Introduction

The Association of College and Research Libraries (ACRL) has developed a set of Information Literacy Competency Standards to describe in detail what information literate individuals should be able to do in their interactions with information – specifically, in the college environment, their interaction with the research process. From the introduction to the Competency Standards document:

“Information literacy forms the basis for lifelong learning. It is common to all disciplines, to all learning environments, and to all levels of education. It enables learners to master content and extend their investigations, become more self-directed, and assume greater control over their own learning. An information literate individual is able to:

- Determine the extent of information needed
- Access the needed information effectively and efficiently
- Evaluate information and its sources critically
- Incorporate selected information into one’s knowledge base
- Use information effectively to accomplish a specific purpose
- Understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally”

From the large and, at times, broadly stated guidelines provided by the ACRL, we have attempted to create a series of questions, organized into checklists grounded in five major information literacy areas. In the footnotes for each checklist you will find the ACRL Competencies on which the questions were built. The purpose of these checklists is to assist faculty and instructors in assessing current and future assignments to maximize their potential to enhance and build student information literacy skills. The focus here is on the individual research assignment; however, many of these questions can also be applied to instruction in general.

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1) SCOPING THE INFORMATION NEED

*Does the assignment…*

- Communicate to students that they must narrow and/or modify the topic, likely through formulating specific questions, to achieve a manageable focus? \(^2\)

- Build on key concepts, terms and resources that have been explored in class, and/or direct students to them? \(^3\)

- Encourage and equip students to create an appropriate research plan (e.g., a timeline for the steps involved in completing the assignment)? \(^4\)

- Provide guidance to students as to how and where to begin the research process, and indicate potential reference sources? \(^5\)

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2 “Defines or modifies the information need to achieve a manageable focus”; “The information literate student determines whether the initial query should be revised.”; “Develops a thesis statement and formulates questions based on the information need”; “Reviews the initial information need to clarify, revise, or refine the question”

3 “Identifies key concepts and terms that describe the information need”

4 “Defines a realistic overall plan and timeline to acquire the needed information”; “Develops a research plan appropriate to the investigative method”

5 “Explores general information sources to increase familiarity with the topic”
Does the assignment…

- Include links and/or referrals to appropriate resources, such as library resources and librarians?  

- Equip students to recognize, comprehend and utilize search strategies and data-gathering techniques appropriate/necessary to the discipline/subject being studied?  

- Encourage students to see the research process as a learning experience, through which to acquire new skills that will serve them after the course is over.  

- Encourage students to learn (in class and/or at the library) and use a variety of search strategies (keyword searching, browsing, citation chaining, etc), gathering important search terms as they encounter them.  

- Make explicitly clear the types of resources students are expected to use, and indicate or refer to likely starting points for research in the scholarly and popular literature of the discipline being studied (particular databases, search engines, journals, reference sources, sections of the library).  

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6 “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)”  

7 “Identifies appropriate investigative methods (e.g., laboratory experiment, simulation, fieldwork); “Selects efficient and effective approaches for accessing the information needed from the investigative method or information retrieval system”  

8 “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”; “Investigates benefits and applicability of various investigative methods”; “Investigates the scope, content, and organization of information retrieval systems”  

9 “Identifies keywords, synonyms and related terms for the information needed”; “Selects controlled vocabulary specific to the discipline or information retrieval source”; “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)”; “Implements the search strategy in various information retrieval systems using different user interfaces and search engines, with different command languages, protocols, and search parameters”; “Implements the search using investigative protocols appropriate to the discipline”  

10 “Uses various search systems to retrieve information in a variety of formats”; “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 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)” ; “Uses surveys, letters, interviews, and other forms of inquiry to retrieve primary information”; “Knows how information is formally and informally produced, organized, and disseminated”; “Recognizes that knowledge can be organized into disciplines that influence the way information is accessed”
3) EVALUATING INFORMATION

Does the assignment…

- Encourage students to consult a variety of sources and to compare their usefulness and relevance before settling on the best sources to use?  

- Explain, or encourage students to explore, differing viewpoints on the topic?

- Provide the student with the knowledge and practice necessary to efficiently assess the quality of information sources found during the research process?

- Prepare the student to identify, differentiate, and assess the usefulness of different types of resources (visual/textual; primary/secondary; popular/scholarly; current/historical; etc)?

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11 “Repeats the search using the revised strategy as necessary”; “Identifies gaps in the information retrieved and determines if the search strategy should be revised”

12 “Investigates differing viewpoints encountered in the literature”; “Determines whether to incorporate or reject viewpoints encountered”

13 “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 original information need has been satisfied or if additional information is needed”; “Reviews search strategy and incorporates additional concepts as necessary”; “Reviews information retrieval sources used and expands to include others as needed”

14 “Identifies the purpose and audience of potential resources (e.g., popular vs. scholarly, current vs. historical)”; “Identifies the value and differences of potential resources in a variety of formats (e.g., multimedia, database, website, data set, audio/visual, book)”; “Differentiates between primary and secondary sources, recognizing how their use and importance vary with each discipline”
4) READING INFORMATION

Does the assignment…

- Ensure that students are aware of effective reading strategies appropriate to the materials and/or discipline being studied, encouraging the use of techniques for such as notetaking, highlighting, and scanning.\(^{15}\)

- Clarify for students that they will need to engage, respond to, and integrate information gathered through research in order to generate their own arguments and conclusions.\(^{16}\)

- Ensure that students are aware that reading for academic research requires examination and comparison of methods, data, and conclusions in the resources they read.\(^{17}\)

- Provide students with guidance and resources to assist them in collecting, organizing, and storing their research appropriately and reliably.\(^{18}\)

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15 “Reads the text and selects main ideas”; “Restates textual concepts in his/her own words and selects data accurately”; “Identifies verbatim material that can be then appropriately quoted”; “Determines whether information satisfies the research or other information need”

16 “Integrates new information with previous information or knowledge”; “Selects information that provides evidence for the topic”; “Draws conclusions based upon information gathered”; “Analyzes the structure and logic of supporting arguments or methods”

17 “Uses consciously selected criteria to determine whether the information contradicts or verifies information used from other sources”; “Examines and compares information from various sources in order to evaluate reliability, validity, accuracy, authority, timeliness, and point of view or bias”; “Tests theories with discipline-appropriate techniques (e.g., simulators, experiments)”; “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”; “Recognizes prejudice, deception, or manipulation”; “Recognizes the cultural, physical, or other context within which the information was created and understands the impact of context on interpreting the information”

18 “ Creates a system for organizing the information”; “Uses various technologies to manage the information selected and organized”; “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)”; “Maintains a journal or log of activities related to the information seeking, evaluating, and communicating process”
5) USING INFORMATION

Does the assignment…

- Assist students in learning how to create a synthesis of their own ideas and the ideas they uncover through research.\(^{19}\)

- Equip students to create an organized, polished final product focused on a central purpose or thesis, in an appropriate, engaging format.\(^{20}\)

- Communicate to students that their final product should demonstrate their growth and development as scholars, and their understanding of the process of research and writing.\(^{21}\)

- Support students in the design and execution of their final product, providing samples, guidelines, and resources as necessary.\(^{22}\)

- Clarify the expected citation style(s), and direct students to useful, comprehensible resources to assist them in citation, appropriate use of copyrighted materials, and avoidance of plagiarism.\(^{23}\)

\(^{19}\) “Realizes that information may need to be constructed with raw data from primary sources”; “Recognizes that existing information can be combined with original thought, experimentation, and/or analysis to produce new information”; “Recognizes interrelationships among concepts and combines them into potentially useful primary statements with supporting evidence”; “Extends initial synthesis, when possible, at a higher level of abstraction to construct new hypotheses that may require additional information”

\(^{20}\) “Organizes the content in a manner that supports the purposes and format of the product or performance (e.g. outlines, drafts, storyboards); “Integrates the new and prior information, including quotations and paraphrasings, in a manner that supports the purposes of the product or performance”; “Manipulates digital text, images, and data, as needed, transferring them from their original locations and formats to a new context”

\(^{21}\) “Describes criteria used to make information decisions and choices”; “Articulates knowledge and skills transferred from prior experiences to planning and creating the product or performance”; “Reflects on past successes, failures, and alternative strategies”

\(^{22}\) “Chooses a communication medium and format that best supports the purposes of the product or performance and the intended audience”; “Uses a range of information technology applications in creating the product or performance”; “Incorporates principles of design and communication”; “Communicates clearly and with a style that supports the purposes of the intended audience”; “Utilizes computer and other technologies (e.g. spreadsheets, databases, multimedia, and audio or visual equipment) for studying the interaction of ideas and other phenomena”

\(^{23}\) “Differentiates between the types of sources cited and understands the elements and correct syntax of a citation for a wide range of resources”; “Demonstrates an understanding of what constitutes plagiarism and does not represent work attributable to others as his/her own”; “Selects an appropriate documentation style and uses it consistently to cite sources”; “Posts permission granted notices, as needed, for copyrighted material”; “Records all pertinent citation information for future reference”