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 lead 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 Q&C solution
The Q&C 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 Q&C 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?

Sponsorship
- Who, if anyone, sponsors the site?
- What does the URL tell you?

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?

Currency
- How current is the site?
- How current are the site’s links?

Instructor Guidelines for Designing Assignments Using Q&C
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 Q&C
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 throughout the writing process. 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 Q&C, 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.

For more information: http://students.washington.edu/pedagogy/  E-mail: wrighttm@u.washington.edu, deibel@u.washington.edu, reads@u.washington.edu