Information Literacy

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Information Literacy   Research   Misinformation   Information Systems   Source Evaluation

Recent information studies literature defines information literacy as the set of integrated abilities and dispositions encompassing the understanding of how information systems function, the reflective discovery of information, and the use of information in sharing and creating new knowledge so as to participate wisely in a variety of settings. An information literate person will display a critical understanding of how information systems function and will wisely and intentionally participate in those systems as they consume, create, and share information to strengthen and serve professional, religious, family, and civic communities. Various library organizations have developed theories on information literacy, but everyone has a responsibility to learn and teach information literacy skills.

What is Information Literacy?

Information literacy is the set of integrated abilities and dispositions encompassing the understanding of how information systems function, the reflective discovery of information, and the use of information in sharing and creating new knowledge so as to participate wisely in a variety of settings. An information literate person will display a critical understanding of how information systems function and will wisely and intentionally participate in those systems as they consume, create, and share information to strengthen and serve professional, religious, family, and civic communities.

Information Literacy is not a new concept, and its importance is ever-growing in today's information landscape. Information literacy was first introduced by Zurkowski (1974) in a workforce context. Soon, though, the idea was adopted by academia and policy-making organizations. In 1989, the American Library Association (ALA) declared that "to be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information." Although the terminology "information literacy" may not be familiar to all, the concepts are embedded in many disciplines. According to ALA (2000), "[i]nformation literacy forms

the basis for lifelong learning. It is common to all disciplines, to all learning environments, and to all levels of education" (p. 2). Visual literacy, data literacy, science literacy, and media literacy are just a few examples of related concepts that fall under the umbrella of information literacy.

The Association of College & Research Libraries' (ACRL) Information Literacy Competency Standards for Higher Education were released in 2000. These standards state that an the information literate student

- Determines the nature and extent of the information needed.

- Accesses needed information effectively and efficiently.

- Evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system.

- Uses information effectively to accomplish a specific purpose.

- Understands many of the ethical, legal and socio-economic issues surrounding information and information technology (Association of College & Research Libraries, 2000).

These standards approached information literacy as a set of skills, which are easy to assess. Other theories of information literacy, though, approach it as not only a set of skills but a way of thinking and a social practice (Addison & Meyers, 2013; Sample, 2020).

UNESCO's Prague Declaration: Towards an Information Literate Society (2003), described information literacy as "a prerequisite for participating effectively in the Information Society and part of the basic human right of lifelong learning." Information literacy as a social practice includes access to information (including government information) as a human/civil right (Appedu & Hensley, 2022; Flornes, 2017; Henninger, 2017; Sturges & Gastinger, 2010); information as both accessible and discoverable (Henninger, 2017); and to be taught Information Literacies is a Human Right (Appedu & Hensley, 2022; Henninger, 2017; Sturges & Gastinger, 2010).

A competing theory to information literacy is the concept of metaliteracy introduced by Mackey and Jacobson (2011) in their article "Reframing Information Literacy as Metaliteracy." According to the Metaliteracy website, it "is a pedagogical model that empowers learners to be reflective and informed producers of information both individually and in collaboration with others."

In 2015, however, ACRL released a Framework for Information Literacy in Higher Education, which describes threshold concepts, knowledge practices, and dispositions associated with information literacy. The Framework is based on a Delphi Study related to threshold concepts and incorporates some of the concepts of metaliteracy. In fact, Jacobsen was a member of the task force to develop the Framework.

The 6 Frames of the New Framework

Information has value.

- Intellectual property laws and publishing practices affect how people access and use information. Though much information is provided freely, people need to navigate and make informed choices about citations, copyright, and other legal and socioeconomic practices that affect the information they need.

Authority is constructed and contextual.

- Authority is recognized and evaluated differently by various communities, and its level of importance is determined by the information need. People need to be aware of the biases that can influence how authority is perceived and be open to new perspectives.

Searching as strategic exploration.

- Searching for information is an iterative process that requires mental flexibility and evaluation of a range of sources. It begins with a question that directs the search for relevant information and is influenced by cognitive, affective, and social factors.

Research as inquiry.

- Inquiry is a process that involves asking questions and solving problems within or between disciplines that are unresolved. Collaboration and debate are often involved, and the process can extend beyond academia to address personal, professional, or societal needs.

Information creation as a process.

- Information is created through a process that could include researching, editing, and reviewing, which process results in various formats and modes of delivery. People need to recognize how the information they access was created so they can evaluate how well it meets their information need.

Scholarship as conversation.

- Communities of scholars and professionals engage in a discursive practice of research that involves sustained discussion and negotiation of meaning over extended periods of time. Seeking out diverse perspectives is crucial to gaining a deeper understanding of a topic, and attribution to relevant previous research is an essential aspect of participation in the conversation.

Figure 1

Academic Libraries and Technology
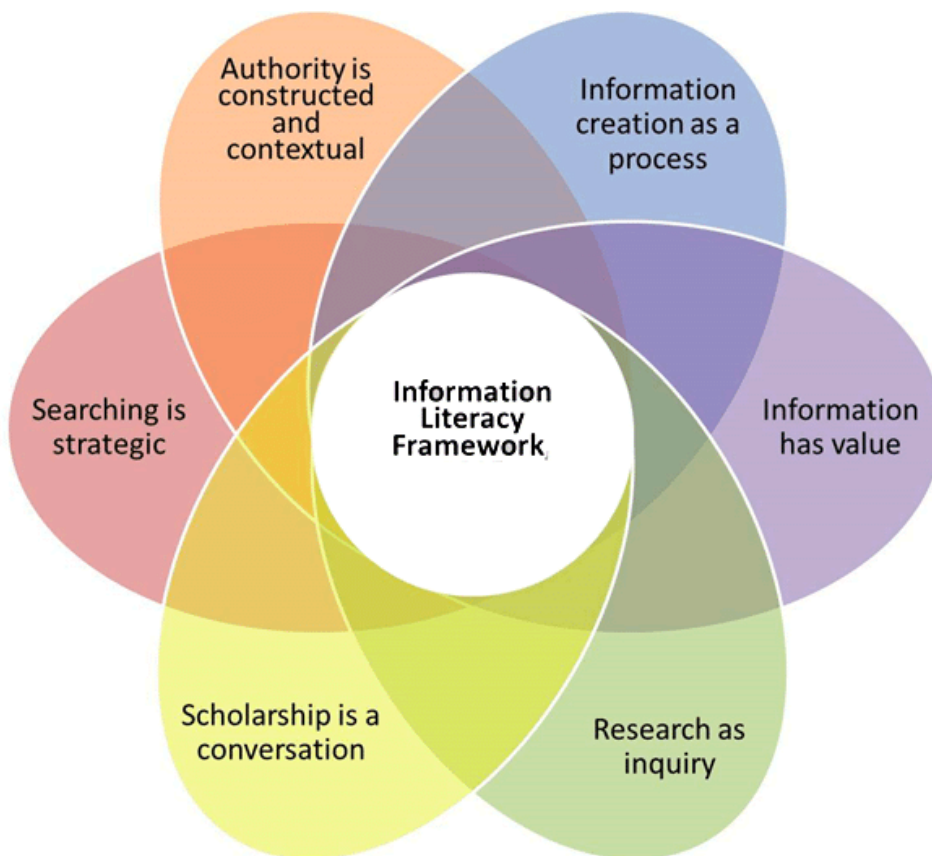
Burress, T., Clark, M., Hernandez, S., & Myhill, N. (2015, June 25-30). *Wikipedia: Teaching Metaliteracy in the Digital Landscape* [Poster session]. ALA Annual Conference & Exhibition, San Francisco, CA, United States. *Li nk*

Many instructors still use the older Information Literacy Competency Standards for Higher Education adopted in 2000. However, ACRL sets the standard for information literacy instruction in higher education, and educators working in K-12 can design their instruction on similar lines to provide learners with consistent concepts related to the Framework for Information Literacy for Higher Education.

Why is it important?

People are immersed in a constantly changing information landscape: AI, "fake news," a "post-truth" world. They often struggle to discern fact from fiction and feel unsure how to navigate the overload of information they face. Information literacy is a discipline dedicated to educating people on the importance of wisely exploring, using, sharing, and creating information. The end goal is to help people become lifelong learners and ethical global citizens.

Who is responsible for teaching information literacy?

Information literacy is not simply the domain of information literacy professionals, such as librarians. Information literacy instruction is the responsibility of educators, librarians, and citizens alike and should be found in libraries, schools, universities, museums, the media, publishers, theaters, and the cinema, among others. In short, everyone has a responsibility to learn and teach information literacy.

What does information literacy instruction look like?

Information literacy instruction can come in many forms, but the curriculum should focus on how to find, evaluate, and use information. The ACRL Framework should guide the instruction content, which could include the SIFT method of

evaluating sources. This method, developed by digital literacy expert Mike Caulfield, involves four steps: **Stop, Investigate the source, Find better coverage, and Trace the information back to a primary source.** To help learners find better coverage, you can teach them how to **read laterally** by reading what other websites say about a source to verify information, identify potential biases, and determine an author's purpose. To help learners trace the information to a primary source, you can teach them how to go upstream by checking the references in a source. On a website, it would mean clicking on embedded links, reading those sources, and clicking on their embedded links until you find a primary source.

Figure 2

The Four Steps: SIFT

Stop   Investigate the source   Find better coverage   Trace claims, quotes and media to the original context
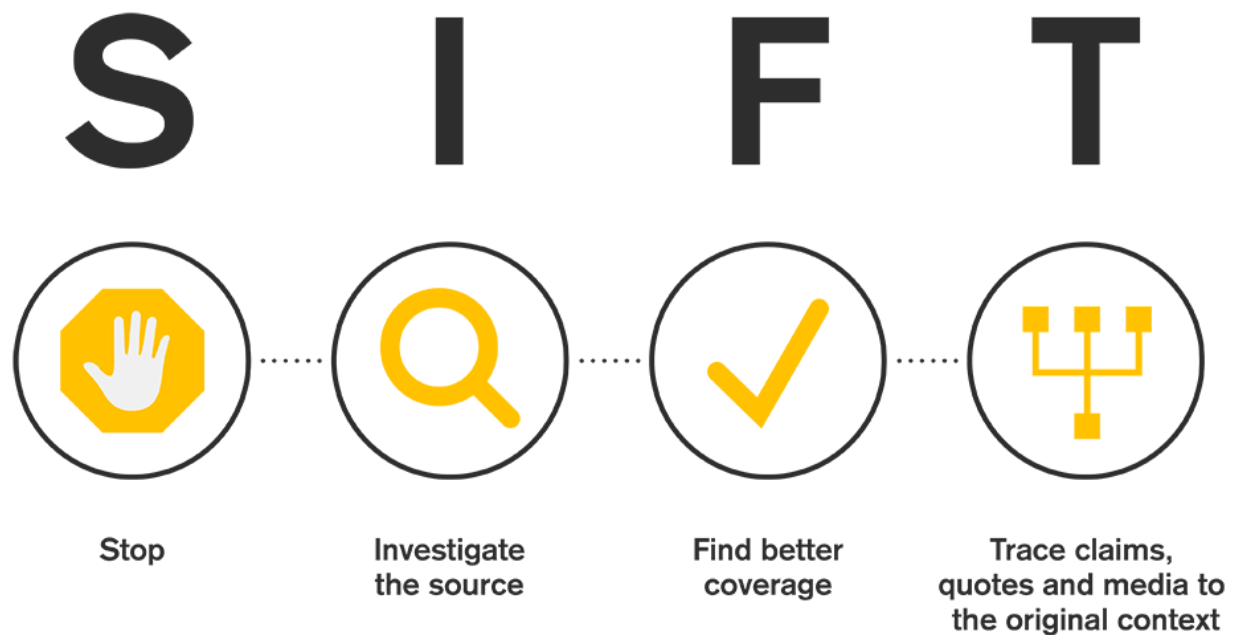
Caulfield, M. (2019). Sift: The Four Moves [Online image]. Hapgood. <u>Link</u>

The SIFT method is more effective than the outdated CRAAP test (currency, relevancy, authority, accuracy, and purpose) that used to be taught as the primary way to evaluate sources. SIFT encourages looking beyond the source to verify and contextualize information.

Key terms to use and define in information literacy instruction

- Misinformation: information that is unintentionally incorrect or out of context
- Disinformation: information that is purposely incorrect or out of context with the intent to deceive
- Primary source: the origin of a piece of information, usually a person's experience or a research study
- Secondary source: text or media that interprets or otherwise refers to another source for information
- Inquiry: investigating something without knowing the answer beforehand
- Iterative searching: repeating actions with tweaks each time to achieve a better result
- Bias: a preference for someone or something, sometimes considered to be unfair

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Related Literacies

Other literacies are also important for navigating the modern world. These literacies include but are not limited to the following.

- Media literacy: the ability to analyze, evaluate, and critically interpret various forms of media content.
- News literacy: the ability to analyze and evaluate news content.
- Visual literacy: the ability to interpret and communicate through visual channels, like charts, graphs, infographics, and videos.
- Data literacy: the ability to navigate the complexities of data presentations by examining data sets, detecting trends, and concluding insights of the data.
- Digital literacy: the ability to evaluate and utilize digital technologies and information systems.
- Science literacy: the ability to understand and evaluate scientific information.
- Civic literacy: the ability and desire to participate in an informed and civil way in one's community and society as a whole.
- AI literacy: This area of research is changing rapidly and discusses the importance for teaching students about how AI works, such as where AI tools get their information, ethical issues surrounding its use, and how to use it effectively.

For more information

- https://www.ala.org/acrl/standards/ilframework

The Framework for Information Literacy for Higher Education contains professional standards for identifying the threshold concepts, knowledge practices, and dispositions of information literate individuals in higher education.

- https://projectinfolit.org/

Project Information Literacy (PIL), a nonprofit research institute, conducts ongoing national studies on information use throughout higher education.

- https://infolit.byu.edu

Brigham Young University's Information Literacy website contains content on learning more about information literacy, as well as resources for teaching and assessing information literacy in the classroom.

- https://ncte.org/statement/nctes-definition-literacy-digital-age/

The National Council of Teachers of English (NCTE) defines literacy in a digital age, with implications for teaching and assessment. This definition focuses on interconnection and adapting to a variety of contexts.

- https://www.sconul.ac.uk/sites/default/files/documents/coremodel.pdf

The SCONUL Seven Pillars of Information Literacy contains the core information literacy standards developed by the Society of College, National and University Libraries in the United Kingdom.

- https://www.cilip.org.uk/news/421972/What-is-information-literacy.htm

CILIP, the UK's library and information association, released an official definition of information literacy in 2018.

- https://adbu.fr/wp-content/uploads/2013/02/Infolit-2nd-edition.pdf

The Australian and New Zealand Information Literacy Framework (ANZIL) was adapted from ALA's standards to fit the cultural and educational needs of Australian and New Zealand librarians, educators, and learners.

- https://umd.instructure.com/courses/1354089

The University of Maryland has put together a guide on understanding AI and Information Literacy.

For teaching support

- https://sandbox.acrl.org/resources
- Sponsored by the American Library Association and the Association of College and Research Libraries, the ACRL Sandbox is a repository of information-literacy materials, lesson plans, and assessment tools.
- https://cor.stanford.edu/

The Civic Online Reasoning curriculum developed by the Stanford History Education Group provides educators with single lesson plans or a full curriculum for teaching information and civic literacy.

- Crash Course - Navigating Digital Information

In partnership with MediaWise, the Poynter Institute, and the Stanford History Education Group, John Green's Crash Course series teaches learners how to navigate the internet using information literacy techniques.