

DEVELOPING INFORMATION LITERACY THROUGH STRUCTURED INTERNET RESEARCH

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ABSTRACT

Faculty members often express frustration with students who inappropriately rely on Internet information. Because students are motivated by a desire for rapid, readily summarized information, they often rely on the first sources obtained through a search engine. The issue is whether students can distinguish the quality of the information they obtain—the skill known as information literacy. This paper provides a background on information literacy, discusses criteria for evaluating information and provides examples of course assignments that focus student research on particular Internet sources rather than popular search engines. The results of such assignments not only provide discipline-content information, but also develop information literacy skills that students can take into the workplace.

Background on Information Literacy

In 1989, the American Library Association (ALA) issued its final report on information literacy written by a group of leaders from education and librarianship. The report [2] notes the enormous impact of the information explosion and examines the importance of information literacy to student achievement and the conduct of business. Information literacy means that individuals not only recognize when information is needed, but they also “have the ability to locate, evaluate, and use effectively the needed information.” Since that time, there has been a growing movement to better understand the need for information literacy as it relates to specific disciplines. After monitoring the decade subsequent to the original report, the ALA issued a follow-up report noting the progress that had been made in the area but further finding that the enormous investment in computers and networks can only realize its full potential when the workforce has strong information literacy skills [3].

Since information and resources are now dispersed beyond the walls of libraries, there is no longer the control that occurs with materials that are drawn from sources with a review and editorial process. This can lead to inaccurate or incomplete information, such as that documented in the journal *Cancer* by researchers who studied 371 web sites and found cases of clearly erroneous information and information that was outdated or misleading [4]. In a survey of undergraduates conducted by the National Center for Postsecondary Improvement, “less than half (48 percent) feel confident in their ability to find information—essentially, in the skills needed to research a topic” [5, p.29].

Methods for Evaluating Information

In January 2000, Information Literacy Competency Standards for Higher Education along with specific Performance Indicators, and desired Outcomes were formally approved by the Board of Directors of the Association of College and Research Libraries [6]. Endorsements of these standards were made by the American Association for Higher Education in October 1999 and the Council of Independent Colleges in February 2004. The five standards require the information literate student to: (1) determine the nature and extent of the information needed, (2) access needed information effectively and efficiently, (3) summarize the main ideas to be extracted from the information gathered, (4) individually or as a

member of a group, use information effectively to accomplish a specific purpose, and (5) understand many of the economic, legal, and social issues surrounding the use of information and access and use information ethically and legally.

How can information literacy skills be developed so that these standards are met? When faced with various sources of information students need an evaluation model to apply to the material. One five-step model, commonly used by librarians to evaluate resources and adapted for Internet webpage evaluations, requires the user to assess accuracy, authority, objectivity, currency, and coverage [1]. Accuracy refers to the ability to verify the information that is presented, authority refers to the characteristics of the information provider, objectivity refers to the potential for bias, currency refers to the evidence of timeliness, and coverage considers the completeness of the information. One website [1] contains a number of web evaluation materials which can be printed and distributed for educational purposes.

Developing Internet Research Assignments

Web-based assignments designed to cover particular business topics can also teach information literacy skills. Kamhi-Stein and Stein [7] propose that collaboration on curriculum development between librarians and discipline faculty is important since “information competence instruction needs to be an essential part of any course requiring a written research paper assignment.” They encourage faculty to (1) list the most important databases in their discipline on their course syllabi, (2) list course-relevant Web sites on their course syllabi, (3) provide their students with sample searches and descriptors based on their writing assignments, and (4) design a multi-step writing assignment. Using this approach, two examples of assignments follow.

Labor Union Assignment. The objective of this structured assignment is to gain an understanding of labor unions in the United States. Students first prepare a paper with a brief history of labor unions including a description of the various organizations involved in union related matters. In the second step, students prepare an assessment of the current status of unions and include one example of a strike that occurred within the past year providing a description of the issues involved and their resolution. Students would be given the following sources: www.aflcio.com the American Federation of Labor-Congress of Industrial Organizations; www.teamster.org The International Brotherhood of Teamsters; www.nlr.gov National Labor Relations Board; www.nrtw.org National Right to Work Legal Defense Foundation, and <http://www.right-to-work.org/> the National Right to Work Committee. In this set of five sites, there are two labor unions, a government agency that enforces the National Labor Relations Act conducting elections to determine if employees want to have representation by unions and investigating unfair labor practices by both employers and unions, and two organizations that oppose labor unions and compulsory unionism. The diversity of perspectives on labor union topics develops critical thinking and literacy skills as students analyze and combine this information.

Securities and Exchange Commission (SEC) Assignments. The SEC, www.sec.gov, site has much valuable information. The depth and breadth of the material can provide an instructor with numerous assignments that can focus on a particular company or cover number of broader issues. For beginning students, a reading assignment of the link “What We Do” www.sec.gov/about/whatwedo.html tells of the creation and history of the SEC, while also providing an overview of the laws that oversee the securities industry. An early understanding of the SEC can provide a student with a richer understanding of the requirements imposed on registered corporations

A more advanced assignment for business students is to research selected Litigation Releases that describe fraud activities and charges brought against corporate officers. Such assignments can provide a basis for a rich discussion exploring the legal and ethical aspects of business operations. For example, students can be asked to find an example to present in class of a settlement and/or enforcement action that the SEC has taken against particular companies and/or executives. Students first can be provided with an example of a case to read and further research. For example, "The SEC reached a settlement with Arthur Andersen (formerly a large public accounting firm), regarding Waste Management (Litigation Release No. 17039, June 19, 2001) and there also was an Enforcement Release No. 1532 (Litigation Release No. 17435, March 26, 2002) that was made with Waste Management executives. Read these items and determine if any other announcements and actions have occurred." A thorough search by students will determine that other actions have occurred, most recently Litigation Release No. 18913, September 30, 2004, entitled "Former Vice President of Waste Management, Inc. Sued for Massive Earnings Management Fraud Settles SEC Action." Such an assignment demonstrates the time involved with investigation and resolution of securities issues, and shows the power of using direct sources to determine the status of cases rather than using searches of popular press reports.

CONCLUSION

Being able to access, evaluate and use information efficiently and effectively is a skill needed to function in our rapidly changing business environment. Students who learn how to gain knowledge will be more valuable employees and better prepared for our rapidly changing workplace.

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