

Information Literacy Competency Standards for Higher Education: Standards, Indicators, and Outcomes for the LiONiL Online Tutorial

Standard One

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

P1. The information literate student defines and articulates the need for information.

O2. Develops a thesis statement and formulates questions based on the information need.

O3. Explores general information sources to increase familiarity with the topic.

- Describes the difference between general and subject-specific information sources.
- Demonstrates when it is appropriate to use a general and subject-specific information source (e.g., to provide an overview, to give ideas on terminology).

O4. Defines or modifies the information need to achieve a manageable focus.

- Identifies an initial question that might be too broad or narrow, as well as one that is probably manageable.
- Explains his/her reasoning regarding the manageability of a topic with reference to available information sources.
- Narrows a broad topic and broadens a narrow one by modifying the scope or direction of the question.
- Demonstrates an understanding of how the desired end product (i.e., the required depth of investigation and analysis) will play a role in determining the need for information.
- Uses background information sources effectively to gain an initial understanding of the topic.
- Consults with the course instructor and librarians to develop a manageable focus for the topic.

O5. Identifies key concepts and terms that describe the information need.

- Lists terms that may be useful for locating information on a topic.
- Identifies and uses appropriate general or subject-specific sources to discover terminology related to an information need.
- Decides when a research topic has multiple facets or may need to be put into a broader context.
- Identifies more specific concepts that comprise a research topic.

P2. The information literate student identifies a variety of types and formats of potential sources for information.

O3. Identifies the value and differences of potential resources in a variety of formats (e.g., multimedia, database, website, data set, audio/visual, book).

- Identifies various formats in which information is available.
- Demonstrates how the format in which information appears may affect its usefulness for a particular information need.

O4. Identifies the purpose and audience of potential resources (e.g., popular vs. scholarly, current vs. historical).

- Distinguishes characteristics of information provided for different audiences.
- Identifies the intent or purpose of an information source (this may require use of additional sources in order to develop an appropriate context).

O5. Differentiates between primary and secondary sources, recognizing how their use and importance vary with each discipline.

- Describes how various fields of study define primary and secondary sources differently.
- Identifies characteristics of information that make an item a primary or secondary source in a given field.

P4. The information literate student reevaluates the nature and extent of the information need.

O1. Reviews the initial information need to clarify, revise, or refine the question.

- Identifies a research topic that may require revision, based on the amount of information found (or not found).
- Identifies a topic that may need to be modified, based on the content of information found.
- Decides when it is and is not necessary to abandon a topic depending on the success (or failure) of an initial search for information.

Standard Two

The information literate student accesses needed information effectively and efficiently.

P1. The information literate student selects the most appropriate investigative methods or information retrieval systems for accessing the needed information.

O3. Investigates the scope, content, and organization of information retrieval systems.

- Describes the structure and components of the system or tool being used, regardless of format (e.g., index, thesaurus, type of information retrieved by the system).
- Identifies the source of help within a given information retrieval system and uses it effectively.
- Identifies what types of information are contained in a particular system (e.g., all branch libraries are included in the catalog; not all databases are full text; catalogs, periodical databases, and Web sites may be included in a gateway).
- Distinguishes among indexes, online databases, and collections of online databases, as well as gateways to different databases and collections.
- Selects appropriate tools (e.g., indexes, online databases) for research on a particular topic.
- Identifies the differences between freely available Internet search tools and subscription or fee-based databases.
- Identifies and uses search language and protocols (e.g., Boolean, adjacency) appropriate to the retrieval system.
- Determines the period of time covered by a particular source.
- Identifies the types of sources that are indexed in a particular database or index (e.g., an index that covers newspapers or popular periodicals versus a more specialized index to find scholarly literature).
- Demonstrates when it is appropriate to use a single tool (e.g., using only a periodical index when only periodical articles are required).
- Distinguishes between full-text and bibliographic databases.

O4. Selects efficient and effective approaches for accessing the information needed from the investigative method or information retrieval system.

- Selects appropriate information sources (i.e., primary, secondary or tertiary sources) and determines their relevance for the current information need.
- Determines appropriate means for recording or saving the desired information (e.g., printing, saving to disc, photocopying, taking notes).
- Analyzes and interprets the information collected using a growing awareness of key terms and concepts to decide whether to search for additional information or to identify more accurately when the information need has been met.

P2. The information literate student constructs and implements effectively-designed search strategies.

O1. Develops a research plan appropriate to the investigative method.

- Describes a general process for searching for information.
- Describes when different types of information (e.g., primary/secondary, background/specific) may be suitable for different purposes.
- Gathers and evaluates information and appropriately modifies the research plan as new insights are gained.

O2. Identifies keywords, synonyms and related terms for the information needed.

- Identifies keywords or phrases that represent a topic in general sources (e.g., library catalog, periodical index, online source) and in subject-specific sources.
- Demonstrates an understanding that different terminology may be used in general sources and subject-specific sources.
- Identifies alternate terminology, including synonyms, broader or narrower words and phrases that describe a topic.
- Identifies keywords that describe an information source (e.g., book, journal article, magazine article, Web site).

O3. Selects controlled vocabulary specific to the discipline or information retrieval source.

- Uses background sources (e.g., encyclopedias, handbooks, dictionaries, thesauri, textbooks) to identify discipline-specific terminology that describes a given topic.
- Explains what controlled vocabulary is and why it is used.
- Identifies search terms likely to be useful for a research topic in relevant controlled vocabulary lists.
- Identifies when and where controlled vocabulary is used in a bibliographic record, and then successfully searches for additional information using that vocabulary.

O4. Constructs a search strategy using appropriate commands for the information retrieval system selected (e.g., Boolean operators, truncation, and proximity for search engines; internal organizers such as indexes for books).

- Demonstrates when it is appropriate to search a particular field (e.g., title, author, subject).
- Demonstrates an understanding of the concept of Boolean logic and constructs a search statement using Boolean operators.
- Demonstrates an understanding of the concept of proximity searching and constructs a search statement using proximity operators.
- Demonstrates an understanding of the concept of nesting and constructs a search using nested words or phrases.
- Demonstrates an understanding of the concept of browsing and uses an index that allows it.
- Demonstrates an understanding of the concept of keyword searching and uses it appropriately and effectively.
- Demonstrates an understanding of the concept of truncation and uses it appropriately and effectively.

O5. Implements the search strategy in various information retrieval systems using different user interfaces and search engines, with different command languages, protocols, and search parameters.

- Uses help screens and other user aids to understand the particular search structures and commands of an information retrieval system.
- Demonstrates an awareness of the fact that there may be separate interfaces for basic and advanced searching in retrieval systems.

- Narrows or broadens questions and search terms to retrieve the appropriate quantity of information, using search techniques such as Boolean logic, limiting, and field searching.
- Identifies and selects keywords and phrases to use when searching each source, recognizing that different sources may use different terminology for similar concepts.
- Formulates and executes search strategies to match information needs with available resources.
- Describes differences in searching for bibliographic records, abstracts, or full text in information sources.

P3. The information literate student retrieves information online or in person using a variety of methods.

O1. Uses various search systems to retrieve information in a variety of formats.

- Describes some materials that are not available online or in digitized formats and must be accessed in print or other formats (e.g., microform, video, audio).
- Identifies research sources, regardless of format, that are appropriate to a particular discipline or research need.
- Recognizes the format of an information source (e.g., book, chapter in a book, periodical article) from its citation. (See also 2.3.b.)
- Uses different research sources (e.g., catalogs and indexes) to find different types of information (e.g., books and periodical articles).
- Describes search functionality common to most databases regardless of differences in the search interface (e.g., Boolean logic capability, field structure, keyword searching, relevancy ranking).
- Uses effectively the organizational structure and access points of print research sources (e.g., indexes, bibliographies) to retrieve pertinent information from those sources.

O2. Uses various classification schemes and other systems (e.g., call number systems or indexes) to locate information resources within the library or to identify specific sites for physical exploration.

- Uses call number systems effectively (e.g., demonstrates how a call number assists in locating the corresponding item in the library).
- Explains the difference between the library catalog and a periodical index.
- Describes the different scopes of coverage found in different periodical indexes.
- Distinguishes among citations to identify various types of materials (e.g., books, periodical articles, essays in anthologies). (See also 2.3.a.)

O3. Uses specialized online or in person services available at the institution to retrieve information needed (e.g., interlibrary loan/document delivery, professional associations, institutional research offices, community resources, experts and practitioners).

- Retrieves a document in print or electronic form.
- Describes various retrieval methods for information not available locally.
- Identifies the appropriate service point or resource for the particular information need.

- Initiates an interlibrary loan request by filling out and submitting a form either online or in person.
- Uses the Web site of an institution, library, organization or community to locate information about specific services.

P4. The information literate student refines the search strategy if necessary.

O1. Assesses the quantity, quality, and relevance of the search results to determine whether alternative information retrieval systems or investigative methods should be utilized.

- Determines if the quantity of citations retrieved is adequate, too extensive, or insufficient for the information need.
- Evaluates the quality of the information retrieved using criteria such as authorship, point of view/bias, date written, citations, etc.
- Assesses the relevance of information found by examining elements of the citation such as title, abstract, subject headings, source, and date of publication.
- Determines the relevance of an item to the information need in terms of its depth of coverage, language, and time frame.

P5. The information literate student extracts, records, and manages the information and its sources.

O3. Differentiates between the types of sources cited and understands the elements and correct syntax of a citation for a wide range of resources.

- Identifies different types of information sources cited in a research tool.
- Determines whether or not a cited item is available locally and, if so, can locate it.
- Demonstrates an understanding that different disciplines may use different citation styles.

Standard Three

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

P4. The information literate student compares new knowledge with prior knowledge to determine the value added, contradictions, or other unique characteristics of the information.

O1. Determines whether information satisfies the research or other information need.

O7. Selects information that provides evidence for the topic.

- Describes why not all information sources are appropriate for all purposes (e.g., ERIC is not appropriate for all topics, such as business topics; the Web may not be appropriate for a local history topic).
- Distinguishes among various information sources in terms of established evaluation criteria (e.g., content, authority, currency).
- Applies established evaluation criteria to decide which information sources are most appropriate.

P7. The information literate student determines whether the initial query should be revised.

O2. Reviews search strategy and incorporates additional concepts as necessary.

- Demonstrates how searches may be limited or expanded by modifying search terminology or logic.

Standard Four

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

None

Standard Five

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.

P1: The information literate student understands many of the ethical, legal and socio-economic issues surrounding information and information technology.

O2: Identifies and discusses issues related to free vs. fee-based access to information.

- Demonstrates an understanding that not all information on the Web is free, i.e., some Web-based databases require users to pay a fee or to subscribe in order to retrieve full text or other content.
- Demonstrates awareness that the library pays for access to databases, information tools, full-text resources, etc., and may use the Web to deliver them to its clientele.
- Describes how the terms of subscriptions or licenses may limit their use to a particular clientele or location.

- Describes the differences between the results of a search using a general Web search engine (e.g., Yahoo, Google) and a library-provided tool (e.g., Web-based article index, full-text electronic journal, Web-based library catalog).

P2. The information literate student follows laws, regulations, institutional policies, and etiquette related to the access and use of information resources.

O2. Uses approved passwords and other forms of ID for access to information resources.

O6. Demonstrates an understanding of what constitutes plagiarism and does not represent work attributable to others as his/her own.

P3. The information literate student acknowledges the use of information sources in communicating the product or performance.

O1. Selects an appropriate documentation style and uses it consistently to cite sources.

- Describes how to use a documentation style to record bibliographic information from an item retrieved through research.
- Identifies citation elements for information sources in different formats (e.g., book, article, television program, Web page, interview).
- Demonstrates an understanding that there are different documentation styles, published or accepted by various groups (1).
- Demonstrates an understanding that the appropriate documentation style may vary by discipline (e.g., MLA for English, University of Chicago for history, APA for psychology, CBE for biology)
- Describes when the format of the source cited may dictate a certain citation style.
- Uses correctly and consistently the citation style appropriate to a specific discipline.
- Locates information about documentation styles either in print or electronically, e.g., through the library's Web site.
- Recognizes that consistency of citation format is important, especially if a course instructor has not required a particular style.