

Across the Disciplines: Strategies for Teaching Cyber-Savvy

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The Web—An Information Source

The growth of the World Wide Web as an information resource is pervasive, both in and out of the academic world. Google and Wikipedia have become 21st-century reference portals and the ease of posting material on the web has led to a dizzying array of “sources” of widely disparate quality and usefulness. Like it or not, the web is usually the first stop for students—regardless of discipline—or consumers looking for information.

But...

While the amount of information available online continues to grow, students’ and others’ ability to critically assess those sources has lagged behind. Novice information users are often encouraged to use checklists or rubrics to judge the “accuracy” or “reliability” of a website and its contents even though those checklists often provide misleading results or fail to take the students to the next step: evaluation and conclusion.

The Q6C Solution

The Q6C approach provides instructors with guidelines on constructing and integrating web assignments that give students a process that allows them to become more thoughtful online information consumers—to become cyber-savvy.

Drawing on interdisciplinary research studies, our solution offers a holistic approach to online information analysis that takes learners beyond the checklist and through a process—the Q6C process—that shows how to critically approach most online information in a way that will be useful in their coursework and, importantly, long after they earn their degree.

The Problems with Checklists

AUTHORSHIP

- Is there an author?
- Can you tell whether the author is knowledgeable and credible?

Authorship of a website can be complex (single, multiple, corporate, single-sourced, public, or unrestricted).

SPONSORSHIP

- Who, if anyone, sponsors the site?
- What does the URL tell you? The URL ending often specifies the type of group hosting the site: .com, .edu, .org, .gov, .net, .mil, .uk, etc.

Encourages the use of superficial qualifications, such as degrees (M.D., Ph.D.), to determine credibility.

Leads students to assume that sponsorship (and its biases) is transparent.

PURPOSE & AUDIENCE

- Why was the site created: To argue a position? To sell a product? To inform readers?
- Who is the site’s intended audience?

Not all domains are regulated and can be unreliable for determining sponsorship.

This list limits, rather than broadens, the possible (multiple) purposes of a site.

CURRENCY

- How current is the site?
- How current are the site’s links? If many of the links no longer work, the site may be too dated for your purposes.

May be multiple and not self-evident to students.

How current a site needs to be will vary by the type of site.

REF: Hacker, Diane. *A Pocket Style Manual*. 5th ed. Boston: Bedford/St. Martin’s, 2008. ISBN: 0-312-45275-6.

Q6C—A Process for Critically Approaching Online Resources

Question

- Maintain a skeptical frame of mind.
- Ask questions about a source you are considering for *your* research.

Categorize

- Is this a primary, secondary or tertiary source in the context of *your* research?
- What type of site is it? (blog, wiki, database, website, etc.)

Characterize Authorship

- Identify who created the content. Single or multiple authors? Committee? Institution? Community? Critic? Expert? Anonymous? Unknown? Other?

Critique Rhetorically

- What do the authors’ choice of words, tone, font, display format, images, genre, and argumentative strategies tell you about the intended audience and the credibility and reliability of this site?

Contextualize

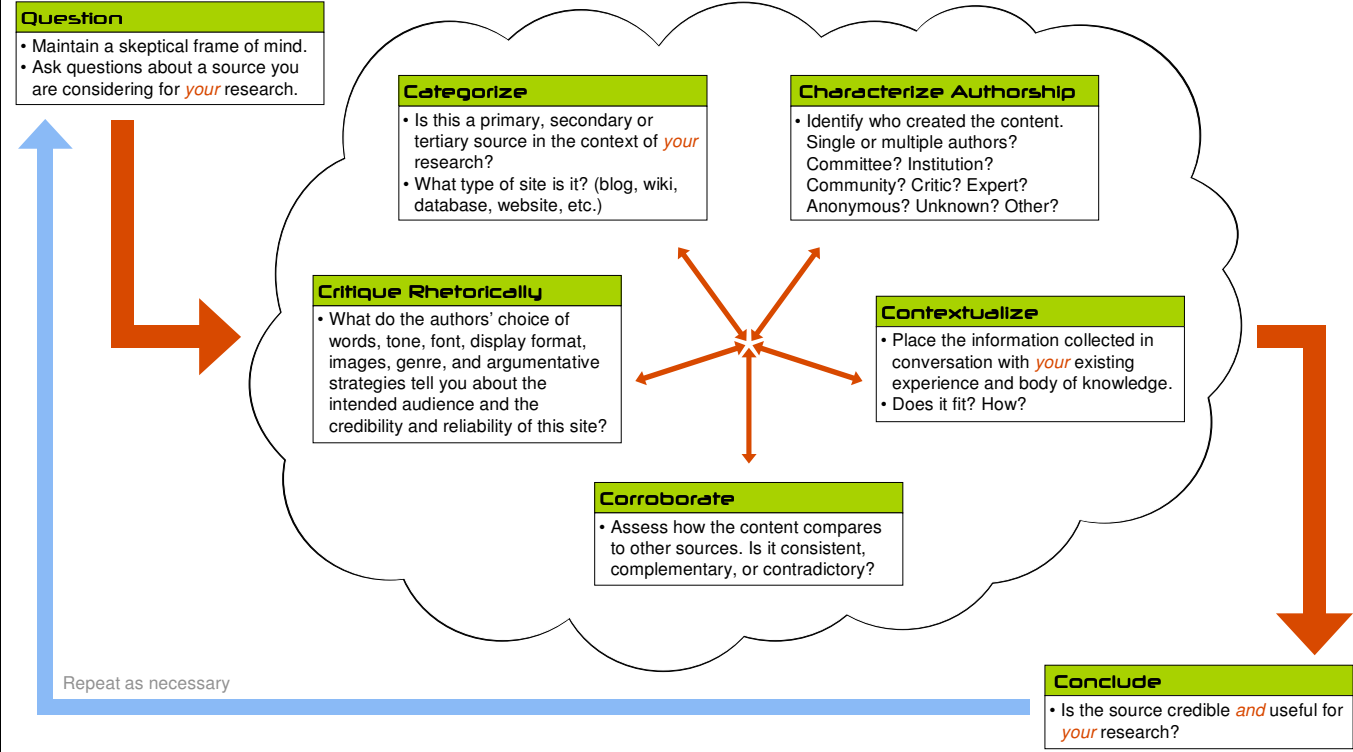
- Place the information collected in conversation with *your* existing experience and body of knowledge.
- Does it fit? How?

Corroborate

- Assess how the content compares to other sources. Is it consistent, complementary, or contradictory?

Conclude

- Is the source credible *and* useful for *your* research?



Instructor Guidelines for Designing Assignments Using Q6C

1. Maintain authenticity to increase student investment: Construct an assignment that engages students in an “authentic” research experience.
 - Are students learning how to research like a professional in your discipline?
 - What is the research scenario? What is the students’ role?
 - Is the research topic assigned or chosen by the student?
2. Scaffold the research process so that students learn new skills incrementally.
 - Present research as a process, not a product.
 - What are the steps to research in your discipline?
 - How will students gain general knowledge and then expert knowledge about the topic?
 - What resources will you provide to get students started? How far do students have to go on their own?
3. Make explicit the outcomes of the assignment: Move students to the meta-cognitive level.
 - What are the disciplinary aspects of the research process that students will engage in? Are they explicit?
 - What is the transferable knowledge that students will gain from this assignment? Is this knowledge identified?

Examples of Assignments Incorporating Q6C

English Composition with Service Learning
As part of the course’s focus on homelessness in King County, your first major assignment is to prepare a researched essay that will cite open web sources. Rather than give you the criteria by which to critically evaluate an open web source, this exercise will prompt you to generate your own criteria through experience. Find answers to the following questions on the web and be prepared to share your experience.

American History
Imagine preparing a last-minute college-level lesson plan that requires you to do some quick online research on the Spanish-American War. You find two good websites but—assessing them on their bias, accuracy, and credibility—you must choose which one is the better site for your purposes. Using Q6C, evaluate both sites, decide which is better, and prepare a report on your findings.

Software Engineering
For a large software development project, evaluate and choose a third-party software kit (SDK) to handle the online database front-end for your product. You need to check that the software will be compatible and meet the project’s requirements. Additionally, you should consider issues of developer support, user communities, and customer opinions of the software.