn Library Baltimore, Maryland

The following are elements of the Information Literacy Program to be developed for faculty and students based on findings of the survey:

For Faculty:

Develop workshops for faculty on:

- Developing information literacy-friendly assignments;
- Integrating information literacy Standards into a course;
- Other topics determined relevant based on specific survey findings.

Further development of Faculty Focus Web Site to include additional information about the survey findings. The survey will be rewritten to include narrative and background information on the nature of the question and what we were attempting to ascertain. Faculty and Students will be referred to this Web site for additional information on the survey and its purpose. Refer to Information Literacy Survey Results Dissemination for more details.

Additional programs will be developed based outcomes of the Brown Bag sessions.

For Students:

- Individualized one-on-one sessions, upon request, with librarian to discuss results and develop a plan for future instruction needs.
- Develop factoids slide show to advertise on the Commons Commonvision based on findings from the survey.

Past programs offered:

Brown Bag Discussion—Plagiarism in the Classroom

The Faculty Development Center and the Albin O. Kuhn Library & Gallery are co-sponsoring a brown bag discussion on plagiarism in the classroom. Participants will be provided with two brief articles to read ahead of time in order to facilitate discussion. This session will take place Thursday, June 17th from 1:00 to 2:00 in the Library Administration Conference Room (Library 353). Light refreshments will be served. RSVP to sullivan@umbc.edu to reserve your spot.

Assignment Design Workshop I: Integrating Information Literacy Skills into Your Assignments

In April 2004, the Faculty Development Center and the Albin O. Kuhn Library & Gallery co-sponsored a workshop on assignment design. The workshop focused on integrating information literacy skills (based on the ACRL Information Literacy Competency Standards) into assignments. The PowerPoint presentation is available online.

Copyright and Fair Use Workshop: What Faculty and Students Need to Know

In March 2004, the Faculty Development Center and the Library co-sponsored a workshop on copyright and fair use. The workshop featured David McDonald, Special Assistant for Academic Affairs, Towson University. David's handout is available in PDF format. The workshop also included an update on the campus Intellectual Property Policy.

## Sample Quiz

University of California Davis University Library Davis, California

Library Research Skills Quiz

I. Which of the following are effective strategies for choosing search terms?

- A. Write out your topic in a few sentences
- B. Highlight the main terms and phrases
- C. Brainstorm synonyms and different terms
- D. Check a subject encyclopedia for words and concepts
- E. All of the above

2. Which of the following would you use to search for books at the UC Davis University Library:

- A. LexisNexis
- B. UCeLinks
- C. Harvest

3. You can search for articles using Harvest.

- A. True
- B. False

4. Which of the following links from the UC Davis Library homepage offers the best help when you need to select appropriate article databases for your topic?

- A. Library services
- B. Electronic databases
- C. Subject guides
- D. Melvyl UC Catalog

5. Citations that include volume and issue numbers are for:

- A. Essays in edited books
- B. Articles in journals
- C. Documentary film series
- D. Different versions of the same Web site

Examine the citation below and answer the following 2 questions:

Kelly, W. E., Kelly, K. E., & Clanton, R. C. (2001). The relationship between sleep length and grade-point average among college students. College Student Journal, 35(1), 84–86.

6. What piece of information from the citation above will you use to search Harvest to find this item?

- A. The article title
- B. The publisher
- C. The journal title
- D. The call number

7. Identify the different parts of the citation above:

- A. Title of the article
- B. Title of the journal
- C. Author
- D. Volume number
- E. Issue number
- F. How many pages long is this article?

## **Class Assignments**

University of Iowa University of Iowa Libraries Iowa City, Iowa

#### **Development of Assignments**

In one approach, a librarian and a faculty member or TA can work together to develop assignments that focus on information literacy skills while enhancing the learning of ideas and concepts for the course. Sample assignments may include finding primary source material, finding pro and con opinions, or creating a list of scholarly articles to be included in a bibliography.

#### Class Sessions

In another approach, a librarian can present a class session to teach students strategies for finding and evaluating information specific to the needs of the course. In preparation for such a class session, the librarian will consult with the faculty member or TA in order to design a class session to meet the course goals and instructional objectives. Instruction is most effective when students are able to immediately apply the material presented and when the presentation is directly tied to a course assignment.

#### Web-based Resources

Sometimes the collaboration between faculty member and librarian results in the development of a resources page for the course Web site including links to UI subscription databases and explanations of how to evaluate information found on the Web.A librarian could also provide a brief sample search strategy to help guide students.