

# **Information Literacy Competency Standards for Higher Education**

Standards, Performance Indicators, and Outcomes

## **Standard One**

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

#### Performance Indicators:

- 1. The information literate student defines and articulates the need for information. *Outcomes Include:* 
  - a. Confers with instructors and participates in class discussions, peer workgroups, and electronic discussions to identify a research topic, or other information need
  - b. Develops a thesis statement and formulates questions based on the information need
  - c. Explores general information sources to increase familiarity with the topic
  - d. Defines or modifies the information need to achieve a manageable focus
  - e. Identifies key concepts and terms that describe the information need
  - f. Recognizes that existing information can be combined with original thought, experimentation, and/or analysis to produce new information
- 2. The information literate student identifies a variety of types and formats of potential sources for information.

- a. Knows how information is formally and informally produced, organized, and disseminated
- b. Recognizes that knowledge can be organized into disciplines that influence the way information is accessed
- c. Identifies the value and differences of potential resources in a variety of formats (e.g., multimedia, database, website, data set, audio/visual, book)
- d. Identifies the purpose and audience of potential resources (e.g., popular vs. scholarly, current vs. historical)
- e. Differentiates between primary and secondary sources, recognizing how their use and importance vary with each discipline
- f. Realizes that information may need to be constructed with raw data from primary sources
- 3. The information literate student considers the costs and benefits of acquiring the needed information.

- a. Determines the availability of needed information and makes decisions on broadening the information seeking process beyond local resources (e.g., interlibrary loan; using resources at other locations; obtaining images, videos, text, or sound)
- b. Considers the feasibility of acquiring a new language or skill (e.g., foreign or discipline-based) in order to gather needed information and to understand its context
- c. Defines a realistic overall plan and timeline to acquire the needed information
- 4. The information literate student reevaluates the nature and extent of the information need.

## Outcomes Include:

- a. Reviews the initial information need to clarify, revise, or refine the question
- b. Describes criteria used to make information decisions and choices

## **Standard Two**

The information literate student accesses needed information effectively and efficiently.

#### Performance Indicators:

- 1. The information literate student selects the most appropriate investigative methods or information retrieval systems for accessing the needed information. *Outcomes Include:* 
  - a. Identifies appropriate investigative methods (e.g., laboratory experiment, simulation, fieldwork)
  - b. Investigates benefits and applicability of various investigative methods
  - c. Investigates the scope, content, and organization of information retrieval systems
  - d. Selects efficient and effective approaches for accessing the information needed from the investigative method or information retrieval system
- 2. The information literate student constructs and implements effectively-designed search strategies.

- a. Develops a research plan appropriate to the investigative method
- b. Identifies keywords, synonyms and related terms for the information needed
- c. Selects controlled vocabulary specific to the discipline or information retrieval source
- 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 organizers such as indexes for books)

- 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
- f. Implements the search using investigative protocols appropriate to the discipline
- 3. The information literate student retrieves information online or in person using a variety of methods.

- a. Uses various search systems to retrieve information in a variety of formats
- b. 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
- c. 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)
- d. Uses surveys, letters, interviews, and other forms of inquiry to retrieve primary information
- 4. The information literate student refines the search strategy if necessary. *Outcomes Include:* 
  - a. Assesses the quantity, quality, and relevance of the search results to determine whether alternative information retrieval systems or investigative methods should be utilized
  - b. Identifies gaps in the information retrieved and determines if the search strategy should be revised
  - c. Repeats the search using the revised strategy as necessary
- 5. The information literate student extracts, records, and manages the information and its sources.

Outcomes Include:

- a. Selects among various technologies the most appropriate one for the task of extracting the needed information (e.g., copy/paste software functions, photocopier, scanner, audio/visual equipment, or exploratory instruments)
- b. Creates a system for organizing the information
- c. Differentiates between the types of sources cited and understands the elements and correct syntax of a citation for a wide range of resources
- d. Records all pertinent citation information for future reference
- e. Uses various technologies to manage the information selected and organized

## 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.

#### Performance Indicators:

1. The information literate student summarizes the main ideas to be extracted from the information gathered.

#### Outcomes Include:

- a. Reads the text and selects main ideas
- b. Restates textual concepts in his/her own words and selects data accurately
- c. Identifies verbatim material that can be then appropriately quoted
- 2. The information literate student articulates and applies initial criteria for evaluating both the information and its sources.

## Outcomes Include:

- a. Examines and compares information from various sources in order to evaluate reliability, validity, accuracy, authority, timeliness, and point of view or bias
- b. Analyzes the structure and logic of supporting arguments or methods
- c. Recognizes prejudice, deception, or manipulation
- d. Recognizes the cultural, physical, or other context within which the information was created and understands the impact of context on interpreting the information
- 3. The information literate student synthesizes main ideas to construct new concepts. *Outcomes Include:* 
  - a. Recognizes interrelationships among concepts and combines them into potentially useful primary statements with supporting evidence
  - b. Extends initial synthesis, when possible, at a higher level of abstraction to construct new hypotheses that may require additional information
  - c. Utilizes computer and other technologies (e.g. spreadsheets, databases, multimedia, and audio or visual equipment) for studying the interaction of ideas and other phenomena
- 4. The information literate student compares new knowledge with prior knowledge to determine the value added, contradictions, or other unique characteristics of the information.

- a. Determines whether information satisfies the research or other information need
- b. Uses consciously selected criteria to determine whether the information contradicts or verifies information used from other sources
- c. Draws conclusions based upon information gathered
- d. Tests theories with discipline-appropriate techniques (e.g., simulators, experiments)
- e. Determines probable accuracy by questioning the source of the data, the limitations of the information gathering tools or strategies, and the reasonableness of the conclusions
- f. Integrates new information with previous information or knowledge
- g. Selects information that provides evidence for the topic

- 5. The information literate student determines whether the new knowledge has an impact on the individual's value system and takes steps to reconcile differences. *Outcomes Include:* 
  - a. Investigates differing viewpoints encountered in the literature
  - b. Determines whether to incorporate or reject viewpoints encountered
- 6. The information literate student validates understanding and interpretation of the information through discourse with other individuals, subject-area experts, and/or practitioners.

- a. Participates in classroom and other discussions
- b. Participates in class-sponsored electronic communication forums designed to encourage discourse on the topic (e.g., email, bulletin boards, chat rooms)
- c. Seeks expert opinion through a variety of mechanisms (e.g., interviews, email, listservs)
- 7. The information literate student determines whether the initial query should be revised.

#### Outcomes Include:

- a. Determines if original information need has been satisfied or if additional information is needed
- b. Reviews search strategy and incorporates additional concepts as necessary
- c. Reviews information retrieval sources used and expands to include others as needed

## **Standard Four**

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

## Performance Indicators:

1. The information literate student applies new and prior information to the planning and creation of a particular product or performance.

- a. Organizes the content in a manner that supports the purposes and format of the product or performance (e.g. outlines, drafts, storyboards)
- b. Articulates knowledge and skills transferred from prior experiences to planning and creating the product or performance
- c. Integrates the new and prior information, including quotations and paraphrasings, in a manner that supports the purposes of the product or performance
- d. Manipulates digital text, images, and data, as needed, transferring them from their original locations and formats to a new context
- 2. The information literate student revises the development process for the product or performance.

- a. Maintains a journal or log of activities related to the information seeking, evaluating, and communicating process
- b. Reflects on past successes, failures, and alternative strategies
- 3. The information literate student communicates the product or performance effectively to others.

## Outcomes Include:

- a. Chooses a communication medium and format that best supports the purposes of the product or performance and the intended audience
- b. Uses a range of information technology applications in creating the product or performance
- c. Incorporates principles of design and communication
- d. Communicates clearly and with a style that supports the purposes of the intended audience

## **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.

## Performance Indicators:

1. The information literate student understands many of the ethical, legal and socioeconomic issues surrounding information and information technology.

#### Outcomes Include:

- a. Identifies and discusses issues related to privacy and security in both the print and electronic environments
- b. Identifies and discusses issues related to free vs. fee-based access to information
- c. Identifies and discusses issues related to censorship and freedom of speech
- d. Demonstrates an understanding of intellectual property, copyright, and fair use of copyrighted material
- 2. The information literate student follows laws, regulations, institutional policies, and etiquette related to the access and use of information resources.

- a. Participates in electronic discussions following accepted practices (e.g. "Netiquette")
- b. Uses approved passwords and other forms of ID for access to information resources
- c. Complies with institutional policies on access to information resources
- d. Preserves the integrity of information resources, equipment, systems and facilities
- e. Legally obtains, stores, and disseminates text, data, images, or sounds
- f. Demonstrates an understanding of what constitutes plagiarism and does not represent work attributable to others as his/her own

- g. Demonstrates an understanding of institutional policies related to human subjects research
- 3. The information literate student acknowledges the use of information sources in communicating the product or performance.

- a. Selects an appropriate documentation style and uses it consistently to cite sources
- b. Posts permission granted notices, as needed, for copyrighted material