Michigan Technological University

Undergraduate Student Learning Goal 6: Information Literacy Rubric   (for use 2022-23)

Students are able to analyze the need for, strategically access, critically evaluate, and use information effectively, ethically, and legally.

Information Literacy	What is being assessed	Beginning 1	Developing 2	Proficient 3	Exemplary 4
6.1 Determine the Extent of Information Needed	Recognizes the need for information and divides that need into researchable subtopics.	Has difficulty identifying an information need.	Identifies an information need but has difficulty dividing that need into researchable subtopics.	Identifies an information need and demonstrates an ability to divide that need into mostly relevant, researchable subtopics.	Identifies an information need and demonstrates an ability to divide that need into relevant, researchable subtopics.
6.2 Access the Needed Information	Knows how (strategies) and where (information outlets) to search for information.	Accesses information non-strategically and from few relevant information outlets.	Accesses information using simple search strategies and from few relevant information outlets.	Accesses information using sophisticated search strategies and from some relevant information outlets.	Accesses information using effective, well-designed search strategies and from most relevant information outlets.
6.3 Evaluate Information Sources Critically	Uses criteria to select sources that are appropriate to the information need.	Chooses sources using undetermined or inappropriate criteria.	Chooses sources using somewhat appropriate but minimal criteria.	Chooses sources using an appropriate selection of criteria.	Chooses sources using an effective selection of criteria that are most appropriate to the scope of the information need.
6.4 Synthesize Information to Accomplish a Specific Purpose	Represents and synthesizes information from sources completely and objectively to achieve intended purpose.	Represents information from sources but some content is missing, inaccurate, and/or irrelevant to intended purpose	Represents information from sources and content is present, fairly accurate, and relevant to intended purpose. Begins to synthesize information from multiple sources.	Represents information from sources and content is complete, accurate, and relevant to intended purpose. Adequately synthesizes information from multiple sources.	Represents information from sources and content is complete, accurate, and relevant to intended purpose. Fully synthesizes information from multiple sources to generate new ideas and concepts.
6.5 Use Information Ethically	Understands the need for and successful implementation of proper attribution.	Attribution is incomplete or inappropriate.	Attribution is partially complete and mostly appropriate.	Attribution is nearly complete and mostly appropriate.	Attribution is complete and appropriate.
6.6 Access and Use Information Legally	Understands that information access and use have legal implications.	No awareness of the applicable laws, regulations, and institutional policies related to the creation, access, and use of information.	Basic awareness of the applicable laws, regulations, and institutional policies related to the creation, access, and use of information.	Aware of the applicable laws, regulations, and institutional policies related to the creation, access, and use of information.	Aware of the applicable laws, regulations, and institutional policies related to the creation, access, and use of information. Knows how and when to consult additional legal resources.

Adapted from Association of American Colleges & Universities (AAC&U) VALUE rubric [http://www.aacu.org/value-rubrics] on information literacy.

Definitions/Examples

- *Applicable laws, regulations, and institutional policies* - such as copyright, Institutional Review Board (IRB) requirements, proprietary information requirements, complying with institution access requirements, etc.

- *Attribution* - Use of citations and references; distinguishing between common knowledge and ideas requiring attribution. Complete attribution refers to citing all pieces of information that should be cited. Appropriate attribution refers to properly adhering to the conventions of the chosen or assigned citation style (i.e., APA, MLA, IEEE, etc.).

- *Criteria* - Such as relevance to the *information need*, currency, authority, audience, accuracy, quality, bias, point of view, etc.

- *Information* - Content from any *source* outside of one's own knowledge base.

- *Information need* - The thesis, argument, assignment topic, proposition, primary question, research question, or hypothesis which drives the search for *information*.

- *Information outlet* - Collection of *sources* (e.g., library, database, internet search engine, experts in a field, archives, etc.).

- *Researchable subtopics* - Component parts of an *information need* that can be researched individually.
  Example: Information need - Is this building material cost effective? Researchable subtopics: Cost of the material, alternative materials, cost of alternative materials, relevant regulations, potential environmental issues, etc.

- *Search strategies* - An intentional and well-thought out approach to finding relevant information. In the case of database searching, the combination of key terms, phrases, and synonyms derived from researchable subtopics.

  - *Non-strategically* - such as performing only Google searches, using only natural language searches, not refining the strategy based on results and new discoveries, etc.

  - *Simple* - such as relevant keyword and synonym searches, simple Boolean techniques, finding an item given a citation, etc.
    Example: simple Boolean database search - searching for: **buildings AND materials,** as keywords that could be found **anywhere** in the text of an article or a book.

  - *Sophisticated* - such as controlled vocabulary/subject searching, proximity searching, truncation techniques, advanced Boolean techniques, cited reference searching, etc.
    Example: proximity searching - most library databases offer a proximity feature to increase the relevancy of results, for example a search for **solar near/3 energy** in the engineering database Compendex would return results where "solar" and "energy" appear within 3 words.
    Example: truncation techniques - most library databases offer truncation features to expand searches. For example, using the term **flex*** would return articles including flex, flexes, flexible, flexibility, etc. The "*" symbol is the truncation symbol used most often in library database searching.
    Example: advanced Boolean database search - searching for: **(robot* OR autonomous vehicle*) AND underwater**, as terms that could be found in the **abstract** or **title** of an article.

- *Source* - books, journal articles, technical reports, white papers, industry standards, patents, websites, data, interviews, movies, sound recordings, etc.