DEVELOPING AND ASSESSING STUDENT INFORMATION LITERACY COMPETENCY

Marian W. Boscia
King's College
MarianBoscia@kings.edu

Michele M. McGowan
King's College
MicheleMcGowan@kings.edu

ABSTRACT

Business professionals work in a dynamic environment in which research, new technologies, and experience all contribute to the evolving nature of their knowledge. These professionals must be competent to access new information, evaluate the source of this information for suitability and credibility, and be familiar with the many resources available to search for information. American Library Association defines information literacy as the set of skills needed to acquire, evaluate, and use information [American Library Association, 2006a]. It is essential for business students to develop sound information literacy competencies. This paper present a group exercise designed to develop and assess students' ability to acquire information from a variety of sources and to make judgments about the usefulness of the sources and the information acquired.

INTRODUCTION

The Association to Advance Collegiate Schools of Business (AACSB) assurance of Learning Standard No. 15: Management of Curricula requires that business schools use a "well documented, systematic processes to develop, monitor, evaluate, and revise the substance and delivery of the curricula of degree programs and to assess the impact of the curricula on learning" [AACSB International, 2008, p. 15]. This standard further lists general knowledge and skill areas to be included in curriculum that include communication, analytic, information technology usage, and reflective thinking skill. ABSEL members have always been committed to helping students develop these skills by providing them with opportunities to explore management decision-making through simulation and experiential learning. This paper expands on information-literacy work by ABSEL researcher Vik (2006), which described a web-based module which provided students with a framework for gathering sources for research papers.

An important aspect of a manager's decision process is the collecting, sifting, and evaluating of the information upon which they will base their decision. Good managers will draw information from a variety of sources, maintaining a network to facilitate the flow of information. In contrast, poor managers limit their intake of information and the span of their sources [Watson, 1994; Mutch, 1999]. As educators, ABSEL members need to prepare their students for life-long participation in an information literate society [Hinchliffe, 2002]. This exercise is designed to provide students with an information-gathering experience in which they will access information from a variety of sources and make judgments about the quality of the information and the network providing it.

The American Library Association in association with the Association of College and Research Libraries approved a set of information literacy standards on January 18, 2000, at the Midwinter Meeting of the American Library Association in San Antonio, Texas. These standards have been endorsed by American Association for Higher Education and the Council of Independent Colleges. The standards describe an information literate individual as a person who has the ability to:

- "Determine the extent of information needed
- Access the needed information effectively and efficiently
- Evaluate information and its sources critically
- Incorporate selected information into one's knowledge base
- Use information effectively to accomplish a specific purpose
- Understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally." [American Library Association, 2000, p. 2-3].

THE EXERCISE

PURPOSE AND OBJECTIVES

American Library Association, with over 65,000 members, has established well recognized standards for information literacy. According to Standard 2, an information literate student should be able to access information effectively and efficiently (American Library Association, 2006c). The outcomes to be assessed under this standard include:

A. Identifies appropriate investigative methods (e.g., laboratory experiment, simulation, fieldwork).
B. Investigates benefits and applicability of various investigative methods.

C. Investigates the scope, content, and organization of information retrieval systems.

D. Selects efficient and effective approaches for accessing the information needed from the investigative method or information retrieval system. (American Library Association, 2006c).

For schools that are accredited by the AACSB, outcomes assessment has become an important part of "Assurance of Learning" programs. Presented below is an experiential exercise that can produce these outcomes for assessing information literacy in any upper-level business course. An example of this project that can be readily adapted to any discipline is contained in Appendix A.

This exercise serves two primary purposes. First, it is designed as an experience that can increase students' information literacy. Second, the report prepared by students as a requirement of this exercise can be used to assess each student's level of information literacy. To improve and standardize students' research reports, a set of guidelines, such as those provided in Appendix B may be included with the assignment. The learning objectives of this exercise are as follows:

1. Students will compare quantity of information available from library versus internet resources.
2. Students evaluate the quality of information provided by library resources versus internet resources.
3. Students will analyze the relevance, reliability, and usefulness of a variety of information search techniques.
4. Students gain experience working with their colleagues on a team basis to gather and coordinate information.
5. Students will summarize and organize their findings from a variety of sources.
6. Students will practice writing skills by writing a research report (optional).

Assessment has become intrinsic to the instruction processes in most educational settings. The assessment objectives of this exercise are as follows:

1. To assess students' ability to find and gather information.
2. To assess students' critical thinking skills by analyzing, evaluating, and comparing information sources.
3. To assess students' familiarity with the relevance, validity, and usefulness of a variety of internet search engines.
4. To assess students' ability to work effectively with their colleagues.
5. To assess students' skill in writing communication based on their ability to summarize information gathered from a variety of sources.

THE EXERCISE

A generic example of this information literacy exercise is presented in Appendix A. In its introduction, this exercise establishes the scenario that the student is part of a collaborative, professional team that has been asked to provide information on a specific topic for their firm. They must organize their findings and report the results to their colleagues and client. Examples of where students might be asked to collaborate on a project that requires information literacy include: 1. preparing a consulting report for an advisory services client; 2. working with a group of a client's employees on a project involving an tax, audit,

marketing, operations, human resource, or finance issue; and 3. researching an issue for a team of colleagues.

This project is a meta-research activity that is designed to help students identify useful sources of information in their subject area. In addition, this exercise is designed to help students develop and test information search strategies that can help them to be efficient and effective researchers in a work environment. By asking students to use multiple methods to access information from a variety of sources, including data bases, visiting the library stacks, and at a variety of Internet search engines, they will have a greater knowledge of the landscape of the available information. Further, students are asked to evaluate the nature and quality of the information provided by each type of source. This can help students be more discerning in their future information searches.

Because written communication is so important in work situation, this project contains guidance for developing a project on their information search. This report can be used as a basis for judging the information literacy of students. The report requires a brief description of the issue addressed by the information search. Next, students are asked to give complete citation for a specified number of resources (the authors suggest 15 citation for a minimum score). These sources should be selected from a variety of categories, including at least one from the most important resource for a subject area, such as the Financial Accounting Standards Board for an accounting class or the Securities and Exchange Commission for an investments course in finance. Nine resource categories are suggested, including articles from published journals or from online journals, newspaper articles, books, and internet sites provided by business professionals and those supported by governmental or educational institutions. In addition, the assignment could be expanded to require the use of a variety of popular search engines such as AOL Search, Ask.com, Google, Lycos.com, Live Search from Microsoft, or Yahoo! Web Search.

RESEARCH REPORT STYLES

The research report, that is the "deliverable" of this project, requires complete citations plus a print-out or photocopy of the first page only for citation. As part of an information literacy evaluation, it is important that students can cite sources following one of the major style manuals. Listed below are five choices plus a link for citations from electronic references in the APA style.

1. American Psychological Association: APA Style
   ○ Source: Purdue University
   ○ Web address: http://owl.english.purdue.edu/owl/resource/560/01/.
2. American Psychological Association: APA Electronic Reference Formats
   ○ Source: Purdue University
   ○ Web address: http://www.apa.org/journals/webref.html.
3. University of Chicago Press: The Chicago Manual of Style
   ○ Source: University of Chicago
   ○ http://www.chicagomanualofstyle.org/home.html
4. Modern Language Association: MLA Style
   ○ Source: Purdue University
   ○ Web address: http://owl.english.purdue.edu/handouts/research/r_mla.html" style

5. AMA Style Guide
   ○ Source: HealthLinks: University of Washington
   ○ Web   address: http://healthlinks.washington.edu/hsl/styleguides/ama.html
6. Turabian Style
   ○ Source: University of Wisconsin – Whitewater
   ○ Web   address: http://library.uww.edu/GUIDES/turacite.htm

COMPLETING THE PROJECT

The second part of the research report to be complied after completing the research phase requires that students reflect on their research process. It is this reflection that makes this a meta-research project. Students answer questions pertaining to the successfulness of their search strategy and the usefulness and credibility of their search results. They are also asked to rate categories of resources, distinguishing between those that were the more useful and those that were of the least useful. They are also asked to make a comparison of the quality of the resources found, the scope of the information available, and the ease of determining the reliability of the information between Internet sources and library sources.

An evaluation rubric is provided which assigns points to key six features of the research report, the introduction, the relevance of the topic, the search resulting in terms of the variety, quality, and quantity of sources cite, their answers to the information literacy questions, the quality of the writing, and conclusions drawn from the sources or the project itself.

CONCLUSION

Cormany and Feinstein (2008) describe four elements must be included to optimize an experiential learning experience. These include designing the experience in such a way that it complies with learning theory. The Association of College and Research Libraries, which promulgates standards and guidelines for library excellence, also provides guideline for information literacy [American Library Association, 2006b]. Secondly, the experience suits the cognitive styles of the learners. Third, learners must be allowed time for reflection during the experience. Fourth, the exercise participants must be debriefed after it has been completed. It is important to decide when the debriefing take place and how the debriefing will proceed [Cooke, 1986]. One effective way to debrief this exercise is to have students share their research finding in class. The questions in the project can serve as discussion questions in class.

Upon completion of the exercise, students research a course related topic of their choosing, exploring multiple methods to access and evaluate sources of information, including databases, visiting the library stacks, and Internet search engines. The project resulted in students improving their ability to discriminate between peer-reviewed scholarly resources and opinion pieces and increasing their level of proficiency in obtaining and evaluating the quality of information. They also developed their skill in properly citing sources to avoid plagiarism.

REFERENCES

AACSB International (2008). *Eligibility Procedures and Standards for Business Accreditation*. AACSB International-The Association to Advance Collegiate Schools of Business, Tampa, FL. Retrieved November 1, 2008 from AACSB International website: http://www.aacsb.edu/accreditation/process/documents/ AACSB_STANDARDS_Revised_Jan08.pdf.

American Library Association. (2000). *Information Literacy Competency Standards for Higher Education*. Retrieved October 10, 2008 from American Library Association website: http://www.ala.org/ala/mgrps/divs/acrl/standards/standards. pdf.

American Library Association. (2006a). *Introduction to Information Literacy*. Retrieved October 30, 2008 from American Library Association website: http://www.ala.org/ala/acrl/ acrlissues/acrlinfolit/infolitoverview/introtoinfolit/introinfolit.cfm.

American Library Association. (2006b). *Standards & Guidelines*. Retrieved October 30, 2008 from American Library Association website: http://www.ala.org/ala/acrl/acrlstandards/ standardsguidelines.cfm.

American Library Association. (2006c). Standards 2-Access. Retrieved October 30, 2008 from American Library Association website: http://www.ala.org/ala/acrl/acrlissues/ acrlinfolit/infolitstandards/ stnd2 /standardtwo.cfm.

Cooke, E. F. (1986). "The Dilemma in Evaluating Classroom Innovations." *Development in Business Simulation and Experiential Learning*, Vol. 13, 110-114. Reprinted in the Bernie Keys Library, 8th edition [Available from http://ABSEL.org]

Cormany, D. & Feinstein, A. H. (2008). "Implementation of Effective Experiential Learning Environments." *Development in Business Simulation and Experiential Learning*, Vol. 35, 34-60. Reprinted in the Bernie Keys Library, 8th edition [Available from http://ABSEL.org]

Hinchliffe, L. J. (2002). Information Literacy as a Way of Life. *Research Strategies*, Vol. 18(2): 95-96.

Mutch, A. (1999) Critical Realism: Managers and Information. *British Journal of Management*, Vol. 10, 323-333.

Watson, T. J. *In Search of Management*. London: Routledge, 1994

Vik G. N. (2006). "Using a Web-based Module to Teach Information Literacy." *Development in Business Simulation and Experiential Learning*, Vol. 33, 219-222. Reprinted in the Bernie Keys Library, 8th edition [Available from http://ABSEL.org]