TODD J. WIEBE

# The Information Literacy Imperative in Higher Education

"NOW HE WOULD prowl the stacks of the library at night, pulling books out of a thousand shelves and reading in them like a madman. The thought of these vast stacks of books would drive him mad: the more he read, the less he seemed to know—the greater the number of the books he read, the greater the immense uncountable number of those which he could never read would seem to be."[1] So goes the experience of Eugene Gant, a fictional character based on the author, Thomas Wolfe, himself deep in the stacks of the library at Harvard University. With nary a computer, smart phone, tablet, or pair of those Google cyborg glasses, just seemingly endless stacks of print books, this young man is experiencing some form of information overload, information overstimulation, or infogluttony. He is obviously curious and eager to learn, but completely swirling around in an eddy of information and recorded human knowledge—again, *print* only. Fast forward to 2015. Today, this sort of information-induced "madness" would look very different. It could be achieved anywhere with a Wi-Fi connection or access to mobile data, and its cause would be quantified in exabytes, not volumes.

**Information Literacy is a liberal art**

### Googling vs. researching

While libraries and their vast unique collections, both print and online, still hold a critical place in the modern information landscape, certainly within academia and higher education, students today, and most everyone, really, find what they need—usually a satisfactory "answer" to something—somewhere else. Ah yes, even I am "Googling" stuff all day long. It is not my intention to deliver a message of doom and gloom, or to say that the Internet is turning us all into simpletons (although many have told us it is),[2] because again, for most of my own day-to-day information needs you can be sure, I'm Googling it. It is important, however, not to conflate "Googling it" and finding a bunch of stuff—often some pretty good (or good *enough*) stuff—with using the Internet to really do research.

When you "Google it," you are engaged in an information snatch and grab—get in, get out, move on. Folks who work in web design and Internet marketing are well versed in search engine optimization and the critical importance of having a link appear on the first page of someone's search results. A study done by Chitika, a major online advertising network, found that over 70 percent of Google search "clicks" go to the top three results. Over 90 percent click only on the first page (results 1–10), and the likelihood of someone clicking on the first result on the *second* page drops 140 percent from that of the last result on the *first* page.[3] One might argue that our tendency to look only so deep is like a natural defense mechanism against information overload in the online environment. And what's wrong with this? This approach to search usually is plenty sufficient and, well, extremely *efficient*. It becomes a problem, however, when students rely on this

TODD J. WIEBE *is librarian with rank of associate professor and head of research and instruction at the Van Wylen Library at Hope College.*

tried and true tactic in pursuit of answers to more complex and nuanced questions—non-trivia-type questions, if you will. And I'm not talking about Google versus the library; I'm talking about "Googling it" (now speaking metaphorically for "convenience searching," *wherever* it is you are looking) as opposed to really searching—digging, locating, uncovering, reading, evaluating, synthesizing, perhaps spinning off into an unexpected tangent, and then recalibrating, asking for help, searching again *in a different place* (a novel idea, right?).

In other words, I'm talking about "Googling" versus *researching* and, all the while, knowing what, in fact, each piece of information is that you are looking at and whether or when and why and how you would want or need to use it—on the open web or in a library, *or both*! To do this well, "information literacy," or, as it is now sometimes called, "information fluency," is of the essence. More on that later.

**Information literacy is more than just a contrived educational buzzword librarians like to use for "how to search the library" or "beware of Wikipedia"**

Our students are born into and only know this age of ubiquitous and seemingly infinite information (in terms of both sheer quantity and accessibility). They are no doubt slick and fluid users and avid contributors—or, often in the case of social media, "sharers"—of information via their personal devices and within their carefully curated or customized microcosms. This customization is done, in part, by them, but largely by a "big data" algorithm deciding—*calculating*—what it is they want to see. In fact, so much information comes to us today not as the result of a search we initiate, but through a feed that just keeps coming, showing us the things we might be interested in—our own personalized echo chamber or periscope for the information that fits our online profiles, and I'm not just talking about ads. As former Google CEO Eric Schmidt predicted, soon "it will be very hard for people to watch or consume something that has not in some sense been tailored for them."[4]

All of this creates an illusory comfort within vast pools of information and a sense that "finding stuff is easy." But this fluidity within the "familiar" simply does not carry over into situations requiring serious inquiry and deep investigation using a variety of source types and mediums (i.e., the "unfamiliar"). Several illuminating studies, not to mention years and years of anecdotal evidence that any librarian would be more than happy to tell you about, confirm that this gap, and students' inflated sense of their own information literacy acumen, exists.

When students either discover for themselves or are straight out told that a particular assignment is going to require a very specific type or types of information (not just something that sounds good and seems to be from a "credible" source), their old system crashes. The very linear and dualistic "search-find" process just doesn't cut it. And when they begin to look beyond their circumscribed safe zone, whether or not they are as insatiably hungry to find and devour everything in sight like Eugene Gant in the Harvard Library stacks, they find themselves in a similarly dizzying deluge of strange new information options, a phenomenon that predates the Internet and online libraries.

There is so much great information hiding behind that first page of search results. But why go there? What is there? What to do with it?

This is where information literacy comes into play.

### Information literacy as a liberal art

The most recent definition provided by the Association of College and Research Libraries (ACRL), a major torchbearer for information literacy in higher education, reads as follows: "Information literacy is the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning."[5] This really is just a start, and still rather nebulous, but you can begin to see from it that information literacy is more than just a contrived educational buzzword librarians like to use for "how to search the library" or "beware of Wikipedia."

Information literacy draws on a repertoire of critical inquiry skills. It involves knowing that there are different types of information, each with its own origin, purpose, and place along the information spectrum; knowing how to navigate through a variety of information environments, and why you'd want to do so; and habitually evaluating, questioning, and verifying what you find. Information literacy also involves understanding that there is no one perfect source to be coupled with each new

question; being mindful about appropriately and ethically incorporating someone else's information or intellectual property into the new information that *you* create; knowing that a book isn't inherently a good source just because it's "a book" and that the content of a website is not, by definition, subpar because it is freely available online; and understanding that the format or medium in which information is presented does not define its quality or appropriateness. Most important, it is about acknowledging that *efficiency* is not always the primary goal in gathering information, and that the act of "searching" is not the subordinate, lower-order operation or activity it is often reduced to. Indeed, an interactive and vigorous information-seeking process may be described as one that is "nonlinear, dynamic, holistic, and flowing."[6]

In their seminal article, "Information Literacy as a Liberal Art" (think about that for a minute), Jeremy Shapiro and Shelley Hughes assert that, as information becomes more accessible and omnipresent, "information literacy should in fact be conceived more broadly as a new liberal art . . . as essential to the mental framework of the educated information-age citizen as the trivium of basic liberal arts (grammar, logic and rhetoric) was to the educated person in medieval society."[7] Coincidentally, this was proposed in 1996, the same year that Google founders Larry Page and Sergey Brin began work on what was then a groundbreaking doctoral project at Stanford. Indeed, well before the immensely consequential Google revolution, claims like this were being made about the need for information literacy education. Forty years earlier, Patricia Knapp of Wayne State University wrote that "competence in the use of the library is one of the liberal arts. It deserves recognition and acceptance as such in the college curriculum. It is, furthermore, a complex of knowledge, skills, and attitudes not to be acquired in any one course but functionally related to the content of many. It should, therefore, be integrated into the total curriculum."[8] Replace "the use of the library" with "information literacy" and there you have encapsulated a good part of what contemporary academic librarians tirelessly advocate for.

Information literacy is a liberal art. Naturally, I embrace such a notion, and do not see it as being too high flown. At the philosophical level, librarians believe that information literacy is a fundamental part of students' broader skill set that will help them be effective and responsible users and creators of information, both in college and beyond. An education in information literacy aims to empower students to use critical inquiry skills wherever they are. Most of them, in four years, will not be on a college or university campus. When taught as it should be, information literacy, like other "meta" skills, becomes portable—a habit of the mind that goes places.

Hope College

Hope College

The University of Washington's Project Information Literacy is an ongoing national study of college students, from their first year to postgraduation.[9] During a recent phase of the study that focused on graduates, the investigators also interviewed twenty-three leading employers, asking questions about their expectations of recent college graduates upon being hired. Nearly all of the employers said they expected job candidates, whatever their fields, to be able to search online—a given for a generation born into the Internet world. But they also expected prospective hires to be patient and persistent researchers and to be able to retrieve information in a variety of formats, identify patterns within an array of sources, and dive deeply into source material.[10]

**I encourage you to have a conversation with the librarians on your campus**

Unfortunately, however, employers reported that new hires typically "default to quick answers plucked from the Internet," a strategy that may work for "looking up a definition or updating a fact, but for many tasks, it proved superficial and incomplete."[11] In 2013, the Association of American Colleges and Universities (AAC&U) published a report on its own survey of employers, which found that 72 percent of them believe that colleges and universities should place greater emphasis on the "location, organization, and evaluation of information from multiple sources."[12] In both of these cases, although they did not specifically name it as such, employers were talking about information literacy.

### Information literacy across the curriculum

Several years ago, as part of its Valid Assessment of Learning in Undergraduate Education (VALUE) project, AAC&U released the Information Literacy VALUE Rubric, which is specifically intended to gauge students' work in this area.[13] The rubric's scale covers five broad constructs of information literacy, ranging from "Benchmark" to "Capstone." As a tool, the rubric was designed to work best with a collection of student work, emphasizing information literacy as a holistic, as opposed to task-specific, practice and disposition. Indeed, just as information literacy cannot be demonstrated by a student in a single piece of work, the spectrum of skills that comprise it cannot be taught in a library session or two interspersed throughout the undergraduate experience. These "single serving" lessons are often assignment driven and time sensitive. Moreover, this model of library or "bibliographic" instruction is "inherently reactive, limited, and constrained," able only to achieve "the limited goal of addressing episodic or occasional learning about scholarly or other information."[14]

This is most certainly the case where I work and have been recently intensifying my advocacy for a more structured and officially recognized information literacy component. In recent semesters, a select handful of faculty have been building sequenced, librarian-led, information literacy modules into their courses. These are co-planned and aligned with specific course objectives, but also allow the time and space to explore broader—portable—information literacy concepts. Such will, ideally, become the model for embedding information literacy into both general education and upper-level courses in the disciplines.

What does information literacy looks like within the context of your classes, your discipline, your institution's broader curricular objectives? What are the chronic deficiencies you see in your students, and how might it help to add a more robust and proactive information literacy component to the curriculum? Are students relying on the go-to skills they came with, or are they being intentionally stretched and challenged to develop new search habits and avenues for obtaining and evaluating information? Are they learning to think *about* information, or are they just finding some? Echoing Knapp's sentiments, the ACRL tells it like it is: "Achieving competency in information literacy requires an understanding that this cluster of abilities is not extraneous to the curriculum but is woven into the curriculum's content, structure, and sequence."[15]

I encourage you to have a conversation with the librarians on your campus, many of whom are sure to have their own unique pedagogical

goals and aspirations for the curriculum. Academic librarians with teaching/instruction responsibilities, while always willing to help students with specific point-of-need information requests, first and foremost see themselves as educators, and are eager to expand that role by raising the standard of information literacy education in higher education.

To resolve that liberal education is a "course of study designed to prepare students for complexity, diversity, and change" is to understand the realities of the world our students will inhabit.[16] The ever-evolving network of varied media and content that make up our modern information environment is, and will be, no small part of this. Equipping students with the requisite "literacies" is a must. *Information* literacy, then, is learning for life. □

*To respond to this article, e-mail liberaled@aacu.org, with the author's name on the subject line.*

NOTES

1. Thomas Wolfe, *Of Time and the River: A Legend of Man's Hunger in His Youth* (New York: Charles Scribner's Sons, 1935), 91.

2. For a popular overview of this discourse, see Nicholas Carr, "Is Google Making Us Stupid?," *The Atlantic*, July 1, 2008, http://www.theatlantic.com/magazine/archive/2008/07/is-google-making-us-stupid/306868.

3. Chitika, "The Value of Google Result Positioning," June 7, 2013, https://chitika.com/google-positioning-value.

4. Holman W. Jenkins, Jr., "Google and the Search for the Future," *The Wall Street Journal*, August 14, 2010, http://www.wsj.com/articles/SB10001424052748704901104575423294099527212.

5. Association of College and Research Libraries, "Framework for Information Literacy for Higher Education," February 2, 2015, http://www.ala.org/acrl/standards/ilframework.

6. Allan Foster, "A Nonlinear Model of Information-Seeking Behavior," *Journal of the Association for Information Science and Technology* 55, no. 3 (2003): 228.

7. Jeremy J. Shapiro and Shelley K. Hughes, "Information Literacy as a Liberal Art: Enlightening Proposals for a New Curriculum," *Educom Review* 31, no. 6 (1996), https://net.educause.edu/apps/er/review/reviewarticles/31231.html.

8. Patricia B. Knapp, "A Suggested Program of College Instruction in the Use of the Library," *Library Quarterly* 26, no. 3 (1956): 230.

9. For information about Project Information Literacy, see http://projectinfolit.org/about.

10. Alison J. Head and John Wihbey, "At Sea in a Deluge of Data," *Chronicle of Higher Education*, July 17, 2014, http://chronicle.com/article/At-Sea-in-a-Deluge-of-Data/147477. See also Alison J. Head, *Learning Curve: How College Graduates Solve Information Problems Once They Join the Workplace, Project Information Literacy Research Report* (Seattle, WA: University of Washington, 2012), http://projectinfolit.org/images/pdfs/pil_fall2012_workplacestudy_fullreport_revised.pdf.

11. Ibid.

12. Hart Research Associates, *It Takes More than a Major: Employer Priorities for College Learning and Student Success* (Washington, DC: Association of American Colleges and Universities, 2013), 8.

13. Association of American Colleges and Universities, "Information Literacy VALUE Rubric," http://www.aacu.org/value/rubrics/information-literacy.

14. Craig Gibson, "The History of Information Literacy," in *Information Literacy Instruction Handbook*, ed. Christopher N. Cox and Elizabeth Blakesley Lindsay (Chicago: Association of College and Research Libraries, 2008), 12.

15. Association of College and Research Libraries, "Information Literacy Competency Standards for Higher Education," January 18, 2000, http://www.ala.org/acrl/standards/informationliteracycompetency.

16. As defined in Paul L. Gaston, *General Education Transformed: How We Can, Why We Must* (Washington, DC: Association of American Colleges and Universities, 2015), 4.